



**XVIII. International Balkan and Near Eastern Congress Series on
Economics, Business and Management
Ohrid / Republic of North Macedonia**

November 26-27, 2022

**University of Agribusiness and Rural Development/Bulgaria
University "St. Kliment Ohridski" Faculty of Economics/Republic of North Macedonia
IBANESS**

PROCEEDINGS

Editors

Prof.Dr. Mariana IVANOVA

Prof.Dr. Dragica ODZAKLIESKA

Prof.Dr. Rasim YILMAZ

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FOREWORD

International Balkan and Near Eastern Congress Series brings together many distinguished social and behavioral science researchers from all over the world. Participants find opportunities for presenting new research, exchanging information, and discussing current issues.

We are delighted and honored to host the IBANESS Congress Series in Ohrid / Republic of North Macedonia. Presented papers have been selected from submitted papers by the referees. Sincere thanks to those all who have submitted papers.

We hope that through exchange of the presented researches and experiences, the Congress will enhance communication and dissemination of knowledge in Balkan and Near Eastern Countries.

The Organization Committee
November 26-27, 2022

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CONGRESS ID

TITLE OF CONGRESS

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DATE – PLACE

26-27 November 2022
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IBANESS, University of Agribusiness and Rural Development/Bulgaria
University "St. Kliment Ohridski", Faculty of Economics – Prilep/Republic of North Macedonia



PROCEEDINGS BOOK EDITED BY

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EVALUATION PROCESS

All submitted articles have undergone a double-blind peer review process.

PARTICIPANT COUNTRIES (17)

Albania, Azerbaijan, Bulgaria, Greece, Hungary, Kyrgyzstan, Kosovo, Latvia, Mexico, Moldova, North Macedonia, Qatar, Palestine, Philippines, Romania, Slovakia, Turkey

TOTAL NUMBER OF PAPERS: 140

THE NUMBER OF PAPERS FROM TURKEY: 67

THE NUMBER OF PAPERS FROM OTHER COUNTRIES: 73

Program

10:00 – 11:00	Parallel Session I	Hall 1 Chair Person: Prof.Dr. Fanka RISTESKA	
		Fanka RISTESKA	Fiscal Capacity for the Municipalities Indebtedness in the Republic of Macedonia
		Dafina VLAHNA	The Importance of the Public Loan in the State Budget
		Dafina VLAHNA	The Importance of the Customs System in the Formation of the Budget
		Xhelentiona MULLAYMERI	The Impact of the Eurobond on the Management of Public Finances in the Face of the Earthquake and Pandemic. Case of Albania
10:00 – 11:00	Parallel Session I	Hall 2 Chair Person: Prof.Dr. Halil KIZILASLAN	
		Uğur BÖLÜK Yılmaz CELEPÇİ Filiz KINIKLI Hakan ADANACIOĞLU	İklim Değişikliğinin Su Kaynakları Üzerine Etkisi: Aşağı Gediz Havzası Örneği
		Barış TEKİN Duygu AKTÜRK	TR21 Bölgesinde Tarım İşletmelerinin Tipolojilerinin Belirlenmesi
		Eyup TULUMCU Halil KIZILASLAN	Sivas İli Şarkışla İlçesi Köylerinde Küçükbaş Hayvancılık İşletmelerinin Üretim ve Pazarlama Sorunlarının Belirlenmesi
10:00 – 11:00	Parallel Session I	Hall 3 Chair Person: Prof.Dr. Mariana IVANOVA	
		Shpresa SULI Blerina ZENDELI Gëzime KOXHAXHIKU	The Impact of the COVID-19 on the Online Buying of the Citizens of the North Macedonia: A Case Study Municipality of Tetovo
		Burbuqe KURTAJ-BAJRAMI	Stress to Health Workers During the Covid-19

			Pandemic
		Laura DIACONU (MAXIM) Constantin-Cristian POPESCU	Entrepreneurial Intentions of Romanian Students in the Context of COVID-19 Pandemic
		Andreas G. KOUTOUPIS Apostolos T. POURGIAS	Auditing and Cyber Security at the Greek Banks during the First Wave of COVID-19
11:00 – 12:00	Parallel Session I	Hall 1 Chair Person: Assoc.Prof.Dr. Resül YAZICI	
		Enes KAN Resul TELLİ	Türkiye’de Kamu, Özel ve Yabancı Sermayeli Bankaların Etkinliğinin Parametrik Olmayan Yöntemle Ölçülmesi
		Sevcan ÖZTÜRK KILIÇ Derya GÜLTEKİN	Banka Çalışanlarının Mutluluk Düzeylerinin Belirleyicileri: İstanbul Örneği
		Erdal ARSLAN Ali BORA	Türk Eximbank’ın 2017-2021 Dönemi Faaliyetlerinin DuPont Yöntemine Göre Analizi
		Serkan VARSAK Resül YAZICI	Bankacılık Sektörü Ağırlıklı Ortalama Kredi Faiz Oranlarının Makro Ekonomik Göstergeler Üzerindeki Etkisi: 2002-2022 Türkiye Örneği
		Resül YAZICI Serkan VARSAK	Bankaların Döngüsel Ekonomiye Geçiş Sürecinde İşletmelerin Kurumsallaşma Kapasitesinin Artırılmasında Rolü
11:00 – 12:00	Parallel Session II	Hall 2 Chair Person: Prof.Dr. Eketarina ARABSKA	
		Alba DEMNERİ KRUJA Nensi BEDO	Building Circular Business Models in Albania: What can Further be Improved?
		Ramina MUSTAFAYEVA Ruhiyya QAMBAROVA Yegana ABBASOVA	Directions of Ensuring Economic Security of the Republic of Azerbaijan
		Wisam A. SAMARAH	The Palestinians Economy and the China’s Economic Expansion
		Sara HUSEYNOVA	Econometric Analysis of Economic Growth Parameters between Russia and Azerbaijan

11:00 – 12:00	Parallel Session II	Hall 3 Chair Person: Assoc.Prof.Dr. Ulker IMAMALIYEVA	
		Sibel AKGÜN	Bosna Hersek’in Avrupa Birliğine Üyeliğinin Ulusal Güvenlik Denklemi Üzerindeki Etkileri
		Kemal YAMAN Mehmet KAYA	Göç Kavramı ve Türkiye’de Göç Tarihi Üzerine Bir Araştırma
		Vaskhanim ORUJOVA	Savaşlar ve Sebep Oldukları Tehlikeler
		Ulker IMAMALIYEVA	ABD Jeopolitiğinin Yeni Dünya Düzeni Üzerindeki Etkisi
12:00 – 13:00	Parallel Session II	Hall 1 Chair Person: Prof.Dr. Alberto POMBO	
		Arif MURRJA Agim NDREGJONI	The Context of Enterprise Risk Management in Agriculture- A Literature Review
		George TRIANTAFYLLOU Eirini STRATAKI Dimitrios LAGOS	Wine Marketing Strategies Experimental Evidence from Greece
		Alberto POMBO	Water Desalination for Agriculture and Free Market Economics In San Quintin, Baja California, Mexico
		András SCHLETT	Food Economy in the Shadow of International Conflicts
12:00 – 13:00	Parallel Session II	Hall 2 Chair Person: Prof.Dr. Nuri BALTACI	
		Burak GÜRİŞ Gülçin ÇELİKBIÇAK	Satın Alma Gücü Paritesinin Türkiye için Geçerliliğinin İncelenmesi: Fourier Enders ve Granger Doğrusal Olmayan Birim Kök Testi
		Hilal ÖZTÜRK Salih TÜREDİ	Ekonomik Büyümenin ve Gelir Eşitsizliğinin Yoksulluğa Etkisi: Türkiye Düzey-1 Bölgeleri Örneği
		Nuri BALTACI Gülşah Gamze TAŞKIN	BIRCS-T Ülkeleri: Büyüme ve Ar-Ge İlişkisi

		Kübra KARADAĞ Mehmet Ali YÜCEL	Avrupa Birliği Ülkelerinde Doğalgaz Tüketimi, Enflasyon ve Çıktı Büyüklüğü İlişkisi: NARDL Yaklaşımı
		Rasim YILMAZ	Covid-19 ve Enflasyon
13:00 – 13:30	Lunch		
13:30 – 14:30	Parallel Session III	Hall 1 Chair Person: Prof.Dr. Olivera KOSTOSKA	
		Marjan ANGELESKI Olivera KOSTOSKA	Artificial Intelligence: Creating Value for Business and Beyond
		Hüseyin Gökalp GÜNEŞ Gülşah KARAKAYA	Two Multi-Criteria Decision Making Methods for Selection of Wide-Body Passenger Aircraft
		Igor ZDRAVKOSKI	Analytical Procedures in Conditions of Increasing Concern for Ensuring the Profitability of Business Entities
		Agil Asadov MAHYADDIN Ayhan SATIJI SEYIT Zaur ƏDALƏT OĞLU ƏSƏDZADƏ	The Importance and Possibilities of Formation of Intelligent Transport Systems in the Conditions of Sustainable Development
13:30 – 14:30	Parallel Session III	Hall 2 Chair Person: Prof.Dr. Nurcan METİN	
		Salih MEMİŞ Zafer CESUR	Turizm Seyahat Pazarında Tüketici Davranışlarının Kuşaklar Bağlamında İncelenmesi
		Sercan ÖZDEMİR Murat BURUCUOĞLU	Konaklama İşletmelerinde Müşteri Şikayetlerine Yönelik Bir İçerik Analizi: Orta Karadeniz Bölgesi Konaklama İşletmeleri
		Ahmet ÖZBEK Ece EVCİK	Hazır Giyim İşletmelerinin Sosyal Medya Kullanımlarının İncelenmesi
		Yusuf ESMER Onur ŞAYLAN	Kalite Yönetiminde Yapay Zekâ Kullanımına Yönelik Bir Değerlendirme
		Onur ŞAYLAN Yusuf ESMER	İşletmelerde Stratejik Marka Yönetimi Uygulamaları ve Güncel Örnekler

13:30 – 14:30	Parallel Session III	Hall 3 Chair Person: Assoc.Prof:Dr. Sara HUSEYNOVA	
		Antonios ADAMOPOULOS Antonios MANIATIS	Tourism and European Union
		Arjete ZEJNULLAHU Alberta TAHIRI	Hydrography in the Development of Rural Tourism, Case Study Republic of Kosovo
		Alberta TAHIRI Idriz KOVACI Tatjana DIMOSKA Diellza MISINI Labinota HALIMI	The Value of Cultural Heritage and the Development of Tourism in Kosovo
		Irina MANOLESCU	Dilemmas of the Sustainability of Tourism Development Projects in Eastern European Countries
		Idriz KOVAÇI Alberta TAHIRI Hekuran SABEDINI Mimoza ZHUBI	The Interconnection between Training and Job Performance in Hotel Organizations
		Gulmira ESENBKOVA	Eco-Tourism in the Kyrgyz Republic
14:30 – 15:30	Parallel Session IV	Hall 1 Chair Person: Asst.Prof.Dr. Coşkun DOĞAN	
		Mustafa Fedai ÇAVUŞ	Algılanan Örgütsel ve Yönetmel Desteğin Örgütsel Vatandaşlık Davranışına Etkisi: Kırgızistan’da Öğretmenler Üzerine Bir Araştırma
		İ. Esen YILDIRIM Gülen ARIKAN KOKKAYA	COVID-19 Salgınında Uzaktan Eğitim ile Yüksek Lisans Bir Fırsat Mı Kayıp Mı?
		Coşkun DOĞAN	Toplum Çevirmeninin Sosyal İşlevi
		Coşkun DOĞAN	Spor Alanında Toplum Çevirmenliğinin Gerekliliği
14:30 – 15:30	Parallel Session IV	Hall 2 Chair Person: Prof.Dr. Hikmet ASUTAY	
		John Noel S. NISPEROS	Teaching Performance Associated to V3SK Model of

			a 21st Century Teaching Professional
		Mehmet Can SANDER Hikmet ASUTAY	The Use of Games in Teaching German as a Foreign Language
		Mehmet Can SANDER Hikmet ASUTAY	Role of New Media in German as Foreign Language Teaching
		Galina CHIPRIYANOVA Dimitrios PETROPOULOS	Economic Education – Innovations and Creativity
		Cristina Mihaela SALCĂ ROTARU	Environmental Education for the Development of Environmental Policies in Rural Communities
14:30 – 15:30	Parallel Session IV	Hall 3 Chair Person: Prof.Dr. Dilek ALTAŞ	
		Meryem FİLİZ BAŞTÜRK	Kitlemel Fonlama: Yenilenebilir Enerjinin Finansmanı Açısından Bir Değerlendirme
		Mehmet Ali YÜCEL M. Kenan TERZİOĞLU	Sürdürülebilir Kalkınma ve Eko-İnovasyon: Dinamik Mekânsal Etkileşim
		Tuba DERYA BASKAN	İşletmelerin Finansal Performansı ve Sermaye Yapısı ile Sürdürülebilirlik İlkeleri Çevresel Göstergeleri Kapsamındaki İlişkisi: Sürdürülebilirlik Endeksinde Yer Alan İmalat İşletmeleri Üzerine Araştırma
		Emel DEMİR	Avrupa Yeşil Mutabakatı ve Türkiye’de Yeşil OSB’ler
		Zeliha GÜLMEZ Gökhan AKAR Tufan SARITAŞ	Kirlilik Sığınağı Hipotezi: Asya-Pasifik Ülkeleri İçin Ampirik Kanıtlar
15:30 – 16:30	Parallel Session IV	Hall 1 Chair Person: Assoc.Prof.Dr. John Noel S. NISPEROS	
		Vladimír HOJDIK Nora GRISÁKOVÁ Peter ŠTETKA	Slovak Transportation Sector from the Perspective of Market Concentration Level

		Nora GRISÁKOVÁ Peter ŠTETKA Vladimír HOJDIK	Two stage duopoly model with investment
		Eduards LIELPETERS	Digital Democracy in Latvia. Fostering Relations between Citizens and Institutions
		Veronica GISCA Anastasia BUGA	Particularities of the Adverse Possession
		Veronica GISCA Arina COSTIN	Particularities of the Movable Accession
		Lampros SDROLIAS Panagiotis SERDARIS Sotiria TRIANTARI Konstantinos SPINTHIROPOULOS Vasileios TAMATEAS	The Six Thinking Hats Theory in Elite Football Clubs: Is It Worth Mentioning?
15:30 – 16:30	Parallel Session V	Hall 2 Chair Person: Prof.Dr. Seyfettin ÜNAL	
		Eda YEŞİL Hilmi ÇOBAN	Maliye Politikasının Ülkelerin İyi Olma Hallerine (Wellbeing) Etkisi
		Nimet VARLIK	TCMB’nin Uyguladığı Para Politikaları ile Enflasyon Arasındaki İlişkinin İncelenmesi
		Derya AKIN Faruk AKIN	Şükrü Saraçoğlu Döneminde Ekonomi Politikaları
		Serdar ERDOĞAN Volkan DAYAN	Türkiye’de Gümrük İhracatının Ekonomik ve Finansal Endeksler Arasındaki İlişkisinin Nedensellik Analiziyle İncelenmesi: Kapıkule Gümrük Kapısı Örneği
15:30 – 16:30	Parallel Session V	Hall 3 Chair Person: Prof.Dr. Jülide YALÇINKAYA KOYUNCU	
		Nurcan ÖZKAN	The Effect of Heavy Metal Pollution in Ergene River on Paddy Production in The Region
		Zekeriya ONUÇ Gamze SANER	A Research on the Factors Affecting the Honey Consumption Tendency of Ege University Students
		Nurcan ÖZKAN	Evaluation of the Effects of Macro and Microplastic

			on Marine Organisms
		Oğuz PARLAKAY	Determination of Consumers' Chicken Meat Purchase and Consumption Preferences: A case study of Adıyaman Province in Turkey
16:30 – 17:30	Parallel Session V	Hall 1 Chair Person: Prof.Dr. Ahmet KUBAŞ	
		Utku ALTUNÖZ	Borsa İstanbul Özelinde Döviz Kurları ile Hisse Senetleri Arasındaki Doğrusal ve Doğrusal Olmayan Eş Bütünleşme İlişkisinin Analizi
		Halil SERBES	Türkiye’de Belediyelerin Operasyonel Dengelerini Zedeleyici Uygulamalarının Kamu Alımları Ekseninde İncelenmesi
		Senem DEMİRKIRAN	Bilişim Hukuku ve E-Devlet
		Senem DEMİRKIRAN	Kamuda Teknoloji ve Yenilik Yönetiminde Hukuk
		Melis ÇAKMAK Erdi BAYRAM	Merkeziyetsiz Finans: Kavramsal Çerçeveye Dayalı Bir İnceleme
16:30 – 17:30	Parallel Session V	Hall 2 Chair Person: Prof.Dr. Nevin DEMİRBAŞ	
		Filiz KINIKLI	Tarımsal Kooperatifler ile İlgili Yapılmış Bilimsel Yayınların Bibliyometrik Analiz ile İncelenmesi
		Beyza TUNÇ, Nevin DEMİRBAŞ	Tarım Sektöründe Kırsal Kadının Rolü ve Türkiye İçin Kırsal Kadın Özneli Organizasyonların Önemi
		Zühtü KOÇASLAN Süleyman KARAMAN	Zeytinyağı Üreticisi Aile İşletmelerinde Süreklilik Sorunsalı: İzmir İli Örneği
		Nilgün DOĞAN Hakan ADANACIOĞLU	Tavuk Eti Tüketim Profili ve Tüketimi Etkileyen Faktörler: TRA1 Bölgesi Örneği
16:30 – 17:30	Parallel Session VI	Hall 3 Chair Person: Assoc.Prof.Dr. Emanuela ESMEROVA	
		Sevgi MERTKAN	Ecological Sustainability Indicators of Banks
		Gerta GOGO	The Impact of Electronic Banking on Customer

		Albana GJONI Arnold ISMAILANJI	Satisfaction
		Mohamad SORI	Islamic Banks in Qatar: Are They the Most Efficient Islamic Banks in the World
		Fanka RISTESKA	Perspectives and Importance of the State Securities Market Development in the Republic of North Macedonia
		Petar ASSENOV	Efficiency of Commercial Banks in Bulgaria

Sunday Sessions

11:00 – 12:00	Parallel Session I	Hall 1 Chair Person: Assoc.Prof.Dr. Igor ZDRAVKOSKI	
		Kyriakos TSAMANTOURIDIS Angeliki TSAMETI Victoria-Maria BELLOU	Role Ambiguity in Small Enterprises
		Bekrije MAXHUNI	Organizational Culture, Leadership and Innovation Behavior of Employees
		Rasim YILMAZ	Cryptocurrencies and Countries Under Economic Sanctions
		Rasim YILMAZ	The Effect of Fed's Policy Interest Rate on the Price of Cryptocurrencies
		Panagiota I. XANTHOPOULOU, Alexandros G. SAHINIDIS	Shaping Entrepreneurial Intentions: The Moderating Role of Entrepreneurship Education
11:00 – 12:00	Parallel Session I	Hall 2 Chair Person: Assoc.Prof.Dr. Erdal ARSLAN	
		Songül AKYILDIZ	Yapısal Faktörler ve Dolaylı-Dolaysız Vergi Ayrımı Açısından Türkiye’de Vergi Adaleti
		Meral EROL FİDAN	Genel Muhasebe Dersi Alan Yabancı Öğrenciler Açısından Karşılaşılan Sıkıntılar: Bir Devlet Üniversitesi Örneği
		Birsel SABUNCU	Döviz Dönüşümlü Kur Korumalı Türk Lirası Vadeli Mevduat Hesaplarının Muhasebeleştirilmesi
		Selçuk TEKİN	Sermaye Azaltımı Vergilemesi
11:00 – 12:00	Parallel Session I	Hall 3 Chair Person: Asst.Prof.Dr. Antonios ADAMOPOULOS	
		Katrin KRAHTOVA-NASTEVA	Management of Communications in Medical Teams
		Detelina SMILKOVA	Health Insurance and Health Assurance

		Georgi KESOV	Management Decisions in Health Care
		Biruta SLOKA Anna ANGENA	Tendencies In Health Self-Evaluation in Latvia
12:00 – 13:00	Parallel Session I	Hall 1 Chair Person: Assoc.Prof.Dr. Salih TÜREDİ	
		Cemile EVKAYA	Toplum 5.00: İstihdamın Geleceği
		Tuğba PARLAR	Metaverse’te Sağlık Bilişim Sistemlerinin Geleceği: Fırsatlar ve Zorluklar
		Gökhan KERSE Daimi KOÇAK	Etik İklim Algısının İş Tatminine Etkisi: Liderle Özdeşleşmenin Aracı Rolü
		Muharrem AKSU	Sert, Yumuşak ve İstihdam Edilebilirlik Becerilerinin İş Dünyasında Önemi
		Ruhangiz ALIYEVA Hanım KULUYEVA	Azerbaycan İşçi Piyasasının Mevcut Durumu ve İstihdam Üzerine Etkisi
		Mahammad MAMMADOV	Azerbaycan’da Yazılım Sektörünün Ekonomik Büyüme Üzerindeki Etkilerinin İncelenmesi
12:00 – 13:00	Parallel Session II	Hall 2 Chair Person: Assoc.Prof.Dr. Marjan ANGELESKI	
		Patricia PIONORIO Zoltán SEBESTYÉN	Challenges of Project Portfolio Management Process
		Veronica GISCA Turcanu ALEXANDRA	Real Estate Accession: Practical and Comparative Aspects
		Rasim YILMAZ	Fight Against Inflation after Covid-19: The Case of Turkey
		Emilija GJORGJIOSKA Jordan DELEV	Comparative Analysis of Jurisdiction of the Civil Courts in Industrial Property Disputes in the Republic of North Macedonia and in the Republic of Türkiye
12:00 – 13:00	Parallel Session II	Hall 3 Chair Person: Prof.Dr. Cüneyt	

		KOYUNCU	
		Kemal ERKIŞI	The Impact of Immigration on Unemployment: The Case of Türkiye
		Laura DIACONU (MAXIM) Mihai-Bogdan PETRIŞOR	A Policy Perspective on Unemployment in EU Emerging Economies
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13:30 – 14:30	Parallel Session III	Hall 1 Chair Person: Prof.Dr. Laura DIACONU	
		Hajredin KUÇI Kastriote VLAHNA	The Importance of Knowing the Laws of the European Union
		Enver BUÇAJ Kastriote VLAHNA	Criminal Liability and the Difference with Civil Liability
		Hajredin KUÇI Kastriote VLAHNA	The Importance of the Unification of European Law in a European Civil Code
		Argona KUÇI	Autonomy of the Will of Contracting Parties with a Foreign Element
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		Fatih BAL	Examination of Mobbing According to Personality Traits

		Mariș MARCELA Mihai Flavia ALA	Delimitation of Nullity Compared to Other Civil Law Sanctions
		Veronica GISCA Madalina DICA	Good Faith in Juridical Relations of the Civil Law
13:30 – 14:30	Parallel Session III	Hall 3 Chair Person: Prof.Dr. Eketarina ARABSKA	
		Katrin KRAHTOVA-NASTEVA	Organization of Work and Work Time of Healthcare Workers
		Detelina SMILKOVA	System for Financial Management and Control in Health Care
		Georgi KESOV	Healthy and Safe Working Conditions in the Healthcare Organization
		Dragomir LILIA	Methods for Evaluating the Efforts and Direct and Indirect Effects of Public Target Programmes in the Republic of Moldova
13:30 – 14:30	Parallel Session III	Hall 4 Chair Person: Assoc.Prof.Dr. Emanuela ESMEROVA	
		Emanuela ESMEROVA	Leaders of International Trade
		Eleftheria PALLA Panagiotis SERDARIS	The Role of the Transformational Leadership in the Management of a School
		Natasha TRAJKOVA NAJDOVSKA	Regimes in Economic Growth in Balkan Countries
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Tourism and European Union

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Abstract: This paper focuses on tourism as a multifaceted phenomenon, in the European Union and makes use of both legal rules and empirical data. Italy was the first country to establish a Ministry on Tourism, in 1959, whilst European Economic Community had been created and remained unrelated to tourism. The empirical methodology of the current research is based on panel data analysis estimating a regression model for European Union member countries for the last years. The results indicated that tourism is one of the most important pillars of economic growth especially in South European Union countries like Spain, Italy, France and Greece. Last but not least, tourism, which makes a part of the European Union acquis, particularly since the Lisbon Treaty has been adopted, would deserve a legal support consisting in new human rights, such as inter alia the rights to tourism image and the freedom of being a tourist guide.

Keywords: European Union law; maritime tourism; panel data analysis; tourism growth; right to tourism image

1. INTRODUCTION

Italy was the first country to establish a Ministry on Tourism, in August 1959, although it abolished it from 1993 and on, for a very long time. In a comparable way, the European Economic Community, which was established in 1957 inter alia by that State, was deprived not only from tourism policy but also initially from maritime policy. It would be interesting to deal with tourism, let alone in the territory of the most popular tourist destination, such as the European Union, whose Italy constitutes one of the mainstreaming tourism powers. Tourism is intrinsically an economic phenomenon, as a consumer's behavior to which various sectors of the market are adapted. Besides, it has been recently endowed by a separate field of law, called tourism law. It is clear that it is about a multifaceted phenomenon and so it would deserve a synthetic approach at academic level. That is way, the current research focuses on legal and institutional aspects of tourism in the European Union. It is completed by an economic analysis on economic growth of South European countries on the basis of this phenomenon.

The European Union, being the first tourist destination worldwide, mentioned tourism in the treaties for the first time in 1992. This fact was an important one but insufficient, given that it did that in a rather marginal way. This osmosis has evolved into the actual status of tourism in the European context. In virtue of the 2007 treaty of Lisbon, tourism has been the scope of supporting and complementary competencies of the European Union whilst each Member State has maintained its primary competence on the matter. More precisely, according to Article 6 of the Treaty on the Functioning of the European Union (TFEU), the European Union shall have competence to carry out actions to support, coordinate or supplement the actions of the Member States in tourism. Moreover, in the same text a specific section for tourism was created, Title XXII (Article 195), which lays down the procedure for adopting measures in the sphere of tourism.

Since 2001, the European Commission has published several communications, setting out its policy guidelines for the development of the tourism sector. Subsequent to the adoption of a new legal basis for tourism, it adopted a strategy for tourism in 2010, with a Communication on 'Europe, the world's No 1 tourist destination – a new political framework for tourism in Europe'. In that soft law text, it cites some examples of tourism industries: 'Traditional suppliers of travel and tourism services (hotels, restaurants, travel agencies, car hire, charter airlines, tourist coaches, cruise vessels, etc.) offering goods and services directly to visitors, whilst Eurostat uses the term 'tourism industry' in the singular as well as plural, but does not define it in the manual for tourism statistics (Juul, 2015: 4).

The Communication outlined the EU's tourism policy and actions to be implemented jointly by the Commission, Member States and their regions, as well as by industry stakeholders. One of the four priority areas for action consists in the consolidation of the image and profile of Europe as a collection of sustainable and high-quality destinations. Another one consists in promoting the development of sustainable, responsible and high-quality tourism, for which the Commission proposed the protection of heritage of tourism destinations. In order to

achieve the objectives, set in the European Union tourism strategy, this institution has launched numerous projects and initiatives, including the Calypso initiative and its follow-up Tourism for Seniors. The most recent of the aforementioned communications was issued in 2014, under the title 'A European Strategy for More Growth and Jobs in Coastal and Maritime Tourism'.

The European Union offers impressive whether sometimes compelling images to tourists either having European citizenship or not. However, although the European Commission has made a reference to the image of the European Union in a soft law text relevant to tourism, no legal consecration of the new human right to tourism image exists.

The most empirical studies support the tourism-led growth hypothesis, because a stable economic system is an impetus of tourism growth in developed and developing countries (Aslan, 2014; Tang and Tan, 2015). Bilen et al (2015) inferred that there is bidirectional causality between tourism and economic growth studying panel Granger causality tests for the 12 Mediterranean countries in the time period 1995–2012. The advantage of panel Granger causality tests is that allow for country-level heterogeneity, thus leading to more accurate results according to their study.

The model hypothesis of this study predicts that tourism sector boosts economic growth for 24 European Union countries. This empirical study has the following objectives:

- **To examine the interrelation between tourism and economic growth**
- **To estimate a panel data regression model**

The remainder of the paper proceeds as follows: Section 2 describes the methodology of empirical study, while section 3 analyses the empirical results and finally, section 4 provides the conclusions of this paper.

2. DATA AND METHODOLOGY

2.1. Data analysis: In this empirical research panel least squares method is applied in order to examine the interrelation between tourist arrivals and economic growth. For this purpose an autocorrelation model is estimated and some basic diagnostic tests are examined for their reliability and statistical significance such as specification tests.

The regression model has the following general form

$$LGDP_t = c_1 + c_2 LTAR_t + [ar(1)=c(3)] + u_{1t} \quad (1)$$

Where:

GDP = gross domestic product

TAR = tourist arrivals

L = logarithmic symbol

t = time trend

u = residuals

ar(1) = first order autocorrelation term

c_1, c_2, c_3 = estimated coefficients

Following the empirical studies of Adamopoulos (2021), Vazakidis and Adamopoulos (2020), Adamopoulos and Thalassinos (2020), the variable of economic growth (GDP) is measured by the rate of real GDP and the variable of tourism growth is expressed by tourist arrivals (TAR). The graphs of examined variables are presented in Figures 1 and 2.

As we can infer from these figures a rapid decrease in gross domestic product and tourist arrivals is highlighted in 2020 for 24 European Union member countries as a consequence of the pandemic crisis (COVID-19). France, Spain, Italy, Greece and Poland were at the forefront of tourist arrivals increase in European Union in the last years, while Luxembourg, Slovenia, Finland, and Malta were the last of the remaining European Union countries. Also, Germany, France, Italy, Spain and Netherlands were at the forefront of gross domestic product growth in European Union in the last years, while Estonia, Latvia, Malta, Croatia, and Slovenia were the last of the remaining European Union countries.

Figure 1 – GDP in EU countries

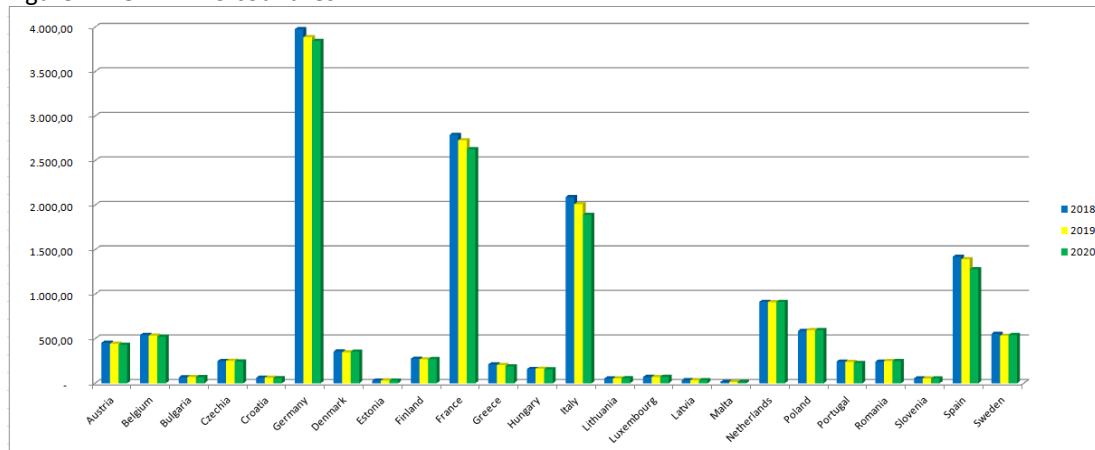
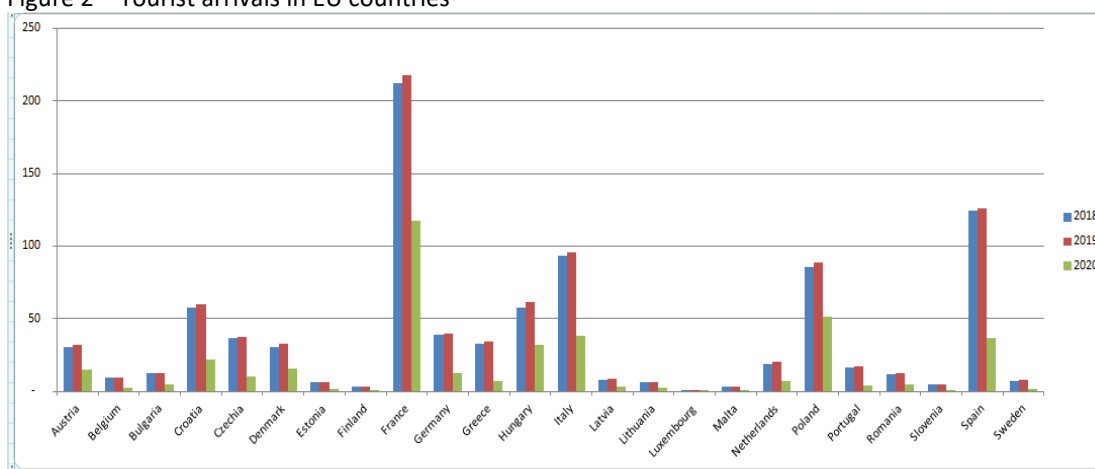


Figure 2 – Tourist arrivals in EU countries



2.2. METHODOLOGY

The estimated equation is examined for statistical significance based on the statistical diagnostic tests such as possible existence of autocorrelation problem and normality test. Gross Domestic Product is regarded as the dependent variable of the estimated model while tourist arrivals as the independent one respectively. Panel data analysis includes the statistical data of examined variables for 24 European Union countries covering the time period from 2018 to 2020. The data sample is referred to 24 European Union countries such as Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxemburg, Malta, Netherlands, Poland, Portugal, Romania, Slovenia, Spain and Sweden). In order to achieve better statistical estimations the examined variables are transformed into their logarithmic form. The statistical data are obtained from statistical database of World Bank (World Development Indicators Statistical database <https://data.worldbank.org>). The Eviews 10.0 (2017) software package is used to conduct the relative statistical tests.

2.2.1. Panel least squares method

Panel least squares method is a modern econometric method which is used mainly for the estimation of regression models with panel data analysis. Panel data analysis consist an econometric method with objective to analyze two-dimensional (typically cross sectional and longitudinal) panel data. A simple panel data regression model has the following general form:

$$Y_{it} = \alpha + bX_{it} + e_{it} \quad (2)$$

Y = dependent variable, X = independent variable, a, b = coefficients,
t = time trend, i = index of individual, e= error term

Panel data regression models are discriminated in fixed effects or random effects relatively based on the objective of the empirical analysis and the statistical problems related to the exogeneity of the independent variables.

3. Empirical Results

The reliability and the significance of the empirical results are dependent on the variables under estimation. The number of fitted time lags and the usage of first order autoregressive term were selected for better estimations results and for the existence of statistical significance in the estimated panel regression model (Table 1).

The empirical results of panel least squares method are summarized as follows:

$$LGDP_t = 16.05 + 0.62 LTAR_t + [ar(1)=0.99] + u_{1t} \quad (3)$$

As we can see from the empirical results an increase of tourist arrivals per 1% causes a relative increase of gross domestic product per 0.62 (Equation 1). Also, examining the panel regression model for statistical significance we can conclude that there aren't any statistical problems due to the lower probabilities of 5% level of significance. Furthermore, the coefficient of determination is very high (0.9996) and is close to unity, so the panel regression model is very well adjusted and statistical reliable.

Table 1 – Panel Least Squares Method

Dependent Variable: LGDP				
Method: Panel Least Squares				
Sample (adjusted): 2019 2020				
Total panel (balanced) observations: 48				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	25.399	0.8012	31.700	0.0000
LTAR	0.0178	0.0069	2.5688	0.0136
AR(1)	0.9934	0.0028	348.86	0.0000
R-squared	0.9996	F-statistic	62435.47	
		Prob(F-statistic)	0.0000	

The empirical results related to the normality test of residuals by estimating Jarque-Bera statistic test indicated that the residuals are normally distributed (Table 2). The same conclusion is proved by the relative graph of estimated residuals of panel regression model (Figure 3).

Table 2 – Normality test

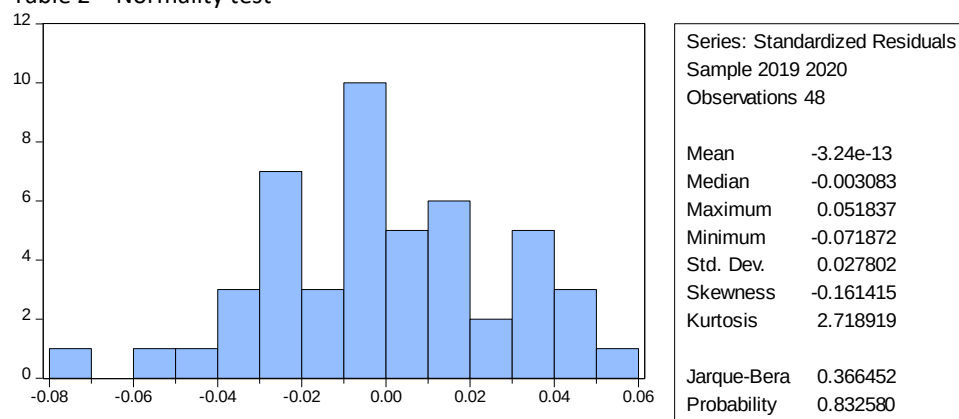
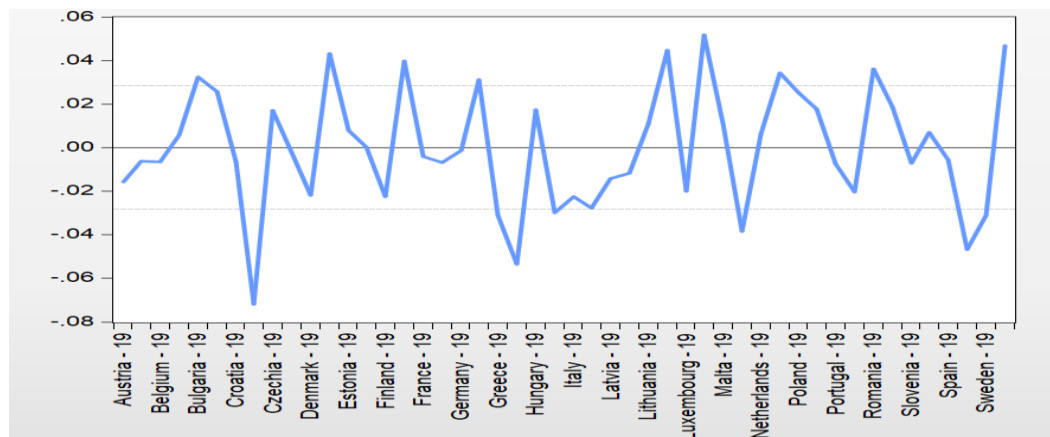


Figure 3 – Graph of estimated residuals



4. CONCLUSION

Tourism makes a part of the European Union acquis, particularly since the Lisbon Treaty has been adopted. The relevance with which the Union attaches to sustainability determines that we cannot refer only to European tourism, but rather that we should speak of sustainable European tourism (Villanueva Cuevas, 2012: 171) whilst the "tourism industry", which is still in use, evokes connotations rather opposed to sustainability.

Besides, the new human right to tourism image should be consecrated explicitly, at internal, European and international levels because it is about an authentic, specific right in the framework of the generic right to tourism. It is also notable that other new guarantees have recently emerged in Europe, such as the freedom of being a tourist guide, without classical preconditions, such as obligatory ad hoc training, certification etc. (Maniatis & Cortés, 2020: 162). The empirical results of this study indicated that tourism sector leads to economic growth in 24 European Union member countries and especially France, Spain, Italy, Greece and Poland were at the forefront of tourist arrivals increase in European Union in the last years, while Luxembourg, Slovenia, Finland, and Malta were the last of the remaining European Union countries.

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The Importance and Possibilities of Formation of Intelligent Transport Systems in the Conditions of Sustainable Development

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Abstract: The terms "Green economy", "environmentally clean production" etc. are arising from the concept of sustainable development have been gaining the great attention in academic and scientific audience. In our modern world, environmental protection and reducing emissions into the atmosphere grab the attention as a global problem. It is obvious that in most countries (e.g. the Republic of Azerbaijan) up to 60-80 percent of the total pollution falls into the share of transport system. 2,3 billion tons of oil produced in the world are utilized for car fuel. According to various experts' calculations, 15 kilograms of oxygen is needed for the complete combustion of every 1 liter of fuel. When it is multiplied with 2.3 billion by 15 kilograms and calculate how much oxygen is being consumed, you get an alarming number. Currently, there are more than 1 billion cars in the world. These cars emit over 1 billion tons of exhaust gas into the environment in 1 year, of which the weight of carbon monoxide is about 650 million tons. If we take into account that the century we live in is the age of intellectuals, the era of smart cities and smart villages, then the necessity of expanding intellectual management and forming smart transport systems in the transport system becomes clear. The smart transportation system is also more suitable for the green transportation system that the world is aiming for in the near future.

In this regard, the formation of "Green transportation system" or "Intelligent transportation system", reducing the harmful effects of transportation on the environment is a necessity arising from today's reality. For this purpose, it is genuinely important to conduct research in the direction of the formation and development of the "Smart Transportation System".

Although the term "smart transportation" has been used in a number of projects and applied in a number of countries, it is not yet accepted as an integral part of society's life; therefore, it is particularly important to develop the scientific-theoretical basis of this term and educate the society in the relevant direction.

In the presented article, the characteristic features and advantages of the intelligent transport system are investigated, the effects of the transportation system on other areas of the economy are analyzed, and the intelligent transportation system is treated as a necessity arising from the concept of sustainable development.

Introduction

An intelligent transport system consists of several elements, and each of them serves a specific purpose. Thus, the working principle of smart traffic lights is not based on time, but based on traffic flow. The traffic light sees the traffic density and according to this signal, yellow, red or green light starts to activate. This helps reduce traffic flow, fuel consumption, and thus environmental damage. Apparently, the operation of the smart traffic light can be considered effective for the aforementioned reasons.

In general, there are various approaches to the intelligent transport system. According to Turkish scientists such as Prof. Dr. Mustafa Ilıcalı, intelligent transport systems mean "efficiency and safety". The reduction of transportation time, consumption on the road and, thanks to all this, the reduction of negative environmental effects, are an indicator of productivity. In particular, efficient regulation of movement intensity, elimination of delays is an important condition for the efficiency and productivity of transport services in general [5; 37].

Intelligent transport system is about to be accepted as a new reality of security. Intelligent Transportation System (ITS) refers to transportation operations that use modern computer technology, communication technology, remote tracking, routing, and automation systems. In general, we can classify the services offered by ITS in different categories as following [1; 8; 10]:

Table 1. Services offered by ITS in various categories

Categories	Services
Traffic management and transportation	- Informing the driver on the road - Helping on route - Information about travel services - Information flow management - Emergency management - Controlling and reducing emissions - Demand management and operation - Pre-trip information - Car coordination and booking - Intersection of highways with railways
Public transport activity	- Public transport management - Transit information along the route - Information about public transport transit - Safety in public transport
Electronic payment	- Non-cash payment services
Measures for commercial transport	- Electronic payment of commercial shipping charges - Automated roadside safety control - Security control in the car - Commercial shipping management - Hazardous materials
Emergency management	- Emergency alert and personal safety - Management of vehicles in emergency situations
Expanding vehicle and security system management	- Longitudinal collision protection - Side collision prevention - Prevention of accidents at road intersections - Improved appearance to prevent crashes - Availability of security system - Application of restrictions against accidents - Automated road network

Source. Compiled by authors based on Internet Searches.

ITS enables short-term online forecasting based on real-time traffic conditions, road availability, efficient management of information flow, rational use of limited network capacity, reduction of congestion and travel time. This system also includes real-time information and analytical systems that enable the collection, monitoring, analysis and visualization of data on selected transport operations. These systems allow to enter, process, centrally store, manage, check and analyze information about traffic flows, traffic intensity and speed, passenger flow, etc.

Meanwhile, ITS includes transport infrastructure and its elements such as traffic composition, smart information boards that enable remote control, road signs and traffic lights, data collection and processing pools, traffic control centers and so on. Taking ITS into account during the strategic planning of transport will allow more efficient use of the existing transport infrastructure and choose the right direction for its development in the future.

Currently, the policy of authorities and the state on the problem of transportation and traffic (congestion) is more focused on controlling congestion and looking for ways to solve this problem than on the development of the transport network. On the other hand, the development of information technology has affected the methods of traffic congestion management. Thus, traffic jam control methods using information technologies help to solve the problem and support the realization of the wishes and dreams of passengers [10; 13; 14].

Theoretical issues and current situation

The increase in the number of people around the world, as well as in metropolis separately, has led to an increase in the demand for trips and travel. As a result, the use of private vehicles in some megacities (Baku, Tehran, Istanbul, Moscow, etc.) has increased dramatically. This issue has caused an increase in pressure on existing transport networks in urban areas. Transportation-related problems including traffic jams, increased lost time, increased vehicle accident incidents, environmental pollution, dwindling energy resources, and increased demand for transportation, have made the provision of a safe and efficient transportation system a necessity for most countries, especially developing countries.

Taking into account the facts about the control of traffic jams in megacities and the solution of related problems, there is a need to attach special importance to increasing the efficiency of transport networks due to new technologies and the wider application of information and communication technologies (ICT) in development plans. This in turn will help to achieve the result of capital invested for the effective development of roads and crossings, as well as effective use of existing resources and increase the level of safety [2; 4,s.178-194; 23; 29].

As mentioned earlier, one of the methods used in the control of traffic jams by benefiting from information technology is the use of intelligent transport systems. Thus, ITS will be able to play an important role in offering quality services to citizens in the communication and information society and increasing the dynamism of the society by creating conditions for the formation of the electronic municipality. ITS is for using ICT to ensure the efficiency of the transport system.

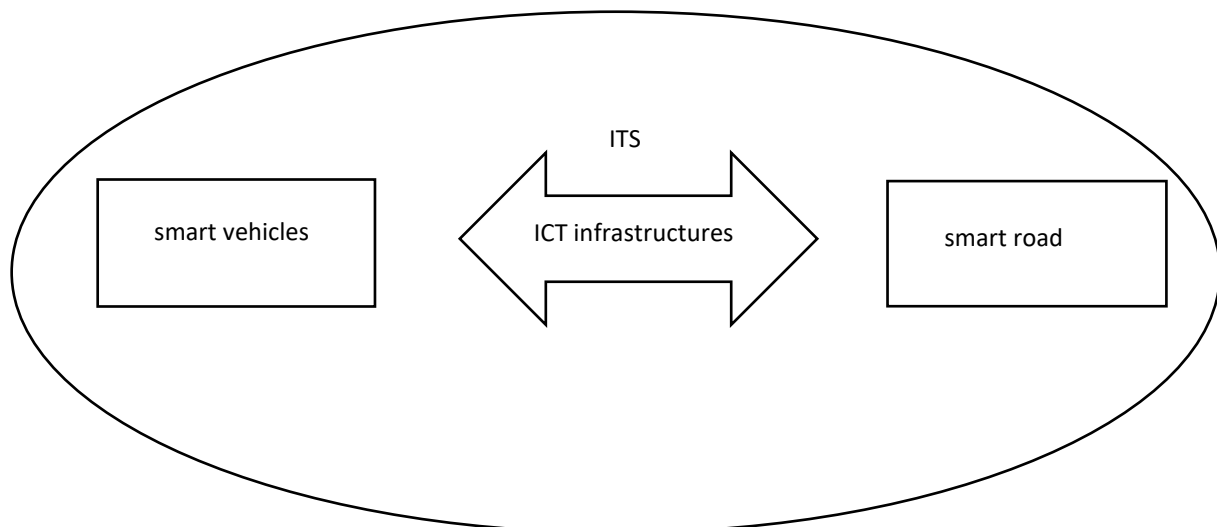
ITS refers to a set of capabilities and specializations such as traffic engineering concepts, computer programs, and computer and communication technologies. In ITS, these capabilities and qualifications are applied in a complex and harmonious way with the aim of ensuring the efficiency and safety of the transport system.

In general, ITS refers to systems that use various information and control technologies to ensure the efficiency and functionality of transport networks. The operation of transport tools is based on information, communication and complexity, and these three characteristics help the managers and users of transport networks to make more accurate decisions. ICT tools used in ITS improve system performance, prevent time loss, increase quality of life and clean environment, increase efficiency of economic activities. For this reason, ITS means the harmonious and complex use of information processing technologies, communication and control systems technologies, as well as new communication technologies and management strategies in order to increase the efficiency and safety level of the transport system [23; 26; 27].

Activities of ITS and ICT application issues

In general, ITS consists of three main elements operating on the basis of control and information technologies: smart road, smart vehicles, communication infrastructures.

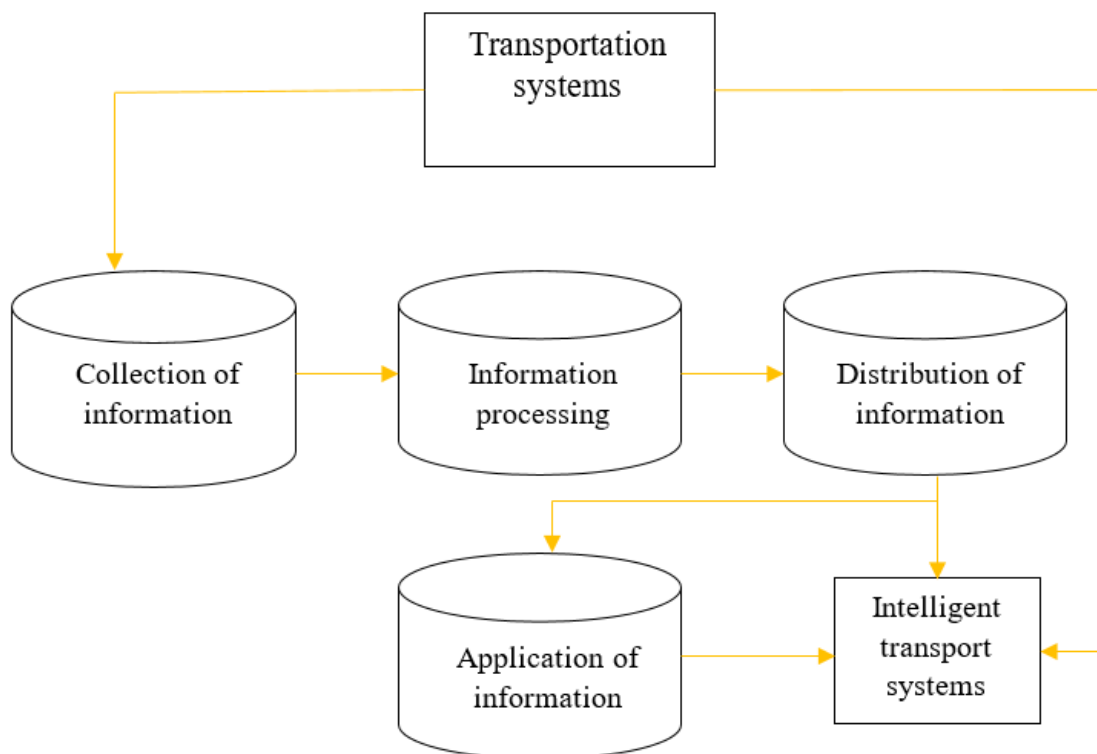
Table 2. ITS Elements



A referred smart road is a thoroughfare or a regular road that belongs to the main infrastructure section and has all the necessary devices for the road. On this type of roads, there are opportunities for information exchange between users, drivers, vehicles and pedestrians, which coordinate the activities of different parts of the system within ITS services through ICT [14; 16; 28].

Smart vehicles mean vehicles provided with the necessary devices to be able to show some of the services listed in ITS. ICT infrastructures are technologies that provide information exchange between smart vehicles and smart roads. Information flow (movement) in these technologies includes certain stages. In the meantime, this includes information collection, data reception, data transmission, data processing, as well as distribution and application of processed information. In order for the system to function effectively and efficiently, it is important to form a suitable chain of communication between these stages. As observed in the figure below, a ITS system ensures the provision of services between the transport system and ICT users by applying information technologies and controlling the necessary information chain.

Table 3. ITS System Workflow



As it can be seen, with the application of ICT, it is possible to organize the operation of transport systems more efficiently and with minimum damages. In fact, if complete and flexible information collection and circulation are ensured, it is possible to eliminate traffic jams and reduce the time spent on roads, which is of particular importance in the modern era, when the concept of sustainable development is relevant. It should also be noted that concepts such as "intelligent transport systems", "green transport system" etc. are a necessity arising directly from the requirements of the concept of sustainable development. Sustainable development is a concept based on three pillars: social, economic and environmental, each of which is directly related to the transportation system [17; 18; 34; 37].

Like the smart transport system, the "Green transport system" also supports the wide application of ICT, the use of alternative fuels, the development of electric transport, etc. in terms of the less impact on the environment. In international practice, green vehicles have great fuel efficiency compared to standard vehicles, which is very important in terms of efficient organization of transportation. At the same time, accidents and traffic jams are less likely to occur with these vehicles.

Intelligent and Green transport systems

One of the main effects of traffic jams is environmental and air pollution, and one of the factors that increase the process of air pollution is fuel-powered vehicles. For example, emissions due to the road transport are

exported more than 200 toxic and harmful substances. Per day, 3.2 tons of carbon dioxide and 200-400 kg of other gaseous substances are released into the air from every thousand car engines, the productivity of the soil around highways (at a distance of 200 m) is 2-3 times less, atmospheric pollution is undoubtedly, also shows its negative impact on outer space [4, s.152-183].

Pollutants mixed in the atmosphere are spread over the territory by the movement of air masses. For example, it has been determined that sulfur oxide from a source entering the air spreads over a distance of 6 000-12 000 km in a short time. All this shows how worrying and global environmental problems are [3; 4, s.231-245; 32;].

There are 7 cars per 1 km² of the land area of the modern world. However, there are cities (for example, Baku) where this indicator has risen to a record level, with approximately 300 cars per 1 km². In this case, road traffic encroaches on the area, creates noise, pollutes the atmosphere, vibrates, etc. All these negative situations destroy the living world [4, s.312-327].

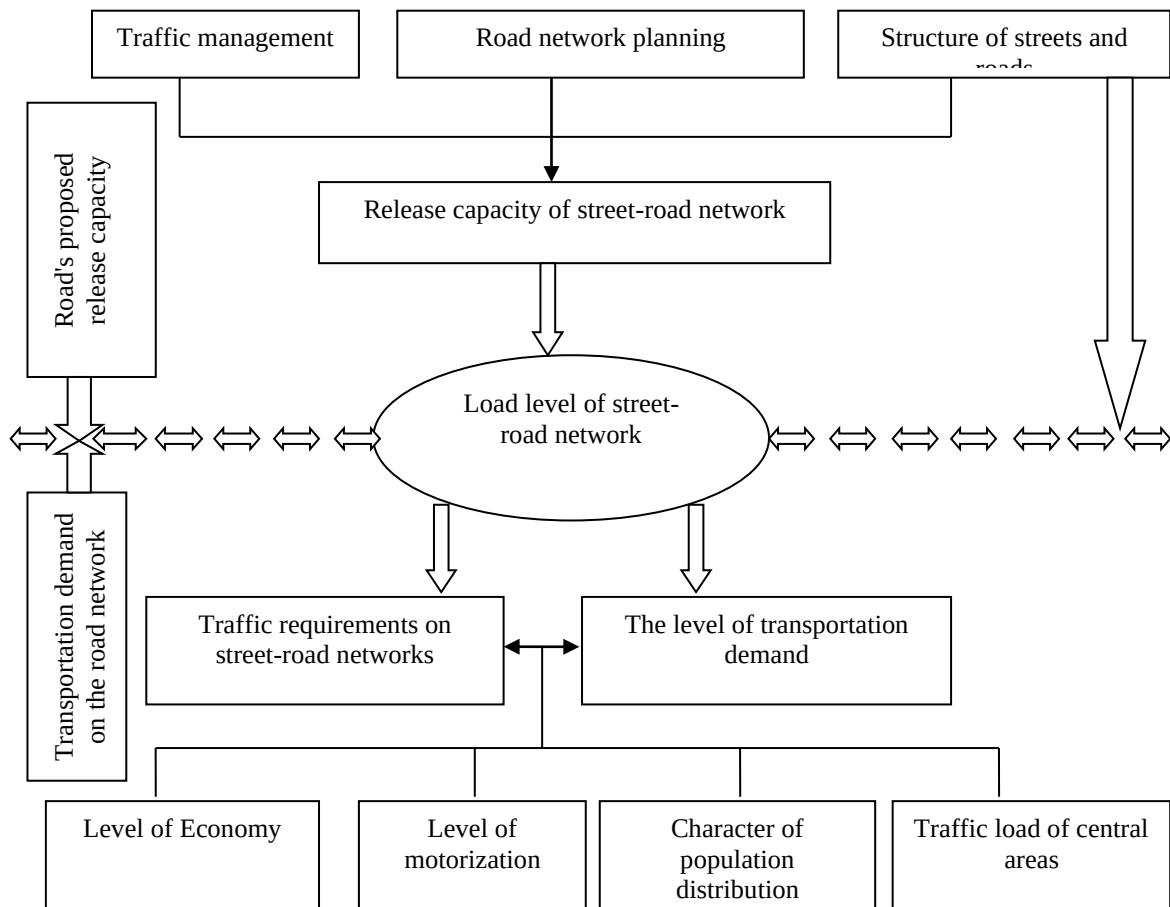
In recent years, the rise in the number of cars in cities has been accelerating the amount of toxic substances released into the environment. Thus, as the cities grow, the traffic problem becomes more acute. In some cities, the gases released by cars make up 68-80% of the air polluting gases. In the past, due to the low number of cars, it was not considered as dangerous for the environment, and it was not taken seriously. At present, more than 2 billion tons of petroleum fuel are used in car engines in the world every year. At this time, the useful efficiency is on average 23%, and the remaining 77% creates negative effects on the environment. Doing a simple calculation, an average passenger car traveling 15 000 km per year uses 4 350 kg of oxygen. In the meantime, it poisons the air by releasing 3 250 kg of CO₂, 350 kg of CO and 93 kg of other harmful gases into the atmosphere, as well as consumes as much oxygen as a person absorbs in a year when the car travels 100 km [4, s. 317-337; 32].

Studies show that the concentration of harmful gases released by cars into the atmosphere depends not only on the type of engine, but also on the technical condition of the cars, their service, timely maintenance of the fuel and combustion system, and the nature of the road. The amount of harmful gases released into the air increases 4-5 times as a result of not adjusting the carburetor of the gasoline-powered engine to the required level. At the same time, cars circulate the atmospheric air not only with toxic components of exhaust gases, but also with fuel vapor and tire dust. If we take into account that each car emits 10 kg of rubber dust into the atmosphere per year, then we will see that this number is thousands of tons for individual cities and countries. consequently, it is only the volume of rubber dust and is quite dangerous for the living organism [4; 36].

Results and Implications

Observations show that there are two main causes of negative outcomes, namely traffic intensity and traffic mode, both of which are closely related to the capacity of the street-road network (SRN). Rather, the state-releasing capacity of the SRN should be reconciled with the intensity of the movement and the mode of movement. In general, based on the observations, we can schematically show the factors that affect the loading of the SRN (Scheme 1.) [4].

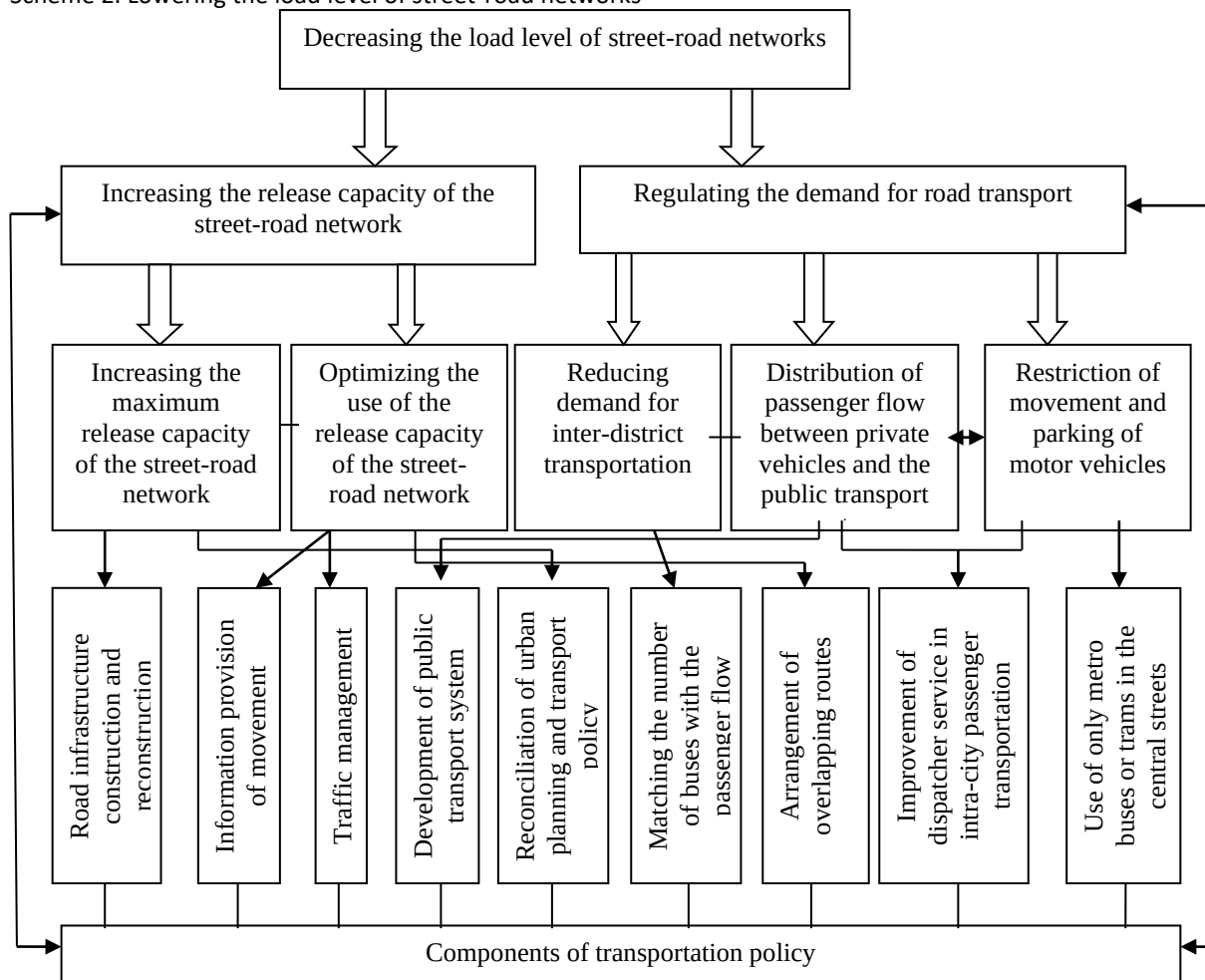
Scheme 1. Factors affecting the loading level of the street-road network



Source: The scheme was developed by the authors based on observation and research

As can be seen from Scheme 1, the release capacity of the SRN is formed by the traffic management, planning of the road network, and the structure of streets and roads. Certainly, movement requirements, transportation requirements, etc. issues also play a role on network loading. At the same time, it is necessary to take certain measures against the overloading of the SRN. Thus, the optimization of the release capacity, the reduction of inter-district transportation, the limitation of the use of personal vehicles, the more efficient organization of parking, etc. issues will allow to reduce the level of loading of the SRN, increase the release capacity and more optimal use of the available opportunities. This, in turn, is very important in terms of efficient organization of services. Taking into account all of the points, the following scheme (Scheme 2.) is proposed for reducing the level of loading of the SRN in terms of efficient organization of services and reduction of environmental damage.

Scheme 2. Lowering the load level of street-road networks



Source: Scheme developed by authors

It is clear that the transportation problem cannot be solved by improving the infrastructure alone. Therefore, it would be more correct to approach the issues in a complex way. The correct division of vehicles, ensuring communication between them, of course, belongs to the activity of the relevant central executive body. However, there are types of transport that, although they contribute to meeting the needs of the society, have very serious effects on health [4; 27; 31].

Today, the environmental problem caused by noise is one of the most painful and psychologically affecting people, causing very serious problems in the mental and nervous system of people. One of the serious effects of the transport system, especially road transport, on the environment is related to noise. From the observations, it is clear that the sound level is higher than 90-95 dB in the streets and avenues of big cities where 2-3 thousand vehicles move per hour. Hence, it depends on the intensity of movement, speed and technical condition of the vehicle. In general, it is considered normal for the noise level to be 67.4-76.8 dB on streets with high traffic intensity, and 10-15 dB less on other streets. It should also be noted that in recent years, the noise level of cars has increased by 12-14 dB, which is caused by the reasons mentioned above [4; 20; 21; 29; 35].

According to medical calculations, depending on a person's age, the permissible norm of sound is between 10-25 dB, and for the majority this indicator does not exceed 12 dB. Loud noise, especially when it exceeds 70 dB, causes serious psychological stress in people and leads to numerous problems. Such problems including hearing loss, dizziness, headaches, general fatigue, etc. can be attributed. On the other hand, the high limit of noise also reduces human life expectancy. So, according to the research of Austrian scientists, loud noise can reduce human life expectancy by 8-12 years because excessive noise causes nervous disorders, mental depression, vegetative neurosis, ulcer disease, endocrine deficiency, cardiovascular diseases, etc. Consequently, 50% of diseases caused by environmental factors are caused by air pollution.

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The context of enterprise risk management in agriculture- A literature review

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Abstract: Risk management in agricultural businesses is an important aspect in agriculture. Uncertainties in production, marketing, financing, law, human resource management, changes in input and production prices, climate and biological variables, agricultural policies and government decisions, global markets and volatility, sales, world trends in consumption, legislation environmental and other factors affecting agriculture can cause large differences in farm production and overall farm income. The purpose of the paper is to study the literature on enterprise risk management and specifically on risk in agricultural enterprises. In recent years, there has been an increase in the number of risk studies with the potential to deepen and further develop previous studies. This study provides a summary of the literature of studies on enterprise risk management with a special focus on agriculture. The objective of this paper is to provide the context of enterprise risk management in agriculture. This review is expected to encourage researchers to carry out new theoretical studies, to perfect the management of enterprise risk in agriculture.

Key Words: context, framework, system, process, agriculture, risk.

JEL Classification: M10, M19, Q10, Q19.

1. INTRODUCTION

Farmers face natural, biological, economic, fiscal, political, social events that are not controlled by them (Murrja and Braha, 2021). The agricultural business always involves risks associated with the nature of its production, since it is prone to climatic and biotic factors (biological cycle, climate, soil, and pests) (Aimin, 2010; Antón, J. et al., 2012; Reynolds-Allie et al., 2013). In addition to issues related to agricultural production, the agricultural enterprise also must address market issues, such as price volatility, labor issues, seasonality, and changes in agri-food policies. According to literature, research on risk, risk perception and risk management strategies are increasingly analyzed. Climate change, globalization of markets and different consumer perceptions of food safety have raised concerns about risk (Olivera et al., 2022; Sulewski and Gajewska, 2014).

Duong et al. (2019) carried out a systematic review of the literature and concluded that the amount of research on risk perception in agriculture and risk management has increased substantially since 1985. The author states that market risk is considered as the most significant followed by biosecurity, which highlights the gaps between the risks mentioned by farmers and the research on socioeconomic factors that explain the perception of worries. However, there are papers discussing both risks and adaptation strategies (Murrja and Braha, 2021; Crane et al., 2013; Ahsan & Roth, 2010; Harwood et al., 1999).

OECD (2008a), Girdžiūtė (2012), Jankelova et al., (2017) Komarek et al. (2020), and Bencova et al., (2021) examine the risks in agriculture and identify that research work focuses on one risk, particularly on production risk, and that there are a limited number of studies exploring the various sources of risk, also showing the importance of risk assessment methods and the importance of studying the interrelationship and interaction between risks. The results of this work show that different types of risk are relevant at different levels and that it is necessary to interconnect risks to understand risk relevance to farmers who must struggle with many risk causes, from natural risks to economic ones (price volatility or flow production).

Market issues are the most important areas of concern followed by biosecurity which is defined by Waage & Mumford (2008).

There are other risks, such as climate risk, financial risk, governing restraints, and new technologies (Olivera et al., 2022). Crane et al., (2013) defines risk as the chance of damage or a negative outcome linked to an action and uncertainty falls within these definitions. Harwood et al. (1999) reveals that risk affects an individual's welfare and is linked with loss. Risk perception influences farmer's behavior and future business decisions such as the continuation in the market. Risk perception and behavior are linked with the resilience of the agricultural sector itself. According to Keil et al. (2000) loss level is the most important factor in shaping risk perception,

and there is a significant relationship between risk perception and decision making. Sjöberg (1998) says that cultural biases are not major factors in risk perception and the variability within the public in a country is probably due to factors such as trust, beliefs, and human concepts.

Risk perception encompasses the mental processing of information and the skill mechanisms that people use to deal with uncertain events. In addition to definition issues and risk perception, one of the issues in literature is risk categorization. Literature presents different risk categories according to the sector and within agriculture. Categorization varies according to the subject matter focused by the researcher (Olivera et al., 2022; Murrja, Ndrejoni, Maloku, Prendi, 2022).

Climate change, globalization of markets and different consumer perceptions of food safety have raised concerns about risk (Olivera et al., 2022). Doung et al., (2019) carried out a systematic review of the literature and concluded that the volume of research on risk perception in agriculture and risk management has increased substantially since 1985.

Harwood et al., 1999; OECD, 2008a; OESD, 2009; Curtis, 2007; Drollette, 2009; Schaffnit-Chatterje, 2010; Kahan, 2013; Carne et al., 2013; Turay, 2015; Thomas, 2018; Murrja et al., 2019; Komarek et al., 2020; USDA-ERS, 2020; Jankelova et al., 2020; Murrja, Maloku and Meço, 2021, Murrja & Braha 2021, Ranjbar et al., 2021; Sciabarrasi, 2021; Murrja et al., 2022 identified production, marketing, economics (funding), human resources, and the respective legal framework as the main five risk sources. According to Hardaker et al. (1997) business risks are those affecting farm business performance such as production, market, institutional and personal risks, and financial risks, connected to the company's financing. According to Murrja, Ndrejoni, Maloku, and Prendi (2022), researchers of the risk management of agricultural businesses classify risks into five main categories: (1) production risk, (2) market risk, (3) financial risk, (4) legal/institutional risk, and (5) human resources risk. The OECD (2009) uses a holistic approach that identifies three risk layers requiring different responses, and this categorization is linked with risk management. The first layer concerns the normal variation in production, process, and weather; it does not require policy reply, and can be managed by farmers as business strategy. The second layer is marketable risk which can be handled through market tools. The third layer, considered as of low probability but reaching catastrophic levels, leads to high and irreversible losses affecting many or all farmers. Under these circumstances, resilience is beyond farmers or markets, and government intervention may be required. In the first layer, risk probability is high, and losses are low, the second layer covers low frequency risk and medium losses; finally, the third layer includes very low frequency, causing very high losses and requiring risk mitigation and risk transfer (Tedesco, 2017).

2. LITERATURE REVIEW

2.1. The term "risk"

The term risk is complex (Hopkin, 2018) and has a universal use. Attempts to define risk date back to the 60s of the last century (Pratt, 1964; Hopkin, 2018). Experts use the term "risk" in several different ways (Hardaker, 2000).

Table 1: Uses of the term risk

Uses:	1) "Uncertainty" (Hardaker, 2000; Rejda, McNamara, Rabel 2021; Thomas, 2018; Srinivas, 2019; Murrja et al., 2019).
	2) Positive (luck) and/or negative (threat) (Renn, 2004; The Oxford English Dictionary; Project Management Institute USA, 2008; ISO 31000, Guide 73; The Institute of Risk Management; Hopkin, 2018; Murrja et al., 2019).
	3) Danger/disaster (Murrja et al., 2019; The Oxford English Dictionary).
	4) Combination of probability and influence (British Standard, 2003; The Institute of Internal Auditors; Orange Book from HM Treasury).
	5) Enterprise (Hopkin, 2018; Murrja et al., 2019).

Source: Authors own elaboration.

2.2. Definition of risk

The Oxford English Dictionary definition of risk is as follows: 'a chance or possibility of danger, loss, injury or other adverse consequences', and the definition of at risk is 'exposed to danger'. In this context, risk is used to signify negative consequences. However, taking a risk can also result in a positive outcome. A third possibility is that risk is related to uncertainty of outcome.

There is no single definition of risk. Economists, behavioral scientists, risk theorists, statisticians, actuaries, and historians each have their own concept of risk (Rejda, McNamara, Rabel, 2021). Definitions of risk can be found from many sources, and some key definitions are set out in Table 2 (Hopkin, 2018).

Table 2: Definitions of risk

Definitions:

Effect of uncertainty on objectives. Note that an effect may be positive, negative, or a deviation from the expected. Also, risk is often described by an event, a expected. Also, risk is often described by an event, a change in circumstances or a consequence (ISO Guide 73).

Risk is the combination of the probability of an event and its consequence. Consequences can range from positive to negative (Institute of Risk Management-IRM).

Uncertainty of outcome, within a range of exposure, arising from a combination of the impact and the probability of potential events (Orange Book from HM Treasury).

The uncertainty of an event occurring that could have an impact on the achievement of the objectives. Risk is measured in terms of consequences and likelihood (Institute of Internal Auditors-IIA)

Source: Hopkin (2018).

2.3. Definition of business risk

Table 3 presents a number of suggested definitions of enterprise risk management. There are three components that are required in a comprehensive definition of the ERM process. These are: 1) the description of the process that underpins enterprise risk management; 2) identification of the outputs of that process; and 3) the impact (or benefit) that arises from those outputs (Hopkin, 2018).

Table 3: Definitions of enterprise risk management

Definitions:

Enterprise risk management is a strategic business discipline that supports the achievement of an organization's objectives by addressing the full spectrum of its risks and managing the combined impact of those risks as an interrelated risk portfolio (Risk Management Society-RIMS)

Enterprise risk management is a process, effected by an entity's board of directors, management and other personnel, applied in a strategy setting and across the enterprise, designed to identify potential events that may affect the entity, manage risk to be within its risk appetite and to provide reasonable assurance regarding the achievement of entity objectives (COSO).

A rigorous and co-ordinated approach to assessing and responding to all risks that affect the achievement of an organization's strategic and financial objectives (Institute of Risk Management-IRM).

All the processes involved in identifying, assessing and judging risks, assigning ownership, taking actions to mitigate or anticipate them and monitoring and reviewing progress (Orange Book from HM Treasury)

Source: Hopkin (2018).

2.4. Appetite for risk

A range of definitions of risk appetite is shown in Table 3 and it is obvious that different professional bodies have produced very similar definitions of risk appetite.

Table 4: Definitions of risk appetite

Definitions:

The amount of risk that an organization is willing to seek or accept in the pursuit of long-term objectives. (IRM, 2011)

The amount and type of risk that an organization is willing to pursue or retain. (ISO Guide 73, 2009).

The amount of risk that an organization is prepared to accept, tolerate or be exposed to at any point in time. (Orange Book, 2004).

The level of risk that is acceptable to the board or management. This may be set in relation to the organization as a whole, for different groups of risks or at an individual risk level. (CIIA, 2005)

Source: Hopkin (2018).

2.5. Risk matrix

Using the matrix to illustrate the likelihood and magnitude of risk impact (risk factor) is a very important risk management tool (Hopkin, 2018). In their studies, Rosenberg et al., (1999), Cooper et al., (2005), Astles et al., (2006), Wilkinson et al., (2013), Flechter, (2015), Ullah et al., (2015), have presented risk matrices at different

assessment levels. While Farag (2015) and Murrja et al., (2022) in their studies have presented risk matrices according to the aggressiveness of the risk factors. Figure 1 presents the enterprise risk matrix; according to levels from 1 (very low) to 5 (very high) and Figure 2 presents the risk aggressiveness matrix of the enterprise risk (Murrja, Ndrejoni, Maloku, and Prendi 2022).

Figure 1: Matrix of qualitative risk levels

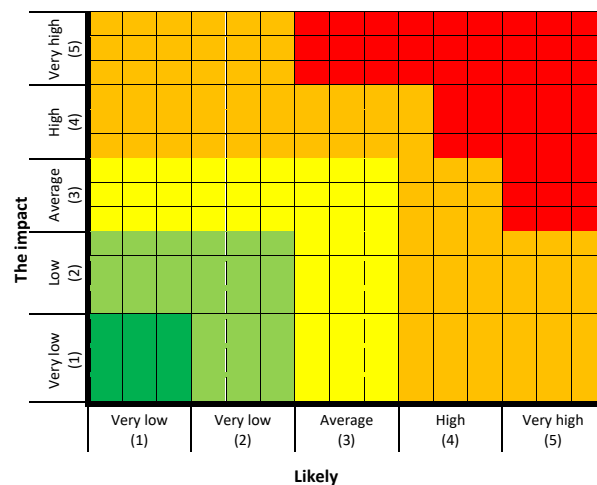
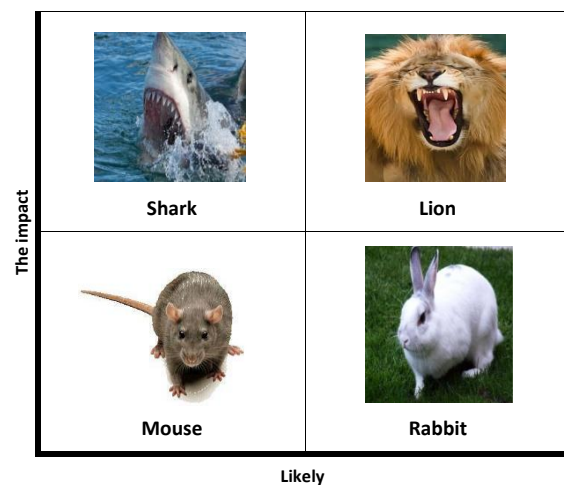


Figure 2: Risk aggressiveness matrix



Source: Murrja, Ndrejoni, Maloku, Prendi (2022).

According to Murrja et al., (2022) the combined assessment of the matrix of risk levels with the matrix of risk aggressiveness enables an assessment of risk levels within a given aggressiveness. See Figure 3.

Figure 3: Combined matrix of risk levels with risk aggressiveness

Aggressiveness	Color-coded risk level	The level of risk in words
	Yellow Green	Average Low Very low
	Yellow Green	Average Low
	Red Yellow	Very high High Average
	Red	Very high

Source: Authors own elaboration.

3. MATERIAL AND METHODS

Theoretical framework of this study is based: 1) in providing a considerable number of items within which our study is part; 2) in existing theories of literature; 3) in tests and certifications of other researchers; 4) in the form of an essay; 5) in creating an opinion to approach unknown research; 6) in a theory related to the proposals of other researchers; 7) in the use of theory, to predict and control situations within the context of the study (Murrja, Ndrejoni, Maloku, Prendi, 2022).

Research literature research is conducted in order to respond to the requirements of the theoretical framework (Pham et al., 2019) with these phrases: "Farm/agricultural risk management"; "Farm/agriculture risk analysis" (Murrja, Ndrejoni, Maloku, Prendi, 2022); and "Risk management" (W Septiani and P Astuti, 2017).

Consequently, this research addresses the following research questions:

RQ1: What have published studies explored to date?

RQ2. What are the research gaps to guide the framework for studies on ERM in agriculture in the future?

We conducted a literature search to identify an initial database of peer-reviewed studies that possibly examined: (i) type(s) of agricultural risk (Komarek et al., 2020); (ii) the process (s) of agricultural risk management; (iii) agricultural risk management framework(s).

The search resulted in a very large number of papers. We selected 83 papers. These works better fit the theoretical framework of our study.

4. DISCUSSION AND RESULTS

Agriculture is an important sector of the economy. This sector is a necessity, without which one cannot live. Its challenges are related to the way of managing risk events, for a sustainable development. The idea of such a work is related to previous works (Meço et al., 2014; Meço et al., 2016; Marku, Murrja 2018; Marku et al., 2018).

In industrial enterprises or in other words in enterprises outside the agricultural sector; (i) risk classification system; (ii) risk management process; and (iii) risk management framework; they are well consolidated, and standardized according to the specifics of different countries or economies. It is not the same situation in the agricultural sector.

Enterprise risk management (ERM) is a complex process. It is even more complex in agricultural enterprises (farms and agribusiness enterprises). To succeed in enterprise risk management (ERM), Hopkin (2018) suggests combining the risk management process with the risk management framework.

The risk management process is standardized. Risk professionals use ISO 31 000 Standard, IRM Charter, COSO-ERM Standard, British Standard BS 31 100 and CoCo (Criteria of Control). But researchers have proposed different risk management processes. For example: Hopkin's "8R and 4T" (2018); Fleckter (2005) adapted the ISO 31000 risk management process diagram for his study; Kahan (2013), Theuvsen (2013), Leppala (2016), Wira Abu Bakar and Rabiha Md Sum (2020), describe the risk management process in agriculture.

The risk management process cannot be developed separately from the risk framework. The components of the risk framework are: (i) Risk architecture; (ii) Risk strategy; and (iii) Risk protocols. Risk architecture defines roles, responsibilities, communication and risk-reporting structure; Risk strategy, appetite, attitudes, and philosophy are defined in the risk management policy; Risk protocols are defined in the risk guidelines for the organization and include the rules and procedures, as well as the risk management methodologies, tools and techniques that should be used (Hopkin 2018).

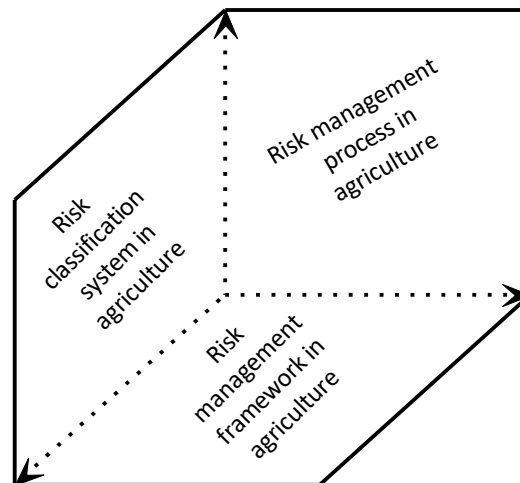
The risk classification system has a very important role in risk management. Even the classification systems are standardized, such as: ISO 31 000 Standard, COSO-ERM, FIRM Card, BS 31 100 Standard for private enterprises (businesses) and PESTLE System for the public sector. The management chooses the system that suits the business circumstances, but the combination of the two risk classification systems is also suggested. (Hopkin 2018).

The focus of our study is enterprise risk management in agriculture. The risks that are relevant in agriculture have different characteristics, and they can be classified in very different ways (Maurer, 2014). Risk researchers in agriculture classify risks into five main groups; (1) production risk, (2) market risk, (3) financial risk, (4) legal/institutional risk, and (5) human resources risk (Harwood et al., 1999; OECD, 2008a; OESD, 2009; Curtis, 2007; Drollette, 2009; Schaffnit-Chatterje, 2010; Kahan, 2013; Carne et al., 2013; Turay, 2015; Thomas, 2018; Murrja et al., 2019; Komarek et al., 2020; USDA-ERS, 2020; Jankelova et al., 2020; Murrja, Maloku and Meço, 2021, Murrja & Braha 2021, Ranjbar et al., 2021; Sciabarrasi, 2021; Murrja et al., 2022). Agriculture is very strongly linked to natural conditions and the environment in which farming activity takes place (Janowicz-Lomotta, Łyskawab, 2014)

Agricultural intensification is often associated with environmental degradation, including soil erosion, water, and soil contamination, and biodiversity loss (Arif et al., 2018; Chen et al., 2017; Ferreira et al., 2018; Nacinovic et al., 2014). The high variety of characteristics of each sustainability frameworks derives from the fact that they were developed to serve different end-users: (i) farmers for assessing their farm performance; (ii) advisories and technicians for advising farmers on how they can improve their sustainability; (iii) researchers who conduct comprehensive regional and local assessments adaptable for context-specific conditions by combining, for example, different indicators from different frameworks (Alaoui et al., 2022).

In order to have a sustainable development, strategic development and maximum profits in agricultural businesses, we suggest enterprise risk management in the three-dimensional plan. The three-dimensional plan enables the combination of the risk management process with the risk management framework and the risk management system in agricultural enterprises.

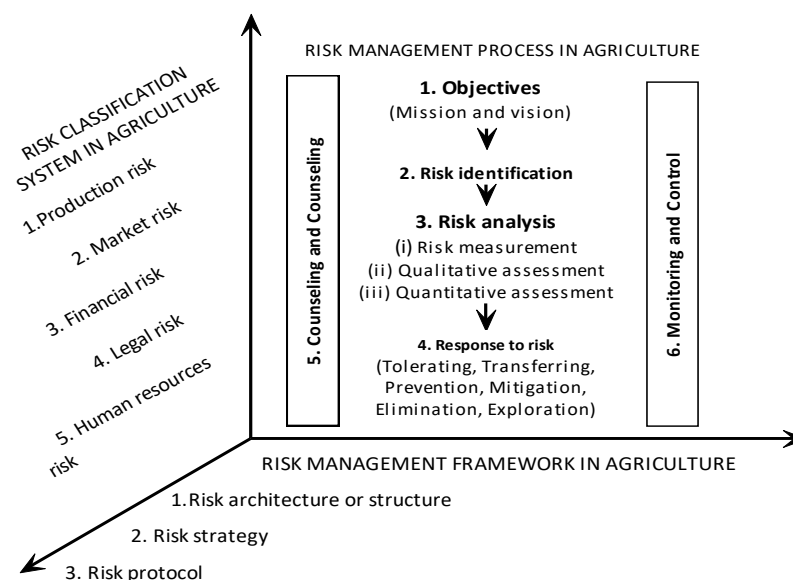
Figure 4: Enterprise risk management (ERM) in agriculture in the three-dimensional plan



Source: Authors own elaboration.

The risk management process in agriculture is adapted from ISO 31 000, IRM, BS 31 100, Hopkin (2018), while the risk management framework is from Hopkin (2018). According to Murrja, Ndregjoni, Maloku, Prendi (2022), researchers of the risk management of agricultural businesses classify risks into five main categories: (1) production risk, (2) market risk, (3) financial risk, (4) legal/institutional risk, and (5) human resources risk. The detailed three-dimensional risk management plan of the enterprise in agriculture is presented in Figure 5.

Figure 5: Enterprise risk management (ERM) in agriculture detailed



Source: Author own elaboration.

The answer to the first research question: RQ1: What have published studies explored to date?

The studies so far have consolidated the risk calcification system in agricultural enterprises. Researchers are of one opinion by classifying risk events into five major agricultural risks (production, market, financing, laws and human resources). During the research we found diagrams of the risk management process in agriculture. These diagrams are individual studies of several authors. We have not found a universally accepted or

standardized diagram. Taking into account the risk management framework has not been found in previous studies and this constitutes an innovation in the risk management of the agricultural enterprise.

The answer to the second research question: RQ2. What are the research gaps to guide the framework for studies on ERM in agriculture in the future?

Let this paper serve as a first step for other researchers in the future, to consolidate and standardize enterprise risk management in agriculture. Even though a considerable number of scientific papers have been studied, it is very difficult to research all the studies in different research platforms. We will express our opinion on the context of enterprise risk management in the "Conclusions" chapter.

5. CONCLUSIONS

Even why our work has been referred to studies in Europe (Tangermann, 2011; Janowicz-Lomotta, Łyskawab, 2014; Špička, Derenik, 2021), Canada (Antón, et al., 2011), Australia (Kimura and Antón, 2011), New Zealand (Martin, 1996; Melyukhina, 2011), Spain (Antón and Kimura, 2011), the Netherlands (Melyukhina, 2011) and other countries of the world, we must emphasize that the risks in agriculture are very diverse, and relate to the typology of each country.

Meanwhile, the countries are divided into three main groups: (i) underdeveloped countries; (ii) developing countries; and (iii) developed countries. Therefore, the risk management approach in agriculture should be according to the specific circumstances of each country.

Suggesting a three-dimensional context for risk management in agriculture is comprehensive. The application in practice will ensure a successful management of the risk of entrepreneurship in agriculture. Excluded (i) the risk classification system, where all risk researchers in agriculture agree on the five main risks (production, market, financing, laws and human resources); and (ii) the risk management framework, which orients in the strategic aspect ERM in agriculture; the process of risk management can be planned according to the specifics of agricultural businesses and the countries where they develop the activity.

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Health Insurance and Health Assurance

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Abstract: Modern healthcare facilities are organizations with a high degree of complexity, specialization and differentiation, operating in an even more complex environment. They require huge resources to operate. Hospital care is and will be the most expensive compared to other types of care.

The modern health system is based on the principles of solidarity, the right to choose and efficiency in the use of system resources, and in its nature has both social and economic characteristics.

With the health care reform, under the Medical Institutions Act, they have been converted into commercial companies or cooperatives. As new economic entities, hospitals must change their economic behavior in several aspects: firstly, they produce and sell their product (hospital product or service) to other economic entities, secondly, a new type of relationship is established between them and the National Health Insurance Fund, companies for voluntary health insurance and others, thirdly – their tax treatment is changed.

Basically, the health care financing systems are based on public (budgetary financing), social health insurance and health assurance.

Keywords: healthcare, health insurance, health assurance, health care reform, national health insurance fund

Introduction

In modern conditions, the health systems of individual countries are built differently. In order to function smoothly, they need different sources of financing, and the choice of an appropriate model for their financing plays a major role in ensuring the efficient use of available resources and achieving a higher quality of the medical services offered. The funds accumulated through health contributions are of a public nature and one of the most popular claims in Bulgaria is that they are insufficient. It should be borne in mind that the state budget pays for the health insurance of some groups of citizens (pensioners, students, unemployed, etc.), which amount to about 40% of the insurance income of the health fund. Society concentrates on public health care spending, without being officially informed and keeping track of the huge private costs, nor how much money goes into the health system and how efficiently it is spent. The proposal to increase the health contribution is perceived negatively by the majority of the population for various reasons, common to all social groups is that the costs are not directly linked to the quality of health care. There is a lack of trust on the part of citizens in the national health insurance fund as an institution that should protect patients' rights and ensure good quality of health services and control over the activities of medical specialists.

Health Insurance and Health Assurance

Health insurance is a form of management and financing of health costs through health insurance contributions based on the pooling of financial and health risks. Health insurance contributions are made by employers, employees and the state into one or more private or state health insurance funds. Through health contributions, universal coverage of the population with health services is ensured. Their amounts vary widely in individual countries (from 6.95% of the insured person's income in the Netherlands to 14.6% of the insured person's income in Germany) and are most often owed in equal proportions by him and the employer.

Health insurance is mandatory, and patients can freely choose their medical facility and doctor. In Bulgaria, the main source of income for health insurance is health insurance contributions. They are defined as a percentage of income and are paid as follows:

1. For persons receiving income from employment, official legal relations, arising on the basis of special laws, working under contracts for the management and control of commercial companies and members of cooperatives, receiving remuneration from the cooperative - the income on which contributions are made for state social insurance, determined under the Social Insurance Code; the contribution is paid by the employer or the department and by the insured in the ratio determined in the law on the state social insurance budget, and since 2015 it is 60:40..

2. Sole traders, partners in commercial companies and persons registered as practicing free professions or craft activities according to registration, and farmers are insured on a monthly income that cannot be less than the minimum amount of insurance income for self-insured persons, determined with the Law on the budget of state social insurance, and annually on the taxable income, according to the data from the tax return; agricultural producers and tobacco producers, registered on the basis of a legal act, who carry out only agricultural activity, do not determine the final amount of the insurance income; insurance contributions for these persons are paid on the minimum monthly insurance income determined by the Law on the budget of state social insurance for the relevant year: Contributions are paid by the 10th of the month following the month to which they apply. The monthly insurance income for the purpose of calculating the annual amount of the contribution is obtained by dividing the annual taxable income by the period during which the activity was carried out. In the case of annual taxation, contributions are made within the terms for submitting taxes under the Personal Income Tax Act.
3. For persons who do not pay social security contributions on income under point 2 and work without an employment relationship under a contract with a contracting entity - an enterprise or other organization, social security contributions are paid for each month in a legally regulated ratio on the taxable income, reduced by the legally recognized expenses for the relevant activity by the enterprise or organization, being deducted from the remuneration paid to the person; contributions are made by the enterprise or organization by the 10th of the month following the one to which they apply.
4. For pensioners - the amount of the pension or the sum of pensions, without the additions to them; contributions are for the account of the republican budget and are paid by the 10th of the month following the one to which they relate.
5. For persons receiving benefits for temporary incapacity for work due to illness, pregnancy and childbirth and for raising a child - the contributions are for the account of the employer or the department and are equal to the part of the contribution owed by him, being paid when the benefits are paid; the same amount is the insurance contribution for persons who are insured only at their own expense, and the contributions are paid by the 10th of the month following the month to which they apply.
6. For persons receiving unemployment compensation - the contributions are for the account of the "Unemployment" fund and are paid by the 10th of the month following the month to which they apply.

Persons who are insured at the expense of the republican budget, unless they are insured on other grounds:

1. Persons up to the age of 18 and after reaching this age, if they study regularly - until the completion of secondary education, but not later than reaching the age of 22; students included in training through work (dual system of training) for the duration of the training according to the relevant curriculum, organized under the conditions and in the order of vocational education and training law, regardless of the occurrence of grounds for insurance;
2. Students - full-time studies in higher schools until reaching the age of 26, and doctoral students in full-time studies by state order;
3. Foreign students - full-time studies, up to the age of 26 and doctoral students of full-time studies, admitted to higher schools and scientific organizations in our country in accordance with Decree of the Council of Ministers No. 103 of 1993 on the implementation of educational activities among Bulgarians abroad and Resolution of the Council of Ministers No. 228 of 1997 on the admission of citizens of the Republic of Macedonia as students in the public higher education institutions of the Republic of Bulgaria;
4. Citizens who meet the conditions for receiving monthly social benefits and targeted heating benefits in accordance with the Social Assistance Act, if they are not insured on another basis, as well as those using social or integrated health and social services for residential care and social services for provision of shelter, financed from the state budget;
5. Those detained or deprived of liberty;
6. Persons in proceedings for the granting of refugee status or the right to asylum;

7. The parents, adoptive parents, spouses or one of the parents of the mother or the father, who take care of a person with a disability of 50 and over 50 per cent type and degree of disability or with a permanently reduced working capacity with certain external assistance;

8. Persons receiving benefits under Art. 230 and 231 of the Law on Defense and the Armed Forces of the Republic of Bulgaria - for the period of receiving the compensation.

The health insurance rights of persons who are obliged to pay insurance contributions at their own expense are interrupted if the persons have not paid more than three due monthly insurance contributions for a period of 36 months until the beginning of the month preceding the month of the medical assistance provided. Persons with interrupted health insurance rights pay for the medical care provided to them. Individuals' health insurance rights are reinstated provided that the individual has paid all due health insurance contributions over the last 60 months. The health insurance rights of the persons are restored from the date of payment of the due contributions, and the amounts paid for the medical assistance provided are not restored.

When the employer or another person is obligated to pay insurance contributions, failure to pay insurance contributions does not deprive the insured person of health insurance rights.

Based on the health insurance contributions, the insured persons receive the medical care they are entitled to without paying its monetary equivalent. They are required to present an identity document, and medical and dental care providers to verify the health insurance status of the individuals according to data from the National Revenue Agency.

Mandatory health insurance contributions collected from insured citizens are managed and spent according to certain criteria approved in the national framework agreement (in accordance with the Law on the budget of the National Health Insurance Fund) from the health insurance institution National Health Insurance Fund and the relevant Regional Health Insurance Funds. The main prerequisite for spending the funds is the occurrence of an insurance event (illness) - payment to the contractor for medical services rendered to the insured patient. The insurer's obligations are expressed by fully or partially compensating the costs related to the treatment of the insured patient. The amount of the mandatory health insurance contribution is determined by the Law on the budget of National Health Insurance Fund and according to the provisions of the health insurance law, it is calculated on the basis of income, in the amount of 8% of the income of a worker, divided between the worker and the employer according to the established ratios. The self-employed and the unemployed who do not receive unemployment benefits should take out their own health insurance.

The principles on which the mandatory health insurance model is based are mandatory participation in the collection of contributions, solidarity, relatively increased responsibility of the insured, equality.

By its very nature, joint participation implies a redistribution of costs among all the insured – the rich help the poor (through higher health contributions), the healthy help the sick, the young help the elderly.

Control over the use of financial resources in the model based on the receipts from health insurance is effective and is carried out by the insurer and the insured persons. The financing of the health system is decentralized, and due to the presence of increased competition in the market of health services, their quality is relatively high. The main drawback of the model is the high levels of health costs, which can cause a deficit in the health insurance funds due to the financing of the treatment of some risk groups of the population who are not health insured but use health services.

The activity of insurance companies related to the financial provision of certain health services and goods is legally regulated in health insurance law. Voluntary health insurance companies mainly offer payment for health goods and services under separate packages in the areas of: improving health and preventing illness, outpatient medical care, hospital medical care and reimbursement of expenses both outside the scope and within the scope of compulsory health insurance. The Financial Supervision Commission gives permission to the companies regarding the offered health insurance packages from the point of view of their feasibility and compliance with the medical standards.

Voluntary health insurance is provided through reimbursement or subscription service. The self-insured person and/or employers, family members and other insurers who insure individuals pay the health insurance premium on their own account or jointly.

Voluntary health insurance companies are financial institutions that provide health services through medical care providers. The scope, type, prices, conditions and procedure for performing health services are defined in contracts between medical care providers and health insurance companies.

The low incomes of the population and the lack of traditions in the field of health insurance limit the presence of voluntary insurance companies. A major problem in the activity of voluntary health insurance companies is the lack of a clearly defined package of health services for the companies to cover and – accordingly – a market for their development. The existing regulation of the basic package of health services paid by the NHIF leaves no market space for voluntary insurance companies. This is also one of the main reasons why there is currently no interest in voluntary supplementary health insurance in the country.

In health assurance, it is characteristic that each patient decides whether to take out health assurance and what package of health services will be covered by it. Risk premiums are determined individually for each patient depending on their health status. This model lacks universal coverage of the population, as only the assured receive health care. The management of financial and health risks is carried out by assurance companies, and the administration of their activity absorbs significant amounts of money. Very often, health assurance contributions are made by employers as a type of social benefit for the benefit of their employees. The quality of the health services offered is high and insured persons have the right to use them immediately, when necessary, without having to enter waiting lists.

Health assurance is another source of funds for the system, although at this stage it can be seen as an expensive alternative for users of medical services, which contributes to its limited performance compared to other financial sources. For obvious reasons, they are also seen as an additional cover for citizens' medical expenses. Assurance can cover various health risks according to the conditions set by the insurance institution and can be individual, family and group, concluded according to the insurer's tariffs. This type of assurance, in contrast to mandatory health assurance, is characterized by its great flexibility and adaptability. Assurers offer both complex and differentiated conditions and terms, in view of the potential health risk that the insured carries. The similarities in the benefits paid by the insurance and health assurance companies are that they cover the costs of an actual medical service - examination, treatment with a stay in hospital, the need for emergency assistance and a number of manipulations or medical intervention. At the same time, with assurers, the limit up to which these costs are covered is lower than that covered by health assurance companies, but in addition to this type of compensation, compensation is paid to the heirs of the assured person in the event of an accident-type event. Health assurance is voluntary and part of the population remains outside their scope, for which it is necessary for the central government to ensure access to medical care for the uninsured.

In an attempt to create more favorable conditions for the development of health assurance, some reliefs have been laid down in the regulatory framework, which provide tax relief to employers.

Conclusion

To finance the health care system in Bulgaria, a model of social health insurance with one health insurance fund - the National Health Insurance Fund - has been chosen. The reform in individual sub-sectors of the health care system has begun, but is not yet complete. Its successful completion is a mandatory but insufficient condition for the construction of a modern and modern health care system. The principles of effectiveness, efficiency, freedom of choice and patient care need to be embedded and become an integral part of the fabric of the system and of the thinking of people employed in or affected by the sector.

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Law on medical facilities
Health law
Health Law Amendment Act

System for financial management and control in health care

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Abstract: In modern conditions, the health systems of individual countries are built differently. In order to function smoothly, they need different sources of financing, and the choice of an appropriate model for their financing plays a major role in ensuring the efficient use of available resources and achieving a higher quality of the medical services offered. The funds accumulated through health contributions are of a public nature and one of the most popular claims in Bulgaria is that they are insufficient. It should be born in mind that the state budget pays for the health insurance of some groups of citizens (pensioners, students, unemployed, etc.), which amount to about 40% of the insurance income of the health fund. The other source of public spending on health care is the direct participation of the state budget in the financing of some drugs and covering the annual deficits of hospital facilities. Bulgarian citizens allocate additional funds for health care, which, according to some estimates, are equal in size to the total public expenditure. At the same time healthcare is in a critical state where the system is not working effectively. This is related to the emerging new tremors in the development of the entire healthcare system in Bulgaria. The lack of a long-term and consistent state policy, which would provide a new attitude to people's health, with which the entire public would be motivated to ensure a high quality of life, makes the topic particularly relevant and significant. There is a need to improve the quality of medical care and increase the efficiency of the health system.

Keywords: Health system, financing, financial management, control, healthcare

Introduction

The healthcare system of any country depends on the influence of many factors - the socio-economic development of the country, resource security, the regulatory framework, and many others. The functioning of the healthcare system is one of the factors that influence the health of citizens. The health system consists of health and medical facilities and management and control bodies.

System for financial management and control in health care

In the system for managing the various aspects of the activity of any health enterprise in modern conditions, the most complex and responsible is the management of its financial activity.

In conditions of a difficult to predict environment, a strategic approach in financial management is required. It focuses on the movement of money and its scrolling through real, financial and liquid assets. Financial management plays an important role in finance and capital formation and investment. Attention is paid to securing, investing and operating capital.

A major role in the management process of any healthcare organization is played by the regulation of its financial activity. The regulatory mechanisms set the parameters for financial and management regulation.

The finances of the healthcare facility are monetary relations in the formation of its capital and in its investment in real assets. Cash in all its manifestations is a material carrier of the finances of the healthcare facility.

Financial management of a healthcare organization is an extremely important aspect of its overall management, and this management includes a number of aspects.

The main financial activities of any healthcare organization are financing and investing, accounting and control, forecasting and long-term planning, pricing, borrowing policy, insurance and social incentives.

Financial management is a set of operations both in the management of cash flows, accounting entries and the movement of capital, as well as in the application of techniques for the collection and distribution of long-term capital. The main objective of the healthcare organization and its financial management is the maximization of shareholder wealth. The main task of the financial manager is the assessment of the relationship between profit and risk - an assessment on the basis of which he makes financial decisions about production and sales.

All material, non-material, labor and financial resources of health institutions and bodies can also be presented as cash flows, which are distinguished by their sources and the ways of transformation, distribution and use in the process of functioning of the health system.

A problem in the study of the economic aspect of health care is to a large extent the rational use of existing health care resources (monetary, material, personnel) - achieving the maximum result at minimum costs. The impossibility of the state to allocate correctly and sufficiently funds for health care, as well as the incorrect planning of monetary resources, is the main reason for the health care crisis in Bulgaria as a result of the long transition of our country from a planned to a market economy.

The main task of the health system, organized on certain principles, is the provision of health care with optimal use of the resources provided by society.

Its complexity stems from the diverse forms of health structures, financing and relationships – market and non-market, regulations and deregulations, economic and administrative, ethical and unethical.

The health care system provides professional services aimed at protecting, restoring and strengthening the health of the population, thereby influencing human capital, the quantity and quality of working and free time necessary for the production of other goods for human development.

The modern health system is based on the principles of solidarity, the right to choose and efficiency in the use of system resources, and in its nature has both social and economic characteristics.

With the health care reform, under the Medical Institutions Act, they have been converted into commercial companies or cooperatives. As new economic entities, hospitals must change their economic behavior in several aspects: firstly, they produce and sell their product (hospital product or service) to other economic entities, secondly, a new type of relationship is established between them and the National Health Insurance Fund, companies for voluntary health insurance and others, thirdly – their tax treatment is changed. Hospitals cease to be budget support organizations, but realize a financial result, which is formed as a difference between their income and expenses.

Modern healthcare facilities are organizations with a high degree of complexity, specialization and differentiation, operating in an even more complex environment. Their function, structure and management methods are considered the most complex and heterogeneous organization in the modern healthcare system. They require huge resources to operate. Hospital care is and will be the most expensive compared to other types of care.

Since most hospitals are no longer "budget institutions" with corresponding "administrative subordination", but are market entities with sufficient managerial and market autonomy, they face increasingly difficult challenges to balance and combine the principles of the market mechanism, the a priori humanity of medicine, rising public expectations and relatively limited resources.

For this reason, economic methods of health care management have a particularly important place and importance.

They represent a set of such ways of influence that create economic conditions, affect the material interest of people, raise the leading role of the economy in terms of management, create the economic rules for the development of organizations and the relationships between them, balance the ratio of consumer-producer dependence and the others. influence indirectly. Based on objective economic laws, they use their levers and categories. In the conditions of the market economy, these methods are of decisive importance. Economic methods of healthcare management include:

- ✓ Planning
- ✓ Financing
- ✓ Pricing
- ✓ Material incentive
- ✓ Economic analysis

Health care financing is a set of ways of raising, distributing and spending money necessary for the reproduction of activities related to strengthening, protecting and improving health. In this sense, the financing

of health care can be considered as an activity related to the management of the financial means necessary for individual health structures and the financial relationships between the participants in the health care process.

It has three main aspects:

- fundraising (sources, subjects and methods of payment);
- distribution of financial resources (geographical, social and organizational);
- expenditure of financial resources (for what: by types of activities, by structure and economic elements and how: results/costs and activity/costs).

Priority is given to questions of the fairness of the distribution and the efficiency of the use of financial resources.

Financial management is a system for financing goods and services, redistribution of income, realization of financial assets, attraction of investments, stability and sustainability of the company. Without financial management, the health care system could not exist - in the form that each person wants. Healthcare is expensive, management is complex, atypical. The end result is not a positive financial result or surplus balance. The final product is fundamental to humanity – the patient's health and quality of life.

The pricing of medical services is one of the aspects of the economic activity of medical institutions (organizations) of any form of ownership.

With the advent of market relations in the field of health care, determining an adequate price for the delivery of health services has become a major problem for managers, insurers and politicians. On the one hand, healthcare managers aim to cover total production costs to ensure the financial survival of their organizations. In the private sector, healthcare managers are also tasked with ensuring revenue growth that ensures profit for owners, lenders and other financial partners. On the other hand, insurance companies and the state, which largely finance the health sector, try to control the growth of the national health budget in order to achieve an efficient use of public resources.

As a consequence, prices in the health sector have a different meaning than those observed in the supply of commercial goods and services. Unlike other sectors of the economy, the direct consumer pays only partially for medical services, and in many cases health care is even offered free of charge to consumers. Therefore, in the field of health care, supply and demand are not always determinants of pricing, and prices do not always reflect consumer evaluations, the coordination process between consumers and providers, and their motivation to cooperate.

Price is a monetary expression of the value of a product (or service).

Costs are the amount of labor invested in providing medical services of a given quality. A characteristic feature of medical services is that the process of its production coincides with the process of its application.

Price consists of two main elements: cost and profit.

Costs are the costs of a medical institution for providing medical services, expressed in money. It includes material costs and remuneration of employees of a medical facility for a unit of service.

Profit is included in the price as a percentage of costs. In the conditions of competition between medical institutions of the same profile in the market of paid medical services, this percentage depends on the quality and comfort of patient care. The percentage of profit varies on average from 15 to 30% of the cost of medical services.

The process of determining a price for a medical service includes a number of sequential elements:

- ✓ determination of the goals of the medical facility (organization) and in this connection
- ✓ the objectives of the price policy;
- ✓ presentation of pricing tasks;
- ✓ determining the demand for medical services;

- ✓ cost estimation (ie costs, costs);
- ✓ analysis of competitors' prices and services;
- ✓ the choice of pricing method;
- ✓ determining the final price for services.

The objective of pricing can be:

- covering costs, their constant reduction;
- ensuring profitability of production, services;
- increasing the competitiveness of service providers;
- conquering the potential consumer market;
- the formation of a stable flow of patients;
- ensuring optimal workload of personnel and medical equipment, etc.

The tasks of pricing must coincide with the goals that the health facility sets for itself in its activities, and these tasks are part of the target block implemented within the framework of the pricing policy.

There are the following types of prices for medical services.

- ✓ "Budget forecasts" (or "budget standards"): financing of medical establishments based on
- ✓ Accepted regulatory documents. "Budget estimates" are used for settlements, between institutions of one territory, between departments of one institution. When using this type of price, the calculations depend on the available financial possibilities; the needs of the medical institution to carry out its activities are not taken into account.
- ✓ Tariffs in the mandatory medical insurance system: monetary amounts, intended to
- ✓ Reimburse the costs of the medical institutions for the implementation of the program of state guarantees for free medical care of the population. These prices are contractual in nature, do not include profits, usually below cost.
- ✓ Contract prices: prices that are approved by contracts between medical
- ✓ Establishments and other institutions and organizations, enterprises, other legal entities for the purpose of medical assistance for employees. Contract prices are close to free market prices, include costs and profit, are regulated by contracts.
- ✓ Free market prices of paid medical services: prices are formed based on supply and
- ✓ Demand and depending on market conditions for medical services. The structure of such a price depends on the economic goal of the medical institution, as a rule, it is used in non-governmental medical organizations.

Bulgarian health care functions in conditions of chronic shortage of funds.

It would be good if a future reform in the financing model of the health care system in Bulgaria contains the following features:

- ✓ Collection and provision in a unified machine-enabled format processing of detailed
- ✓ Information about the work at all levels in the system;
- ✓ Preparation of a clearly defined essential health package (EHP) of goods and
- ✓ Services that are covered by the mandatory health insurance based on the analysis of the provided information and actuarial calculations;
- ✓ Assessment of the necessary funds to cover the costs related to the (EHP), as well as the
- ✓ Sources of income for their financing, including mandatory health insurance and/or insurance contributions, funding from the budget for the groups that are insured at its expense, additional payments from the health insured persons, social payments from the budget for disadvantaged people, etc.;

- ✓ Creation of conditions for competition in the provision of (EHP) within the framework of
- ✓ Compulsory health insurance;
- ✓ Introduction of medical and financial standards, agreed with interested parties;
- ✓ Building a complete information system to ensure transparency and possibility to control
- ✓ The work of the healthcare system; for the purpose
- ✓ Limiting the role of the state to the preparation of the framework for the work of the sector.

Conclusion

The government should not only think about dealing with health costs, but see them as an investment in future economic growth. Better health care will allow Bulgaria to achieve better economic results. A systemic approach to effective public health management gives a better chance of finding the balance between costs and benefits, in such a way that short-term costs (mostly through prevention, early diagnosis and provision of modern treatment) in health yield long-term benefits for the entire economy of the country.

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Digital Democracy in Latvia. Fostering Relations Between Citizens and Institutions

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Abstract: Good relations between citizens and public institutions are necessary for democracy. From the perspective of citizens that means being heard by institutions and having an impact on the decision-making process. From the perspective of institutions that means gaining the trust of citizens, thus ensuring the legitimacy of the decisions made by the representatives of institutions. In Latvia trust in institutions is comparatively low and only a small part of the population is directly engaged in the decision-making processes. Hence, institutions should seek opportunities to foster relations with citizens and support their participation in the democratic processes. On one hand, that could be done by more actively promoting current participation opportunities. On other hand, citizen participation could be strengthened by developing new participation mechanisms. In the 21st Century, that also means – using a digital environment and online opportunities.

The research aims to evaluate the current situation of digital democracy in Latvia and identify the main obstacles that should be overcome to foster digital cooperation between citizens and public institutions in Latvia. To achieve the aim of the research, several research methods have been used. To evaluate current support for citizen participation, Latvian planning documents (strategies) and legal documents are analysed. To comprehend the level of digital cooperation in Latvia, a review of currently available digital solutions is implemented, for example, participation platform Manabalss, Single Portal for Development and Harmonisation of Draft Legal Acts (*TAP portāls*), participatory budgeting tools, and several smartphone applications. To analyse the current promotion of participation opportunities, information on the home pages of the Ministries is analysed, as well as a content analysis of Facebook pages maintained by Latvian Ministries is performed. In the content analysis are analysed entries that are published in the main Facebook pages of all 13 Latvian ministries in the six months period (in total 3181 entries).

Results of analysis of the Latvian planning documents and other legal documents demonstrate support for citizen participation and comprehension of methods that could be used to foster citizen engagement, also by using digital participation opportunities. Nevertheless, the review of currently available digital solutions suggests that the well-thought intentions are not fully implemented and activities of institutions in the digital environment are fragmented and project-based without common objectives and direction. Results of the analysis of the home pages of Latvian Ministries and content analysis of Facebook pages maintained by Latvian Ministries confirm that for now, institutions are insufficiently using digital cooperation solutions and are not sufficiently promoting the currently existing participation opportunities. Hence, for now, the main obstacles to fostering digital cooperation between citizens and public institutions in Latvia are digital skills of the representatives of the institutions and their comprehension of the value of citizen participation. Thus, the research concludes that institutions in Latvia should be more active in the digital environment both by offering digital participation opportunities and by popularizing them – and this digital representation should be a carefully planned process.

Keywords: Citizen participation, Decision-making process, Digital democracy, Public institutions, Social media

1. INTRODUCTION

In a democracy, public administration should maintain good relations with citizens, motivating them to follow the rules and order. By having a dialogue with citizens and fostering their participation in the decision-making process public administration is also supporting its legitimacy, continuing the democratic development of the country. Voting in the elections is a traditional participation activity that could delegate the decision-making power to politicians, thus it is the easiest activity that citizens can take to participate in the decision-making process. Additionally, there are many other activities – digital, face-to-face, institutional and non-institutional – that can also demonstrate the level of citizen participation in the country.

In Latvia level of citizen participation is comparatively low (See Table 1). However, the current situation is heterogeneous, for some activities, such as voting, participation rates are gradually declining, but for other activities, for example, signing proposals for draft laws or participating in pickets and rallies participation rates are increasing. Nevertheless, it must be noted that the situation in Latvia cannot be fully captured, as statistics of the citizen participation activities are not maintained accurately, data of the most recent period often is missing, not all information is publicly available, and statistical data of some activities are not comprehensively compiled at all, for example, about the number of pickets and rallies that are organised.

Table 1: Citizen participation in Latvia

Participation activity / indicator	Data	Source of the data and year
Voting in the latest municipal elections (2021)	34.01%	Central Election Commission of Latvia 2021
Voting in the latest municipal elections when all municipalities were included (2017)	50.39%	Central Election Commission of Latvia 2017
Voting in the latest Parliament elections (2022)	59.41%	Central Election Commission of Latvia 2022
Voting in the latest European Parliament elections (2019)	33.53%	European Parliament 2019
Number of political parties and Associations of political parties (12.11.2022)	62	The Register of Enterprises of the Republic of Latvia 2022
The proportion of citizens who are members of political parties	1%	Van Biezen et. al. 2012
The proportion of citizens who are members of political parties (in 2017)	1.1%	Latvijas Sabiedriskie mediji 2018
Consultative bodies in Latvian ministries (in 2018)	170	State Chancellery of Latvia 2018
Consultative bodies in Latvian ministries (in 2019)	147	Ministru kabinets 2021A
Number of non-governmental organisations participating in the consultative bodies of Latvian ministries (in 2019)	839	Ministru kabinets 2021A
Number of non-governmental organisations that have signed a cooperation document with at least one Latvian ministry	288	Ministru kabinets 2021A
Number of non-governmental organisations that have signed a Memorandum of cooperation between non-governmental organizations and the Cabinet of Ministers	502	Ministru kabinets 2022
The proportion of non-governmental organisations that are active in the participation mechanisms at the national level	4%	Latvian Civic Alliance 2021
The proportion of Latvian citizens participating in non-governmental organisations (in 2017)	5%	Parresoru koordinācijas centrs 2017
The proportion of civic-active citizens (in last two years have participated in a public consultation, picket, donated their time to a problem of public importance, signed a letter of public importance or contacted the elected deputies)	14%	Providus 2021
Civic participation index (in 2015)	10%	Parresoru koordinācijas centrs 2020
Civil Society Participation Index (in 2018)	7	The World Bank Group 2021
Public submissions to Parliament (2019 / 2020 / 2021)	5467 4542 2452	Mandatu, etikas un iesniegumu komisija 2022
Number of citizens that have used the participation portal Manabalss.lv in time from 2011 until the end of 2021 (have voted at least once)	410113	Sabiedrības Līdzdalības Fonds 2022
Number of votes casted in the participation portal Manabalss.lv in time from 2011 until the end of 2021	2293812	Sabiedrības Līdzdalības Fonds 2022

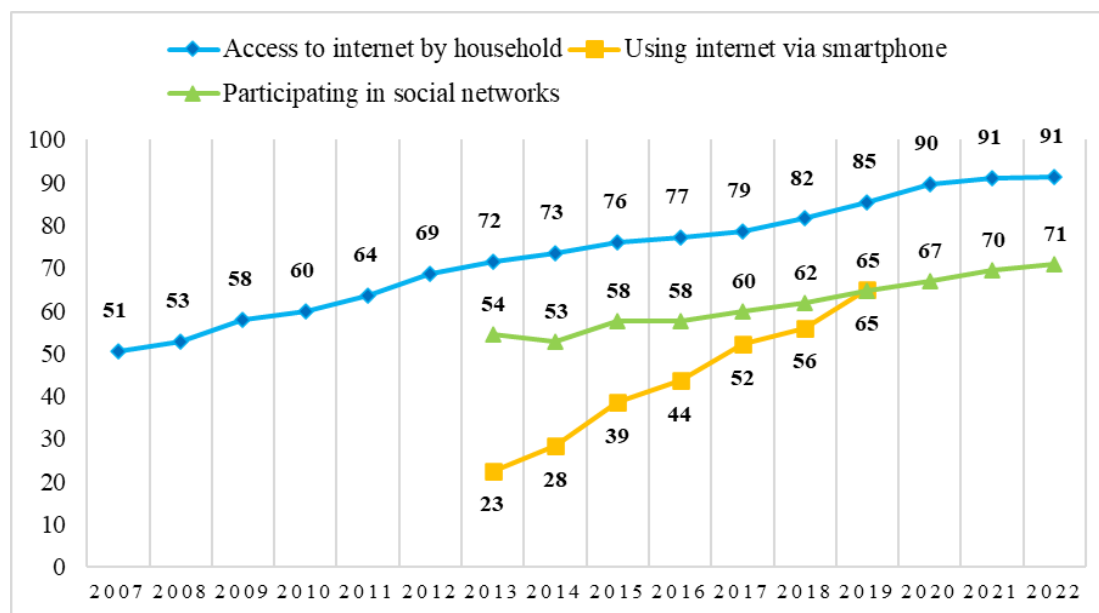
Source: Author's construction based on statistical and public information

The digital environment of the 21st century is ensuring that public administration can be closer to citizens than it was possible previously. At the same time, citizens can also more thoroughly and easily follow the decisions and activities of the representatives of institutions. The openness of government activities and digital solutions can be used also for citizen participation in the decision-making process. The use of the digital environment for communication and cooperation between the state and society is a widely studied subject providing evidence that it is useful for institutions to be present online and further digital development could be beneficial for the state and citizens. Institutions by publishing information on social media are assuring citizens that the institution is transparent in its activities, thus helping to develop a positive effect on public administration's relations with citizens (Arshad & Khurram, 2020). The use of digital solutions is in favour of citizens as it changes the relations between public administration and citizens, giving citizens a more active part in the process "they are not just seen as a client of public administrations, but as a partner that helps to transform public sector organizations by actively participating in public service delivery" (Mergel et. al., 2019). As well as, Armenia Androniceanu and Irina Georgescu have emphasized that "In countries with a high level of e-government implementation, governance is efficient, corruption is low, citizen involvement is higher and economic development is faster" (Androniceanu & Georgescu, 2021, p. 65). At the same time, there are also studies providing comprehension about challenges that institutions are facing when trying to adapt to the digital environment. For public administration, some of the largest challenges are institutions' ability to operate with a large amount of electronic data and implement digital tools on a full scale (Lindquist & Huse, 2017), and

improve the ability to simultaneously engage a larger number of citizens than in the face-to-face meetings or public discussions (Stelzle et al, 2017). Institutions must consider not only what information and by what means is made publicly available but also the way how it is organised “when the information is not presented in a reader-friendly manner, the increased information may dilute the significance of important policy information of which citizens should be aware” (Lee et al, 2020). Additionally, digital environment is providing new opportunities for feedback, thus for the institutions, it can be a new and challenging task in the checklist to demonstrate to citizens where their input was used and that their contribution was valued (Longo, 2017). For the development of e-government, both knowledge of democratic decision-making process and e-service competencies are needed (Melin & Wihlborg, 2018), especially there is necessity for an understanding of digital processes at the top management level (Gravesteijn & Wilderom, 2018) to ensure that digital transformation is successfully implemented at all levels of the organisation. Hence, an important burden for institutions to be able to adapt to the digital environment is the level of digital skills of the employees. The problem, that was also known in Latvia but was mainly ignored until the COVID-19 crisis and only recently there is noticeable comprehension that digital skills training should be implemented for the representatives of institutions.

The level of Latvian citizens' digital skills is a problem in general, according to Digital Economy and Society Index Latvia is below the EU average in this criterion (European Commission 2022A). At the same time, several good preconditions are allowing to foster digital participation in Latvia, for example, comparatively good access to the internet, digital habits of citizens and already existing representation of public administration online (Seimuskane & Lielpeters, 2020, p. 246). The use of the internet has significantly grown over the last 15 years in Latvia (See Figure 1), from 51 per cent of the population in 2007 to 91 per cent in 2022. Participation in social media is becoming more popular as well, in 2022 of the total population of Latvia 71 per cent were using social media. Thus, the digital environment in Latvia has the potential to become a modern space where public administration can communicate and cooperate with citizens.

Figure 1: Use of internet and social media in Latvia (2007 until 2022), the share of the population (in %)



Source: Author's construction based on the data from the Official statistics portal, 2020, 2022A, 2022B

Citizen participation rates in Latvia are comparatively low and an essential role in the decision-making process is given to non-governmental organisations as representatives of society (United States Agency for International Development, 2019). Nevertheless, only a small part of the Latvian population participates in non-governmental organisations (See Table 1). Therefore, digital participation opportunities should be used as a modern solution to foster individual participation, increasing the number of citizens that are participating in the decision-making process of public administration. The opportunity to participate in the decision-making process could also foster citizen trust in public administration and democracy in general as “the feeling of “having a say” in government increases citizen trust in the public sector” (Schmidhuber et. al, 2020). For now, citizen trust in public administration is comparatively low in Latvia. According to Standard Eurobarometer 97 (European Commission, 2022B), of the Latvian population 34 per cent in Summer 2022 tend to trust in public administration, which is below the EU average (50 per cent) and below the trust rates in other Baltic countries

– Estonia (53 per cent) and Lithuania (46 per cent). Thus, considering the existing reality in the relations between public administration and citizens, institutions must be the ones who are making the first step towards citizens. Therefore, the public administration must have a comprehension of the current opportunities that the digital environment can offer for communication and cooperation between institutions and citizens.

2. METHODOLOGY

The research aims to evaluate the current situation of digital democracy in Latvia and identify the main obstacles that should be overcome to foster digital cooperation of citizens and public institutions in Latvia. To achieve the aim of the research, several research methods have been used.

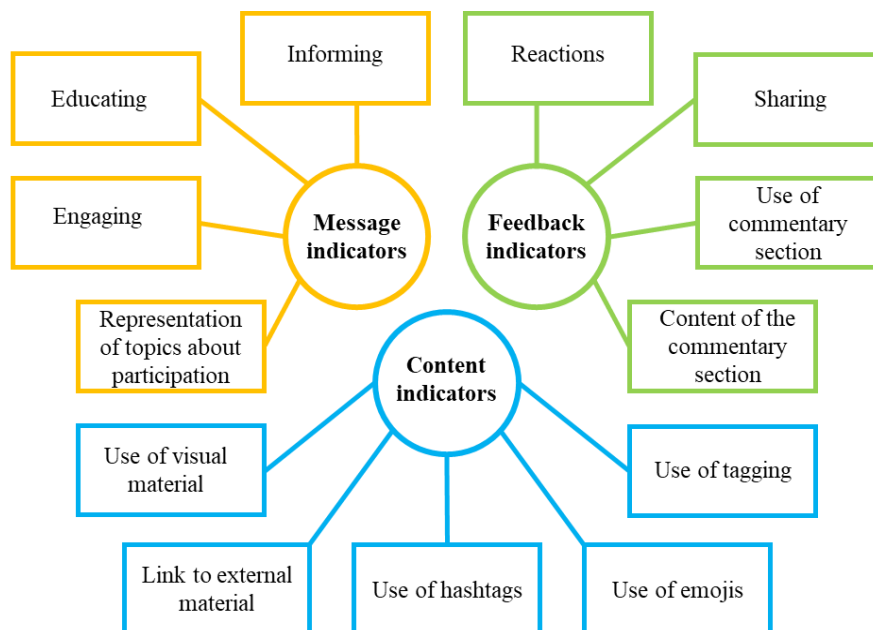
To evaluate current support for citizen participation, Latvian planning documents (strategies) and legal documents are analysed. The official planning documents demonstrate the long-term and medium-term goals and vision – the overall framework that is setting the work field for representatives of public institutions. In the research the ideological orientation and goals for citizen participation are analysed in four documents: the Sustainable Development Strategy of Latvia until 2030, National Development Plan of Latvia 2021–2027, Guidelines for a Cohesive and Active Society 2021–2027, and Guidelines for digital transformation 2021–2027.

To comprehend the level of digital cooperation in Latvia, a review of currently available digital solutions is implemented. The review shows the actual opportunities that are developed for citizen participation, hence those activities that have gained the momentum and the financial support to be implemented and not remain in the planning documents just as desirable but not reachable goals. In the research are reviewed participation platform MyVoice (*Manabalss*), Single Portal for Development and Harmonisation of Draft Legal Acts (*TAP portals*), participatory budgeting tools, and several smartphone applications. Of all government-owned smartphone applications in the review are included only those applications that are used for citizen participation in the decision-making process. In general, many smartphone applications in Latvia are used for cooperation and communication between citizens and institutions, hence the digital presence is at a comparatively good level, and only for the citizen participation opportunities more development is needed.

To analyse the current promotion of participation opportunities, information on the home pages of the Ministries is analysed. Since the middle of 2020 more than 96 public administration institutions have joined the unified platform for state and local government websites (Valsts Kanceleja, 2022A) making the home pages of institutions more understandable and accessible to citizens. Eleven Latvian ministries have joined the new unified platform, and only two ministries are keeping the old home pages - the Ministry of Defence and the Ministry of Agriculture. Home pages of ministries are an essential source for citizens to gain information about the activities of the institution, thus it is important, what information is provided and if this information is ensuring citizens' ability to understand the decision-making process and participate in it.

Another digital source that can be used by citizens to learn about topical affairs of the institutions is social media. If institutions are active on social media and disseminate information about citizen participation opportunities, it can foster the number of citizens who are participating in the decision-making process. Nevertheless, it is not easy to assess the actual situation and activity of institutions on social media, because the number of entries is larger than a regular social media user can comprehend. Therefore, a content analysis of Facebook pages maintained by Latvian Ministries is performed, covering entries published by all 13 Latvian ministries in the six months period (July 2019 until December 2019). The analysed period is the last six months before the COVID-19 crisis started and changed the topical accents on the social media timelines of all ministries. In total, the content of 3181 entries is analysed according to three groups of indicators: content indicators, message indicators and feedback indicators. Each of the three groups was composed of several sub-groups of indicators (See Figure 2). Entries of Facebook are analysed because all Latvian ministries are regularly and actively using it, as well as it is the most often used social media also for Latvian citizens.

Figure 2: The framework of the content analysis



Source: Author's construction based on the objectives of the research (content analysis of Facebook pages maintained by Latvian Ministries)

The results of the research are demonstrating the current state of the digital presence of public administration in Latvia and the motivation and ability of institutions to use and promote digital participation solutions. Although the digital presence of institutions in Latvia is comparatively good, there is a necessity for bold further activities to improve digital communication with citizens and fully seize the opportunity to foster digital participation of citizens in Latvia.

3. SUPPORT FOR CITIZEN PARTICIPATION

At the European Union level is significant support for the initiative to foster democracy, looking towards a strong civic society with youth participation and thoughtful use of online technologies as a way how democracy could be strengthened. In the Council Conclusions on Democracy (Council of the European Union, 2019) is pointed out that for fostering democracy in the European Union it is necessary to support and promote civic education and online media literacy and promote the use of online technologies in strengthening democratic participation. Support for strengthening democracy and the use of digital participation opportunities has grown since the middle of 2020, partly as a reaction to problems and challenges recognised in the context of the COVID-19 crisis. It was noticeable in the Berlin Declaration on Digital Society and Value-Based Digital Government (Federal Ministry of the Interior, Building and Community, 2020) and further in the implementation of the COVID-19 crisis recovery plan Next Generation EU (European Commission, 2022C). This ideological and financial support could improve citizen participation opportunities and foster digital development in the European Union. Nevertheless, only active steps by EU member countries will ensure that goals are reached, thus EU member countries should be more active in the implementation of digital solutions and cooperation and communication with citizens in the digital environment.

In Latvia, citizens are still learning about the value of democracy and their opportunities to influence the decision-making process of public administration. From the public administration's side necessity to foster citizen participation is being reminded occasionally from time to time (Valsts Kanceleja, 2020) and in public communication it is emphasized that public administration values citizen participation and is interested to improve the current unsatisfactory situation (Latvijas Vēstnesis, 2018). In the national planning documents citizen participation is recognised as a field where improvement is needed. Analysis of the planning documents (See Table 2) demonstrates that public administration declaratively is supporting the necessity to foster citizen participation and have a comprehension of methods that could be used for citizen engagement, also considering the use of digital participation opportunities. Nevertheless, the goodwill demonstrated in the planning documents previously not always has resulted in the implementation of real activities. It is also noticeable, that public administration is not planning to reach all citizens directly but is relying on other actors

as intermediaries, such as non-governmental organisations, lobby organisations or organized civic society. Hence, on paper there is noticeable support for citizen participation and use of digital solutions, but it is necessary to follow up if those good deeds do not remain on the paper only.

Table 2: Support for citizen participation in Latvia (in planning documents)

Planning document	Arguments supporting the need to foster citizen participation	Highlighted stakeholders	Suggested methods that could be implemented
Sustainable Development Strategy of Latvia until 2030 (<i>Latvija 2030</i>)	The need to reform the decision-making process in accordance with the principle of subsidiarity. In policy development involve society as much as possible	Latvian citizens (society), considering the diversity of society and social diversity. Also, the activity of social partners and NGOs as important actors of the process	Citizen panels, participation in the development process, citizen juries, civic participation programs, discussions on topical issues in society, mass creativity portal, mass creativity award, interdisciplinary mass creativity coordination institution, the introduction of e-government
National Development Plan of Latvia 2021–2027	There is a need to improve participation, as good governance is characterized by the involvement of citizens; participation in open public administration processes and opportunities to influence them; trust in the representatives of institutions - policy developers; and active involvement of civic society	Individuals, NGOs, Social partners, society (knowledge society as a precondition for an active society)	Self-organisation of society. Expanding cooperation and participation skills and opportunities, in particular: by developing civic education for youth; citizen participation in non-governmental organizations, trade unions and volunteering. Implementation of smart, efficient, and open governance in all public administration processes, using new methods and digital opportunities
Guidelines for a Cohesive and Active Society 2021–2027	The development of a culture of democracy, as purposeful and meaningful participatory processes can have a positive impact on the development of democracy	NGOs, active civic society and organized civic society	Knowledge as a resource (for citizens and public administration); access to information about democracy and participation; creating a common space for quality information and democratic debate; forms of participation planned and based on both the local needs of the citizens and digital participation solutions for remote participation
Guidelines for digital transformation 2021–2027	Digital technology environment as a new space for public administration, considering the involvement of society in public administration processes as a modern necessity. External openness and cooperation, as well as co-creation with the citizens must become the value of public administration	Latvian citizens and businesses; civic society; representatives of the society, entrepreneurs, non-governmental organizations and other stakeholders	Digital governance is tailored to the needs and expectations of stakeholders; opportunities for politicians, public administration and local government employees to acquire the skills necessary to ensure meaningful public participation; to create digital tools and applications that allow to quickly and easily find out the public position on specific issues; to develop platforms for e-participation

Source: Author's construction based on Saeima 2010; Parresoru koordinācijas centrs, 2020; Ministru kabinets, 2021B; Ministru kabinets, 2021C.

The everyday organisation of the citizen participation in the decision-making process is regulated by the Republic of Latvia Cabinet Regulation No. 970 "Procedures for the Public Participation in the Development Planning Process" (Cabinet of Ministers, 2009). The regulation is giving the representatives of institutions a significant role to decide what methods could be used for engaging citizens in the decision-making process and regulation is leaving a comparatively free choice to be creative in the form of methods, including the use of digital democracy methods as well.

Table 3. Reasons that are limiting citizen participation and digital solutions that can foster participation

Reasons not to participate in the decision-making process	Factors that can impact the reasons	Digital solutions that can foster participation
Trust that everything would happen without their involvement	Personal interest in the policy matter	Access to information about topics that are discussed (institutions home page, social media posts, participation portal, smartphone application)
Lack of comprehension of democracy and the decision-making process	Information about participation opportunities and significance	Receiving information in social media (infographics, case studies, local examples, statistics)
Do not have time for the participation process	Better organisation of the participation process	Smartphone applications or other direct communication activities
Do not believe that participation matters	Learning about examples of previous situations when citizen participation has made a significant impact	Case studies or local examples that are described in social media or the home page of the institution
No one has asked for their opinion	Reaching out to citizens with personal address and motivating them to participate	Two-way communication on social media, personal invitation to participation portal or via smartphone application
Cannot access or use existing opportunities for participation	Comprehension from the organiser of the participation process what are the obstacles and ability to remove them	Digital participation as a solution to physical obstacles (time, distance, accessibility of environment)
Is not interested in the existing opportunities for participation	Providing new opportunities (if there is a comprehension of what type of opportunities would be interesting for participants)	Making the participation process as a game or as easy as possible. (smartphone applications, short surveys on social media or easily accessible participation portals)
Do not have information to make a competent decision	Access to information (when is clarified what information is missing)	Access to open data and statistics. Information in simple language on the institution's home page.

Source: Author's construction based on Verba, Schlozman, & Brady, 1995

It should be pointed out, that it is not easy for a representative of an institution to decide what methods can be used for citizen participation, especially if the institution is really motivated to engage citizens in the decision-making process. To ensure qualitative and meaningful citizen participation, it is necessary to also consider reasons why citizens are not eager to participate in the decision-making process (See Table 3). For most of the common reasons digital solutions could help to improve citizens' ability to participate in the decision-making process. Nevertheless, there are also many limitations on the side of the institution itself. In addition to legal documents, guidelines and work habits, that are regulating the overall ideological goals of the participation process, the most common limits for an institution to ensure a meaningful citizen participation process are financial reasons, availability of technical solutions, digital skills of the representatives of the institution and the will of the institution to communicate and cooperate with citizens.

4. DIGITAL PARTICIPATION IN LATVIA

Since 1991 Latvia has reached significant progress in the digitalisation of public administration processes, granting citizens digital access to government services and fostering a digital environment and ICT structure (Ozols & Nielsen, 2018). For several years already, in the official State service portal Latvija.lv citizens have access to digital services provided by public administration and municipal institutions, in 2022 citizens could use 132 digital services provided by 26 different institutions. In October 2022 this opportunity was used by 887541 individuals, hence more than 45 per cent of the Latvian population (State service portal, 2022). The official State service portal could also be used for the collection of signatures on voters' initiatives organized in accordance with the Law "On National Referendum, Legislative Initiative and European Citizens' Initiative" (State service portal, 2021). In recent years public administration is also fostering citizen access to public data, that can be used for improving citizen comprehension of public processes. In 2019 was launched Open data portal (Valsts Reģionālās attīstības aģentūra, 2019) and in 2020 was launched Official Statistics Portal (Centrālā statistikas pārvalde, 2020). In 2019 citizens for the first time could apply for the state-issued official e-mail address (VARAM, 2019) that is promising to make easier, faster, and more secure communication between

institutions and citizens. Overall, institutions in Latvia are gradually increasing their digital presence, ensuring an environment that is used for digital communication and cooperation with citizens. Thus, also developing digital space that could be used for citizen digital participation.

Several state-owned smartphone applications are in Latvia that can be counted as an example of digital participation tools (See Table 4). Environment SOS (*Vides SOS*) for reporting environmental issues, Football (*Futbols*) for reporting on the work of public administration representatives and Language friend (*Valodas draugs*) for reporting good examples or violations of the use of Latvian language. Several participation applications are developed also by municipalities, for example, Cesis municipality (*Cesu novads*) for citizens of Cesis county or Ogre townsman (*Ogres novadnieks*) for citizens of Ogre county. There are also participation applications developed by the non-governmental sector, for example, Participation. Advice. Activism. (*Līdzdalība. Padoms. Aktivisms.*) developed by Civic-Alliance Latvia. Nevertheless, analysis of applications is demonstrating that their functionality often is limited for the purpose of engaging citizens in the decision-making process and not always two-way communication is ensured. Also, the number of users is comparatively small, one of the reasons could be that not enough citizens are informed that such applications exist.

Table 4: Comparison of smartphone applications for citizen participation in Latvia

Application	Owner	Number of users	Purpose	Participation level	Available functions	Two-way communication (Yes/No)
Environment SOS	The State Environmental Service	More than 10000	Reporting environmental issues	National	Submit a report; read the reports submitted by others and their status	No (information about the execution of the report is sent to e-mail)
Language friend	The State Language Centre	More than 5000	Reporting good examples or violations of the use of Latvian language	National	Submit a report; follow the execution of the report	Yes
Football	The State Chancellery	More than 1000	Reporting on the work of public administration representatives	National	Access contact information of institutions; submit a report	No
Participation. Advice. Activism.	NGO "Civic-Alliance Latvia"	More than 100	Information and participation opportunities for civic society	National	News about participation opportunities; Tips and support tools; Short surveys	No
Ogre townsman	Ogre municipality	More than 5000	Information and participation opportunities for citizens of Ogre county	Local	Read news; access tourist and public transport information; receive special offers; submit a report; read the reports submitted by others and vote for them; answer surveys	Yes (the response of the institution is publicly available for everyone)
Cesis municipality	Cesis municipality	More than 1000	Information and participation opportunities for citizens of Cesis county	Local	Submit a report; follow the execution of the report; read the reports submitted by others; read public announcements by the municipality; answer surveys	Yes

Source: Author's construction based on analysis of the smartphone applications

A good example of citizen digital participation in Latvia is the participation platform MyVoice (*ManaBalss*) where citizens can propose and vote for legislative initiatives that are later given for evaluation to Parliament or municipalities. It was established by the non-governmental organisation Sabiedribas Līdzdalības Fonds in 2011 and since then has gradually grown its influence and number of users. In the time from 2011 until the end of 2021, more than 410000 citizens of Latvia have used the participation portal MyVoice (have voted at least once) and 65516 new users have joined the platform in 2021. Since the introduction of the portal, in total 92 initiatives have collected the necessary number of votes and have been officially submitted, 54 of them being implemented by Parliament or other respective institutions (Sabiedribas Līdzdalības Fonds, 2021). Citizen participation platforms can be divided into three groups - Citizen-to-Government, Government-to-Citizen and Citizen-to-Citizen, “depending on who produces information and who is its main recipient” (Cingolani, 2020). Participation platform MyVoice can be included in the Citizen-to-Government segment, where platforms usually do not have a long lifespan, therefore it can be seen as a Latvian success story not only because of the overall good results but also because it is still operating and even with a growing impact on the decision-making process of Latvian institutions.

The first state-owned (Government-to-Citizen) participation platform in Latvia was introduced in September 2021 - Single Portal for Development and Harmonisation of Draft Legal Acts (*TAP portals*). This portal is a major step towards e-government in Latvia as it is digitalizing the circulation of documents and it improves the opportunity to follow the decision-making process of public administration. Portal can be used for citizen participation by non-governmental organisations, lobby organisations and other stakeholders, as well as individual citizens. In the portal citizens can authorize with a unified login service that is available in Latvia, thus approving their digital identity and submitting their objections or proposals about draft legal acts. Portal can support the use of other digital participation methods as well, for example, surveys and discussions (Valsts Kanceleja, 2022B). Evaluating the functionality of the portal, it can be concluded that the portal is helping to improve citizen participation in Latvia, however, in the organisation of the participation process, a significant role still is given to non-governmental organisations as representatives of citizens, as some of the participation opportunities are available only to members of non-governmental organisations and not individual citizens.

Digital solutions for citizen participation in Latvia are used also on a municipal level. For the participatory budgeting process in Riga, the capital city of Latvia, each year since 2019 online voting is used to determine those citizen-initiated projects that will receive funding from the municipal budget. In 2021 there were allocated 500000 EUR that was divided for 12 projects that gained the most votes from citizens, however, the total number of voters was 19000. The preliminary results of the 2022 project contest suggest that 11 new projects have gained financing and in total almost 43000 people have participated in the voting process (Rīgas dome, 2022). Hence, 3 per cent of the total population of Riga voted in 2021, and almost 7 per cent voted in 2022. Although the participation rate is growing, more activity from the municipality still is needed to popularize that city is organizing participatory budgeting and citizens can vote for the projects that will receive funding. Several other municipalities in Latvia are using digital solutions for the participatory budgeting process as well. For example, Valmiera municipality (Valmieras novada pašvaldība, 2022) is using their official homepage and Marupe municipality (Marupes novada pašvaldība, 2022) is using a smartphone application.

Overall, it can be concluded that there are still broad opportunities for growth in the use of digital tools for citizen participation in Latvia. An essential role in the implementation and promotion of such participation opportunities should be given to digital communication of institutions. Nevertheless, the ability of institutions to reach citizens online and maintain meaningful digital communication is one of the main challenges that public administration is facing in the 21st century not only in Latvia but also in other European Union countries.

5. FOSTERING RELATIONS BETWEEN CITIZENS AND INSTITUTIONS

According to Latvian E-index 2021 (VARAM, 2021, p. 11), 66 per cent of institutions have reached the second level of digital maturity. That is an improvement from 56 per cent in 2019, the previous time when the index was published. Nevertheless, the fourth and fifth level is not reached by any institution, but 7 per cent of institutions are in the third level. According to Latvian E-index 2021, there is also noticeable continuous growth in the use of social media. In 2021 Facebook was used by 88 per cent of institutions, Twitter was used by 83 per cent of institutions and 35 per cent of institutions were represented on Instagram. Hence, Latvian public administration is comparatively well-represented online, and the digital presence is continuously improving. However, from the citizen participation perspective, it is not enough that the institution is maintaining a home

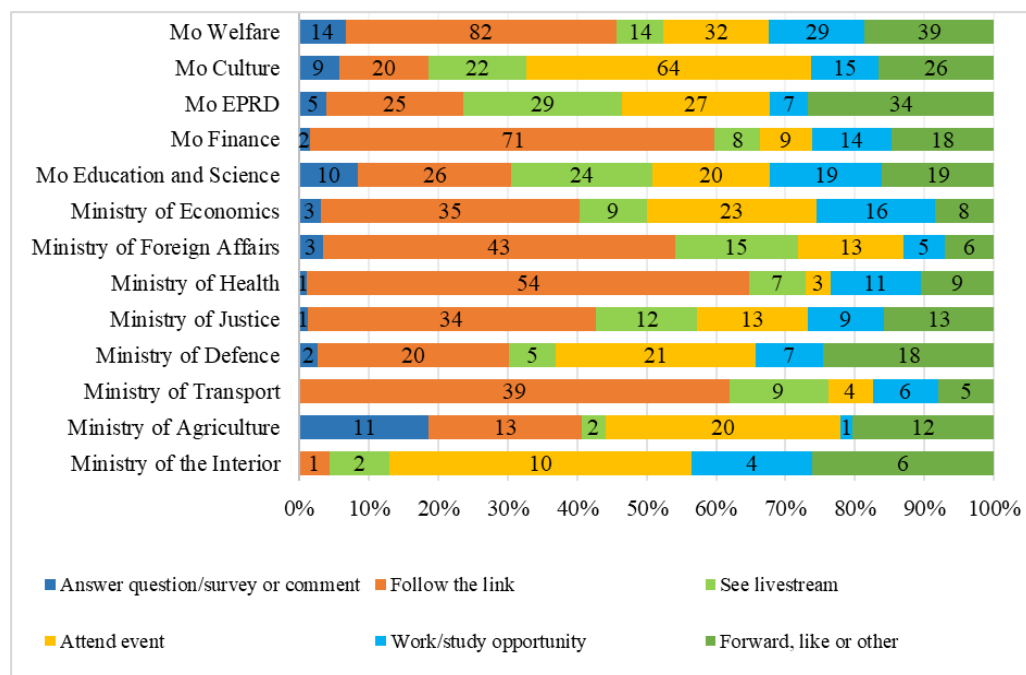
page or social media account, more important is if the published content is interesting to citizens and if it can help to engage citizens in the decision-making process.

Analysis of the information on the home pages of the Ministries demonstrates that all ministries are providing a separate section on the homepage dedicated to public participation. In this section most ministries are using identical information that describes public participation, its necessity and its legal framework. Thus, for 11 of 13 ministries as actors of public participation are mentioned citizens, society and non-governmental organisations. The Ministry of Defence as actors of public participation emphasizes civic society and non-governmental organisations, but the Ministry of Transport is mentioning that public participation is open to every member of society. Since the implementation of the Single Portal for Development and Harmonisation of Draft Legal Acts, ministries do not need to publish information about draft legal acts on their home page. To ensure, that citizens are informed about the current participation opportunities, 12 of 13 ministries have mentioned the new Single Portal and all of them, except for the Ministry of Defence, have published a hyperlink to the new portal. The Ministry of Transport is the only one that has still not published any information about the new system that was introduced in September 2021, hence, more than one year ago.

Ministries have various ways of publishing information about representatives of institutions who are responsible for public participation. Eight ministries have mentioned the responsible person, but it is noticeable that public participation is not the main task of this person. Ministry of Economics has a list of more than 25 responsible persons, divided by sectors. Similarly, the Ministry of Culture also have divided responsibility by sectors, but only with three representatives. As the bad examples are three ministries: the Ministry of Transport have published an unassigned phone number, the Ministry of Foreign Affairs has published an e-mail address of a sector without the name of the representative, and the Ministry of Education and Science has not published any contact person. If the ministry is interested to foster citizen participation, then information about participation opportunities should be provided from the citizen's perspective, not as a generic compilation of definitions that is the currently published version on the home pages of the ministries. Similarly, also information about the representatives responsible for public participation is published in a way that is easier for each ministry. If a citizen would like to contact the representative, then the most often used option is to copy an email address or use the landline number. Only one institution - the Ministry of Welfare provided an opportunity to fill in an online form, an option that is more successfully using contemporary digital solutions. Overall, it can be concluded that the home pages of the ministries are still not open to digital communication with citizens and the communication is customized to the habits of the representatives of the institution.

The good news is, that for almost 15 years already, Latvian institutions are represented on social media – digital environment that is more suited for two-way communication. The most often-used social media are Twitter, Facebook and recently also Instagram. For Latvian ministries as the main social media can be considered Facebook as it is used regularly by all ministries and there is published the widest scope of information. To understand the main topics represented in the Facebook entries of ministries, as well as the use of digital solutions for fostering two-way communication with citizens the content analysis of the Facebook pages of Latvian ministries was implemented. Results of the content analysis demonstrate that, for now, institutions have various and noticeably different habits in the use of digital opportunities that social media are offering for content creation, network building and two-way communication. Significant differences were noticed in the use of visual material, emojis, hashtags and links, as well as in the use of tagging, both in the tagging intensity and in the choice of tagged accounts. Also, use of engagement methods varies between ministries (See Figure 3) both by intensity and choice of methods that are implemented. In the analysed period the most active was the Ministry of Welfare and the least active was the Ministry of Interior.

Figure 3: Engagement methods used in the Facebook entries of Latvian ministries, July-December 2019 (amount of use for each method and their proportion from the total amount of engagement methods used by each ministry, ministries arranged by activity with the most active at the top)

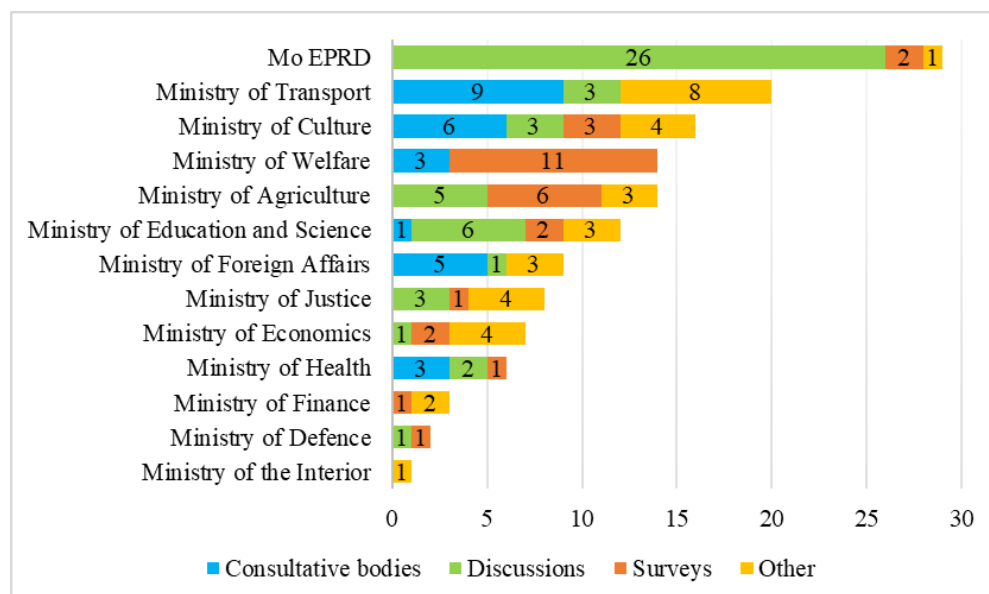


Source: Author's construction based on the content analysis conducted by Eduards Lielpeters in 2020, n=3181

The most often used engagement method for most institutions was in direct text written suggestions to follow a link for further information. Often used was also an invitation to attend face-to-face or online events. The opportunity for two-way communication by encouraging citizens to ask questions, provide answers to the institution's questions or fill in a survey was used comparatively rarely. Furthermore, analysis of the commentary section of the entries published by ministries is demonstrating that institutions are not making good use of the opportunity for dialogue. Often comments made by followers are left without reaction and even questions are not answered. However, also in this position situation varies between ministries, the response rate being in the range from 4 per cent as the lowest for the Ministry of Justice to 36 per cent as the highest for the Ministry of Environmental Protection and Regional Development.

Considering the frequency and topics of the social media posts, it is noticeable that in most institutions there is not happening careful long-term planning of the entries and most probably there are not happening considerations of effects that particular entries could have on improving or damaging relations between public administration and citizens. Social media entries often are reflecting current events and agenda, as well as emphasizing institutions, and other public entities and, for several ministries, also proportionately too often highlighting activities and opinions of the minister himself/herself. In the analysed time period (six months) there were only 141 entries (4 per cent of the total amount of entries), about citizen participation or decisions that are made with the participation of citizens (See Figure 4). The most active was the Ministry of Environmental Protection and Regional Development with 29 entries, hence, even the best result is comparatively small, and it can be concluded that the decision-making process is mostly kept away from the eyes of social media followers. A question for discussion remains if that is a conscious choice of the representatives of the institution to limit the number of entries that are about citizen participation and the decision-making process or if they are just genuinely not aware that social media could be used for promoting citizen participation opportunities and fostering citizen participation in the decision-making process.

Figure 4: Entries about citizen participation in the Facebook pages of Latvian ministries, July-December 2019



Source: Author's construction based on the content analysis conducted by Eduards Lielpeters in 2020, n=3181

Digital transformation is happening faster than institutions can grasp the real meaning and opportunities of it, often having the pressure to be present online and follow the topical agenda without a comprehension of the long-term gains and effects of the content and digital solutions that are provided for citizens online. Therefore, for public administration nowadays it is less than enough just to be present online, representatives of institutions must also have a comprehension of the purpose and long-term goals that are reached by their digital activities. From the perspective of the necessity to foster democracy, as one of the long-term goals thus should also be considered to develop closer relations with citizens online, hence, also offering them digital solutions for participation in the decision-making process.

6. CONCLUSION

Judging by the strategic planning documents, the Latvian public administration is interested to foster citizen participation in Latvia and is aware of the methods that can be used to reach this goal. Nevertheless, public administration should be able not only to write in the planning documents that it cares about citizen participation but also prove that by doing. The current state of the digital environment in Latvia is providing an opportunity for fostering digital participation of citizens. To seize this opportunity, the first step for public administration is to improve digital relations with citizens by introducing meaningful two-way communication and approving in public communication that institutions care about citizens' opinions and are eager to engage citizens in the decision-making process. Until now, this has not been done sufficiently in Latvia.

Results of the content analysis are demonstrating that, for now, institutions are insufficiently using two-way communication and engagement opportunities, as well as they are not very active in the promotion of the existing participation opportunities. Hence, not only more active presence in the digital environment is needed, but also more active promotion of already existing participation opportunities, including promotion of smartphone applications that are not sufficiently known and used by citizens. Results of the research confirms that representatives of institutions either do not know how to maintain digital relations with citizens or are not motivated to do it. Thus, for now, the main limitations that public administration should overcome to foster digital participation of citizens in Latvia are the digital skills of representatives of institutions, as well as their comprehension of the value of citizen participation in the decision-making process.

In the 21st century, public administration can be closer to citizens than has been possible ever before. Institutions can reach citizens directly online, explain decisions made by public administration and also engage citizens in the decision-making process. Nevertheless, it should be a carefully planned process, considering the best opportunities that the digital environment is offering for two-way communication, citizen participation in the decision-making process and co-creation. Considering that Latvian institutions have various habits in the use of digital solutions, there is a need for a more active exchange of experience between representatives of

institutions or the development of a common digital communication strategy for all public administration institutions in Latvia.

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The Role Of The Transformational Leadership In The Management Of A School

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Abstract: Collaborative school cultures have been associated with achieving various school reform objectives for both teachers and students. One of the major factors for the organizational culture of the school is the principal of the school. Principals are the leadership heads responsible for transforming school culture to meet the increased demands of local, state, and federal stakeholders. Transformational leaders due to their inspiration and creativeness can lead people in a way that they try more than their abilities in the organization and also invent and innovate in their work area. Transformational leaders also make their employees realize the value of what they do. So, as schools face an environment that has become business oriented and managerially complex, school leaders may benefit from training and development in leadership styles proven to enhance the success of both business organizations and educational settings. Transformational leadership is the leadership style most researchers feel is appropriate for today's schools. Education leaders may benefit from training and development in transformational leadership styles proven to enhance performance in business organizations and educational settings. This paper focuses on the approach of the transformational leadership model presenting its characteristics by analyzing its features and its contribution to the school success.

Keywords: tranformational, leadership, school, management

1. INTRODUCTION

There have been multiple reviews of empirical research on the direct and indirect effects of leadership on student outcomes with the majority of the studies focusing on either instructional or transformational leadership (Kwan, 2020). From most of them it is pointed out that the transformational leadership is one of the most popular approaches to leadership. According to Northouse (2019), transformational leadership occupies a central role in research across management and education.

2. TRANSFORMATIONAL LEADERSHIP

Sergiovanni (2001), defines the transformational leadership as leadership that focuses on the deep change of both the leaders themselves and the organizations they lead. He/ She is based on the power of influence that is relevant to the functions of the organization and its key characteristic is its emphasis on a) people rather than structures and b) changing culture rather than structure.

Transformational leadership is the type of leadership, who meets many school reform objectives, not least the development of a collaborative or shared, technical culture. The transformational leadership model includes seven behaviors or dimensions: 1) building school vision and establishing school goals, 2) providing intellectual stimulation, 3) offering individualized support, 4) modeling best practices and important organizational values, 5) demonstrating high-performance expectations, 6) creating a productive school culture and 7) developing structures to foster participation in school decisions (Leithwood, Aitken & Jantzi, 2001).

Transformational leadership refers to leaders who seek to create ideas and new perspectives to create a new path of growth and prosperity in front of the organization. They can also make their employees realize the value of their actions. Transformational leadership is a complex and dynamic process in which leaders influence their followers' values, beliefs and goals. They are also able to create perspectives of potential opportunities for employees and develop commitment to change, culture improvement and the need to design new strategies for efficiently school change

(Leithwood & Jantzi, 1990).

3. CHARACTERISTICS OF TRANSFORMATIONAL LEADERSHIP

According to Bass (1985), transformational leadership should have the following characteristics:

- Idealized influence: the leader can be a role model, because of his or her values and vision, with which the subordinates can identify.
- Inspirational motivation: the leader makes his subordinates believe in the team spirit and the mutual vision that arises through teamwork. He additionally fosters them spiritually to be creative, while at the same time contributing to the development of a culture of self-criticism and reflection.
- Intellectual stimulation: the leader tries to make his subordinates think and act in a logical way, providing a challenge, thereby strengthening their motivation.
- Individualized consideration: each subordinate is treated by the leader as a separate person, while they are assigned with responsibilities according to their abilities a trying also to contribute to their personal development.

According to Robbins, Judge, Millett & Boyle (2013), the key characteristics of a transformational leader are:

- the establishment of a shared vision
- high expectations
- the introduction of innovations
- the creation of a positive school climate
- the demonstration of his/her personal concern for the needs of the teachers and students

4. TRANSFORMATIONAL LEADER'S EFFECTIVENESS

Transformational leadership seek to create ideas and new perspectives to create a new path of growth and prosperity in front of the organization (Tracey & Hinkin, 1998). In addition, transformational leadership help facilitate overall school success, and based on its established positive correlations with employees, inspires motivation and job satisfaction. Transformational leadership also results in wide-ranging changes wherever it is introduced and is effective in solving problems in the school environment.

5. CONCLUSION

According to Bass (1985), educational leaders must develop a clear vision to promote a school climate, which supports success for all the students. They can also benefit from training and development in transformational leadership styles, as it is proven that performance in educational settings can be enhanced (Anderson, n.d.). Transformational leadership, even if it isn't suitable for some school leaders, it still continues to be applicable to managing and leading schools in an era of change.

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The Extent of The Tax Burden. A Review on Albanian Economy

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Abstract: To assess the impact of fiscal and tax policies on the socioeconomic structure, the tax burden, defined as the ratio of taxes collected during a given period to total product, is frequently utilized.

This study aims to investigate how changes in a few macroeconomic indices impact taxation.

Taxes, the state's primary source of income in today's globalized world, have an impact on a number of socioeconomic factors. The principal method utilized in the literature to ascertain the effects resulting from taxes using both national and international approaches is tax burden calculations. The ratio of taxes collected in a certain time period to the total product can be used to describe the tax burden in general. Theoretically, when tax revenue increases more than income, the tax burden may rise. Dynamic panel data estimators are used for analyzing how the dependent variables affect the tax. The effects of government spending or revenues on various macroeconomic indicators are clearly highlighted in both theoretical and empirical literature. Furthermore, the effects of various macroeconomic components on the public sector, particularly on public expenditures, are examined, particularly in terms of fiscal theory. The optimal tax rate can be defined as a tax burden level that has no negative impact on either producers or consumers. The paper's goal is to add to the literature by addressing the relationship between tax burden and economic growth, globalization, employment, unemployment, and the level of industrial production.

Key words: Tax Burden, Government spendings, Public Sector, Economic growth, Employment,

Introduction

In today's globalized world, taxes, the main source of revenue for the state, affect several socioeconomic components. Calculations of the tax burden are primary the means used in the literature to determine the effects originating from taxes with both national and international approaches. In general, the tax burden can be defined as the ratio of the collected taxes in a particular period against the total product. Theoretically, the tax burden can surge when the increase in tax revenue is greater than the increase in income. Indeed, according to Smith (1776), an undeterred rising in the tax burden will create corrosive effects on economic activities, especially taxable resources. Although Ricardo (1871) also argues that high tax rates can lead to the displacement of capital, Keynes (1936) thinks that the tax burden can affect investment and savings. However, according to Mosteanu (2005), the tax burden, giving the relationship between the collected tax and the gross domestic product (GDP), can be affected by many economic components. As a matter of fact, a fiscal requirement of the state is one of the most important reasons for the increase in the tax burden. The question raised is: what is the reason the variety of services offered by the state is constantly and regularly increasing. This phenomenon has been discussed in various ways in the literature. First of all, Wagner (1890) explains the increase of state intervention with new social requirements. Musgrave (1959) considers that the state can produce new goods and services apart from its traditional duties, especially due to the lack or failure of the market mechanism. Also, Rostow (1960) considers the services provided by the state as an attractive power of economic development. According to Peacock and Wiseman (1961), while asymmetric incidents are likely to put pressure on public spending in the medium and long term, Downs (1957) and Buchanan and Tullock (1962, 1977) suggest that public spending and the financial sector can expand with "the populist approach" in the political process. Niskanen (1979) claims that it is the behavior of the bureaucrats who expand public spending. These views, which explain the increase of public expenditures in the field of public finance in general, also can be related to the expansion of the public sector and, consequently, the increase in the need for financing. In the medium and long term, the increase in public expenditures and the increase in the tax burden can occur together. This view also supports the political financing approach of Buchanan and Wagner (1977).

The aim of the paper is to determine the effects of macroeconomic indicators such as GDP per capita, foreign trade transactions, the employment capacity, the unemployment rate and the size of the industry sector on the tax burden of Albanian economy.

1. Literature Review

Taxation is now the most significant financial resource of the contemporary state. Through financial mechanisms such as taxation, expenditure, and regulation, the state has constantly maintained its effectiveness over the socioeconomic system. Although it resembles a cyclical oscillation, the efficacy of fiscal governance is growing. One of the most fundamental reasons for this outcome is that the state has consistently taken on new functions throughout its history. In reality, the services that citizens anticipate from the state have expanded in practically all nations (Wagner, 1890), or the market's failure to provide some products and services has necessitated governmental action (Musgrave, 1959). Furthermore, considerations such as various societal requirements, maximizing of social welfare, and independent returns of the political process have resulted in the contemporary state's expansion, increase in public spending, and diversity of taxation. As a result, the increased tax burden is an outcome rather than a cause. The increased globalization process and the neoliberal policies followed in the 1980s prompted concerns about the state's reduction. During this time, extensive efforts were made to reduce the tax burden in order to construct a minimum state.

However, rising welfare, regional or international crises impacting several nations, and employment issues in which countries were concerned made governmental action necessary.

Calculating the tax burden is becoming increasingly relevant for comparing tax regimes and determining whether taxation sources are being used appropriately. Several studies have been conducted to determine the extent and direction in which different socioeconomic indicators affect the tax burden (Friedman, 1978; Rosen, 1978; Atkinson, 1980; Beal-Hodges et al., 2016; Browning and Johnson, 1979; Colm and Wald, 1952; Cural and Cevik, 2015; Dennis et al., 2007; Devarajan et al., 1980; Engen and Skinner, 1992; Kong and Hoek, 2008). While some studies have analyzed the variables that influence the tax burden, others have investigated the impact of the tax burden on macroeconomic indicators or evaluated the causation link between the metrics in issue and the tax burden.

The varied stages of development of the states may differentiate the possible tax loads of tax systems. Increases in per capita income as a result of economic growth, in particular, provide individuals with a greater ability to pay their taxes and actively engage in the taxation process. Furthermore, economic factors such as the volume of a state's international trade transactions might influence the real tax burden (Adam and Kammas, 2007; Adam et al., 2015; Tanzi and Zee, 2000). Thus, Lotz and Morss (1967) found that the gross national product per capita and level of openness have a favorable effect on the tax burden in their research of 72 states. Shin (1969) and Bahl (1971) discovered that parameters like as import and export capability and per capita income had a little impact on the tax burden.

Taxation is one of the most significant aspects of fiscal policy. Raising the tax rate or imposing new taxes, particularly to alleviate inflationary pressures, might raise the tax burden (Brasoveanu et al., 2008; Feldstein, 1980a; Feldstein, 1980b; Lucinda and Arvate, 2007; Purohit, 2006). Stotsky and Asegedech (1997) investigated 43 African nations in this context and discovered a significant association between the severe financial policies used to eliminate budget deficits. Furthermore, they discovered that characteristics such as export size and per capita income influence the tax burden favorably, but the size of the agriculture and mining industries effect the tax burden negatively. Furthermore, in his panel data study of 16 African nations, Eltony (2002) showed that GDP per capita and the size of the agriculture and mining industries directly impact the tax burden. Purohit (2006) used total tax income, GDP, population, and trade balance statistics from 34 developing nations to produce a taxing capacity index in his study. According to this measure, the tax burden is increasing in nations with high GDP per capita and a good international trade balance. Similarly, in their study of China from 1984 to 2004, Kong and Hoek (2008) found GDP growth as the most important factor for current tax income and a rise in the tax burden. However, changes in external factors, particularly the economic structure, taxation laws, and financial management efficiency, might result in a situation in which the tax burden grows faster than the GDP.

Other variables that influence the tax burden and lead it to differ between nations are globalization policies (Adam and Kammas, 2007; Avi-Yonah, 2000; Bretschger and Hettich, 2002; Rodrik, 1998; Roosma et al., 2015). Gelleny and McCoy (2001) addressed this problem in the context of OECD members and concluded that globalization enhances tax competitiveness among governments and reduces business tax rates and the direct tax burden in particular.

Whether or not tax income from various economic sources is employed in productive domains by the public sector, taxes are a factor influencing economic growth and societal development. There are studies in the literature that have explored the impact of the tax burden on several macroeconomic variables in this context

(Agell et al., 2006; Arnold, 2008; Easterly and Rebelo, 1993; Gemmell et al., 2015; Gemmell et al., 2006; Koester and Kormendi, 1989). For example, Barro (1989, 1991), Engen and Skinner (1992), Levine and Renelt (1992), Leibfritz et al. (1997), and Folster and Henrekson (2001) all concluded that increasing the tax burden would have a detrimental influence on economic growth and GDP. In addition, Arnold (2008) conducted research using a sample of 21 OECD nations and determined that tax arrangements and economic growth had a negative link. However, a one-unit rise in tax rates can have a beneficial effect on economic development if the revenue sources are used productively, such as growing human and real capital stocks. Furthermore, a boost in GDP provides for more tax income. In this regard, Vasiliauskaite and Stankevicius (2009) discovered a robust and positive interaction between these two factors in their investigation of tax systems and economic development data. In research using data from 1964 to 2007, Karagianni et al. (2012) discovered a causal relationship between the tax burden and economic growth in the United States. Furthermore, Tiwari and Mutascu (2013) discovered a unilateral causation association between indirect and direct taxes and GDP as a result of a Granger analysis using 1947-2009 USA tax burden and GDP data. Cural and Cevik (2015) examined data on Turkey's growth indicators and tax structure from 1924 to 2013 and concluded that the development process has a statistically significant and favorable influence on income, products and services, and international trade transactions.

Based on the literature research, it is feasible to identify many elements that impact and are influenced by the tax burden in various economic systems. Factors such as GDP per capita, economic, financial, and corporate structures, and economic openness are key here. The primary issue addressed in this study is how and to what degree macroeconomic variables such as Albanian national income, international trade, employment, and sectoral growth impact the tax burden. The next part addresses the methodological backdrop of the empirical technique employed in the solution to this problem and the conclusions acquired as a consequence of the study.

2. Methodology

Multiple regression analysis was used to examine the combined relationships between the independent variables (national income, international trade, employment, and sectoral growth) and the dependent variable of tax burden. According to Draper et al. (1966) and Field (2013), the skeletal model for the multiple linear regression is given by:

$$y = \beta_0 + \beta_1 X_1 + \dots + \beta_k X_k + \varepsilon, \quad k=1,2,\dots$$

and ε = the error term.

β_0 = Intercept, $\beta_1, \beta_2, \dots, \beta_k$ = regression estimates

Y = depended variable, $x_1, x_2, \dots, x_k$ = Independent variables, and ε = error term.

The data analysis tool was considered desirable because the dependent variable (Tax Burden) and the independent variables are both quantitative in nature and many researchers have employed it in similar studies (Contos et al., 2009; Picur and Riahi-Belkaoui, 2006). Andreoni et al. (1998), observed that researchers mostly use standard econometric models to analyze tax non-compliance data, but where necessary, specialized models have been relied on to deal with unusual issues that usually arise in analyzing compliance data.

Variable name	Definition
TB	Tax burden rate = total tax revenue/GDP (\$ for 1993-2019)
GDPpc	Gross domestic product per capita for 1993-2019)
EXIM	Openness = (export spending - import spending)/GDP(a 1993-2019)
laborforce	Annual statistics of the labor force for 1993-2019)
unemp	Annual statistics of the unemployment rate for 1993-2019)
factory	Factory share = the share of industrial sector on GDP for 1993-2019

Source: Author's estimation

Table I.
 Summary description
 of variable

3. Correlation analysis

Correlation analysis was also used to test the hypothesis outlined in the study. The correlation helped us to determine whether there was a significant relationship or non-significant relationship. It also helped us determine the direction of the relationship whether the relationship between the dependent variable and the independent variables were positively related or negatively related. The correlation estimate is represented by r . The value for r lies between the range of -1 and +1, respectively. The closer r approaches +1 the stronger the relationship and the closer r approaches -1 the weaker the relationship. According to Cohen et al. (2013) and Field (2013), the classification of the structure of a correlation relationship should adhere to the following rule of thumb: $0 \leq r \leq 0.3$ weak relationship; $0.4 \leq r \leq 0.6$, moderate relationship; $0.7 \leq r \leq 1$, strong relationship. Conversely, the same rule of thumb still holds: $-1 \leq r \leq -0.7$, weak relationship; $-0.6 \leq r \leq -0.4$, moderate relationship; $-0.3 \leq r \leq 0$, strong relationship. The formula for the correlation coefficient is given by:

$$r = \frac{S_{XY}}{\sqrt{S_{XX}S_{YY}}}$$

$$-1 \leq r \leq 1$$

If the significance value associated with the correlation coefficient obtained from the bivariate correlation between a particular independent variable and a dependent variable is less than 0.05, then we reject the null hypothesis at a 95% confidence level. Furthermore, if the significance value is less than 0.01, then we reject the null hypothesis at a 99% confidence level. The rejection of the null hypothesis indicates the existence of a relationship between the dependent variable and independent variables. In all other cases, we fail to reject the null hypothesis because there is no association between the dependent variable and the independent variables, respectively

One-way analysis of variance was also used to determine the relationship between independent variables and the dependent variable. The analysis helped to determine the relationship between a particular independent variable on the dependent variable by the courtesy of the F-statistic obtained between the dependent and independent variables. Large values for the F-statistic indicate large effect and small values indicate small effect on the dependent variable (Field, 2013). Moreover, if the p-value associated with the relationship between the dependent and a particular independent variable is less than 0.05 or 0.01, we reject the null hypothesis and conclude the existence of a relationship. On the contrary, we fail to reject the null hypothesis and conclude no relationship exists between the dependent and independent variable (Field, 2013)

4. Analysis results

The result analysis includes the results of the model in which variables of the lagged value of tax burden, GDP per capita, foreign trade volume, labor force and the unemployment rate were reproduced as independent variables. The lagged tax burden variable had a positive coefficient and it was statistically significant at a level of 1 per cent.

Then also, GDP, trade openness, the labor force (1 per cent) and unemployment (5 per cent) variables had a positive coefficient and were statistically significant, respectively. Besides GDP, trade openness, labor force and factory share had a positive coefficient and were statistically significant in this model, it is observed that the lagged value of the tax burden had a positive coefficient as it had in other models but it was not statistically significant. Furthermore, the variables of GDP, openness, labor force and share of the industry sector in GDP had positive coefficients and all of them were statistically significant. It was observed that a 1 per cent rise in GDP would cause a 0.1756 per cent rise according to model 1, a 0.1678 per cent rise according to model 2, a 0.1831 per cent rise according to model 3 in tax burden. This demonstrated that the increase in GDP would be partly absorbed by the tax system. Besides that, a 1 per cent rise in the level of openness would cause 0.1121 percent, 0.0849 per cent and 0.0591 per cent rise in the tax burden, respectively. Also, a 1 per cent rise in the share of the labor force within-population would increase the tax burden 0.0535 per cent according to model 1; 0.0422 per cent according to model 2 and 0.0319 percent according to model 3. A 1 per cent rise in the unemployment rate, another indicator of the labor market, would increase the tax burden by approximately 0.066 per cent. The most important reason for this was the fact that besides unemployment, insurance taxes were called upon to finance social transfers for the unemployed, especially in the case of growth in unemployment. In total, in the context of the Albania sample, the share of the industry sector in GDP was the most effective variable for tax burden, except for the GDP per capita. Thus, 15 increases observed in the share

of the industry sector in GDP, increased the tax burden approximately 0.17 per cent in model 2, where unemployment was disregarded and approximately 0.18 percent in model 3, where all variables were analyzed. This reveals the importance of the industry sector in terms of the tax burden.

Conclusion

The state, which emerged during the process of social needs recovery, has the potential to continuously affect socioeconomic activities. Although the intensity of these effects has changed from the past to present, social needs have been evolving dynamically in the process. These public requirements have been putting pressure on both public expenditures and taxes from the past until today. In this context, various financial instruments such as expenditures and taxes, on the one hand, create reflections in socioeconomic situations; on the other hand, they are affected by macroeconomic developments. This paper aimed to determine the relationship between the predetermined main macroeconomic variables and the tax burden. In this context, the dynamic panel data analysis method, based on GDP per capita, foreign trade volume, the level of employment, unemployment rate and the size of industry sector variables for 1993-2019 were used. Based on the analysis' findings, variables such as income per capita, foreign trading volume, the capacity of employment, unemployment and share of the industry sector effect tax burden in a statistically significant and positive direction. It has been remarkable that the effects of the variables, especially that of the income per capita and the share of the industry sector on tax burden, are greater in all the models. The effect of other variables on the tax burden has been relatively weak. The results of this research demonstrate that Albanian Government has not lost its importance in terms of taxation in the neoliberal process; on the contrary, it is becoming tax state by keeping its position.

The reason that lies behind the positive effect of unemployment on the tax burden is the fact that the sense of social state has not been abandoned. Thus, it is predicted that the state will increase public transfer expenditures in the short term due to unemployment and this increase will impose a financial burden on the public sector both in the medium and long term and finally, will mean an increase in the tax burden. As seen in many studies in the literature, the increase in the GDP per capita affects the tax burden positively. This result supports the findings of Adam and Kammas (2007), Adam et al. (2015), Tanzi and Zee (2000), Lotz and Morss (1967), Shin (1969) and Bahl (1971). Also, (Brasoveanu et al., 2008; Feldstein, 1980a; Feldstein, 1980b; Lucinda and Arvate, 2007; Purohit, 2006) argue that taxes can be used as a fiscal instrument and can be particularly effective in reducing inflationary pressure. In this respect, the findings of the study reveal that employment can affect the tax burden. The increase in employment may lead to an expansion of the tax potential in general. It is a more interesting finding that the increase in unemployment affects the tax burden. In particular, the concentration of active and passive employment policies in the sample is clearly a weight on public finances. This weight brings about an increase in the tax burden. In the literature, the expectation that the globalization process will lead to tax competition and reduce the tax burden is a common finding (Adam and Kammas, 2007; Avi- Yonah, 2000; Bretschger and Hettich, 2002; Rodrik, 1998; Roosma et al., 2015). However, the common denominator of the studies is that the increased tax competition will reduce the taxes on capital in general. The findings of the analysis show that the openness indicator, which is an indicator of the inter-country commercial activities, has positive effects on the tax burden. Therefore, as the external trade transactions increase, the tax burden also increases. The studies in the literature generally focus on the effects of the fiscal instruments on various macroeconomic indicators. Many studies also discuss the expansionary impact of various macroeconomic components on public expenditures and the public financial sector. However, this paper aims to contribute to the literature by showing the effects of per capita income, employment conditions, trade relations and the production system on the tax burden. It is considered that the findings that are acquired as a result of an analysis process on such a broad sample would reveal the effects of the neoliberals and global economic integration process on the tax burden and public finance more clearly.

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Leaders of international trade

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Abstract: It is a fact that the international system will remain the main system of countries, but the transnational companies are taking more and more important positions. International production is mainly concentrated in a small number of companies. Namely, the biggest TNKs are 19% of the total trade of all affiliates, with 14% of total goods, and 15% of the total number of employed. Advanced technologies, which is a crucial element of economic power is mostly concentrated in TNKs. These large TNKs make the qualitative difference between the process of integration and the creation of interdependency between national economies.

Introduction

Transnational companies directly internationalise production and services and create an oligarchy. The result of their internationalisation is a partial integration in developing countries in the global market. The cooperative system uses protective mechanisms which disable the flow of knowledge and products outside of TNKs.

Activities of TNKs are mainly focused on the next aims;

- In case of the situation when they haven't made a web of relations with the domestic companies, they have difficulties in the import of inputs or they cannot independently produce the same, the way that TNKs aim to finish an identification of potential suppliers and create a partnership with them. In the event that a partnership with domestic companies already exists, their activities are focused towards deepening and quality improvement of interconnections;
- There must be a clear vision of how foreign direct investment (SDI) are incorporated in the whole developmental strategy of the country, in which their success will depend on how it is implemented in reality;
- The defining of the aims of the national politics means the spreading of connectivity of the domestic economy and foreign affiliates, on one side, and deepening of the already existent bonds on the other.

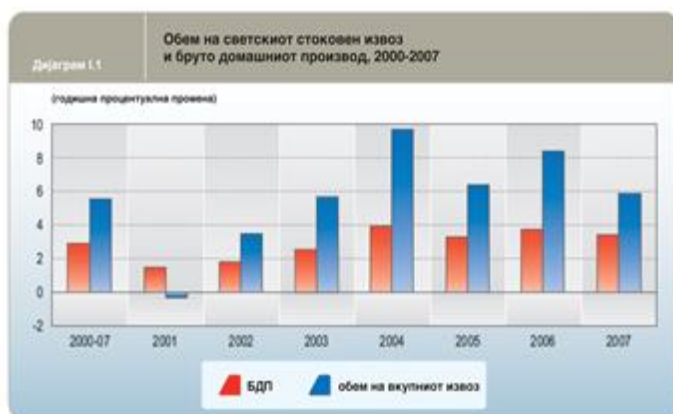
1. Largest trade nations

Trade in 2019 signalled a lowering of the availability of goods and services from developed economies. The uncertainty which appeared in the large markets was a result of the equalizing of the exchange rate and the fluctuations in the prices of the goods most important of which were oil and gas. The rise of the export of goods in the world fell by 6% in 2019, followed by the expansion of the global GDP year by year (world gross domestic product - GDP) by 3,4%.¹ The slowing of the rise of trade from 9,2% in 2019 was a result of the lowered import needs in largest trade nations, like USA, Europe and Japan. Due to the differences from higher developments and economies, where economics has not been able to count on the trade case, trade has remained strong in most developing countries.

Regions like Africa, Close East, Asia South and Central America showed sustainable growth of their economies in 2019.

¹ World Trade Developments 2008 year, p.8

Graph 1. Total world export of goods and GDP

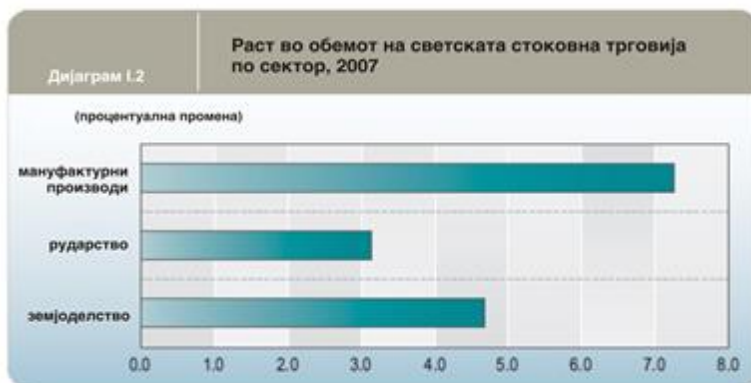


Source: World Trade Developments 2020, p.7 In the period 2019-2021, exports rose by 2,9% faster than that of the GDP.² The only exclusions were noticed in 2020 when trade marginally fell.

The export of manufactured goods rose by 7,5% in 2019, keeping its leading position in front of agriculture like the fuels and mining, which rose by 5%.³ The export of fuels in the close east like its closest trade partner, Asia (65% of total exports) rose by 13%, compared to 28% in the previous year.⁴ Nevertheless, the demand from China and India remained strong, with imports which rose by 26%

With 7% price rise in 2019 and the continued expansion in trade, the price of global exports of manufactured goods rose by 15%. The import of manufactured goods from Commonwealth countries to independent countries- (CIS) rose to an unbelievable yearly average of 30% from 2019 to 2020.⁵ As a result of this 3.6% of the European export of manufactured goods (Double the amount of 2019) now went to the Commonwealth of independent countries (CIS), while Asian exports to the the CIS reached a yearly average rise of 43% in the same period.⁶

Graph 2. Rise of world trade of goods in sectors



Source: World Trade Developments 2007, p.8

The international safeguarding of services rapidly grew larger. In 2019 the value of commercial services rose with a faster rise by 18% compared to the trade of goods (15%) for the first time in 5 years.⁷ This was mainly

² Ibidem.,

³ Ibidem.,

⁴ Ibidem.,

⁵ Ibid,p.9

⁶ Ibidem.,

⁷ Ibidem.,

the result of the international safeguarding of many services and the rise of transport prices. While the service sector generated around about two thirds of the total trade worth, its effect on the total trade remained under 19%. In 2019 the largest exporters of commercial goods remained the EU, USA, Japan, China and India, which together were worth two thirds of global and together were and are the largest trade nations. In the last few years the export of commercial goods from China and India rose a lot faster than the global average.

Graph 3. Leading exporters of commercial services 2019-2021



Source: World Trade Developments 2007, p.8

The trade in commercial goods in 2019 remained highly concentrated in North America, Asia and Europe (with 15%, 29% and 50% each of the total trade of commercial goods).⁸ Trade within the EU was more than a quarter of world trade. Nevertheless, the effect on the market these regions had, stagnated and fell (as was the case of N.America) in the last few years, while the other regions, especially the CIS, Africa and the Near East, grew their impact.

Despite the fact that they had the least impact on global trade, 2.5%, the countries from the CIS grew their impact by 75% from 2019.⁹ This was mainly due to the trade with Russia and Ukraine, like the imports from Kazakhstan, which became the second biggest importer of commercial services in the CIS after Russia.

Graph 4. Total trade in commercial goods 2019



Source: World Trade Developments 2007, p.8

The safeguarding of services sometimes were required to have a commercial presence (affiliates) in another country because of the safeguarding of other services (this model of ordering of services through affiliates didn't take part in the international trade flows).

The foreign direct investments in the companies which were active in the service sector indicated that at least 50% to 55% of the total foreign investments were in this sector.

⁸ Ibidem.,

⁹ Ibidem.,

Graph 5. International sale of services through conventional trade.



Source: World Trade Developments 2005, p.3

2. View of World Trade

The available information showed that in 2019 the establishment of foreign affiliates remained the dominant model from the view of the large exporters because of safeguarding services abroad.

For example, Canada and the USA noted high rates of growth in the sale of services from their foreign affiliates, excluding the financial services (adjustment services) between 2019 and 2020 (10 to 20% average yearly rise).¹⁰

Table 1 Rise of world trade in select regions and economies 2019-2021 (%)

Exports			World	Imports		
2019-2021	2019	2020		2019-2021	2019	2020
5.5	8.5	5.0		5.5	8.5	5.5
3.0	1.0	1.0	North America	4.0	6.0	2.0
1.0	11.0	1.5	Canada	4.0	5.5	6.5
3.0	10.5	7.0	Mexico	3.5	10.0	4.5
3.5	3.5	3.5	USA	4.0	5.5	1.0
6.5	7.5	3.5	South and Central America	8.0	15.5	17.5
4.0	7.5	3.0	Europe	3.5	7.5	3.5
4.0	-2.0	1.5	European Union	3.5	7.0	3.0
1.0	10.0	7.0	Norway	5.5	10.5	9.5
4.0	5.5	11.5	Switzerland	2.0	7.0	5.0
8.0	13.5	7.5	Commonwealth	17.0	21.0	19.5
10.5	2.0	2.5	Asia	8.5	8.5	8.0
2.0	22.0	19.5	Australia	9.0	8.0	11.0
22.5	9.5	6.5	China	18.0	16.5	13.5
-3.0	11.0	11.5	Hong Kong, China	8.0	9.5	8.0
13.0	10.	9.0	India	13.5	9.5	14.0
6.5	12.0	8.5	Japan	3.0	2.0	1.0
8.5	9.5	28.5	Asian trades	5.5	7.5	5.0

Source: World Trade Developments, 2008, UNCTAD, New York and Geneva p.7

The details from table 1 show us that in 2019 the largest percentage changes of exports was in Switzerland, Austria, Commonwealth while a low percentage of exports was seen in Canada, EU, Asia and N.America. On the

¹⁰ Ibid, p.11

other hand imports were most seem in S.America and Central America, Commonwealth, Australia and Norway. Countries which exported a lot less in 2019 were the USA, N.America, Mexico and EU.

One trade characteristic is that it allowed a large usefulness for all countries which took part in it. It grew the production capabilities of the country and through this rose the living standard in all countries. The amount in which international trade took part in, in one country, showed the bigger characteristic of open borders in the countries of the world or rather the open borders of the largest trade nations. While in the countries which are the biggest trade partners, a recession occurs, (a fall of demand) which causes a fall in the exports of that country. In this way the falling of financial activities abroad causes a recession even in the countries whose production is meant for exporting.

Namely, if you want to go to the markets in the world market, it is difficult because the foreign exchange flows to the land that produces those products. The single economy in the world's new territory will not be able to cope with the war that has emerged as the absolute winner of the US. It's still the largest industrial silo in the world, which provides about half of the total industrial production, accounting for 1/3 of the total export of stock and possessing 2/3 of the world's total reserves.

In the same time the English part is characterised with a total world export which has fallen for 9.3%, for Japan 0.4% and for Germany 0.5%. A characteristic for western economies is that they came out of a crisis relatively quickly, which came to lowering of the lead that the USA had compared to the other countries in the world.

Today, more than half of the world's gross domestic product and production is the same as the total unequal share of land per capita: USA, Germany, Japan, Great Britain, France, Italy and Canada. These countries form the group of 7 or shortened to G-7. However, it is important to note that the United States has not yet become the dominant economic and political force in the world

Table 2 Rise of world trade in select regions 2019-2020

Regions	Export FOB (Billion USD)	2018- 2019 (%)	2019- 2020 (%)	2020- 2021(%)	Export CIF (Billion USD)	2000- 2002 (%)	2004- 2006 (%)	2008 (%)
World	5225	7.5	4.5	-2	5410	5.0	3.0	-1
USA	898	8.5	6.5	-1	1151	6.0	10.5	4.5
Latin America	274	9.0	12.5	-2	339	9.5	19.0	5.0
Mexico	119	14.0	20.5	6.5	129	25.5	23.5	14.0
Other Latin American countries	157	70.0	8.0	7.0	211	2.5	16.5	0.5
Western Europe	2338	6.0	3.5	-0.5	2359	3.5	-1.5	5.0
EU	2171	6.8	-0.5	3.0	2163	3.0	-2	5.5
World in transit	178	7.0	5.0	-1	207	17.0	7.0	11.5
Central and Eastern Europe	99	7.5	8.0	9.0	133	-1	6.0	-1.5
Africa	106	16.5	2.0	-16	29	-1	60.	1.5
Asia	1294	0.5	6.0	-15	1090	4.5	0.5	- 17.5
Middle East	138	-7.5	4.0	-21	139	4.0	-3	-17
Japan	388	1.5	2.5	-8	140	5.0	2.5	-1.5
China	184	30.	21.0	0.5	438	3	0.5	-2.5

Source: Trade and Development Report, 2008, UNCTAD, New York and Geneva, 2008, p.11

We need to to note one fact, which is the absence of balances for paying from a long term aspect mostly for the largest global traders. In this way the USA in the last few decades noted a continued high deficit which topped 200 billion USD, and Japan noted a high sufficit of around about 170 billion USD. A large part of the sufficits in Japan was a result of the intensifying of exports of its car industry. In the same period, the actions of Japan in the exports of electronics is noted. It is exactly these two branches show one of the main exporters to the American.

Table 3 Total international trade of goods and services 2019-2020 (Billion USD)

Year	Export of goods	Index	Import of goods	Index	Export of goods	Index	Import of services	Index
2019	2003797	100	2027078	100	357753	100	397366	100
2020	5144770	253	5246326	259	1126092	315	1145244	288

Source: Trade and Development Report, services, goods, 2008, UNCTAD, New York and Geneva, 2008, p.105

We can see from the table that the services are the best growing component of international trade. In the period from 2019 to 2021, the international exchange of services saw a yearly rise of 8%, in contrast to the international exchange of goods which saw a rise of 6%.

Conclusion

Thanks to the fast growth of services and their part in the total international trade from 2019 to 2021 it rose by 2%. Today services are more than 20% of all economic transactions. This especially is noted for financial services, which with the help of new informational technologies, became standardized steps of the international exchange of services.

IT or informatics is a power of the internationalisation of the international exchange of goods, which caused a rise in the importance of services in the total international exchange.

The largest part of the the international exchange of goods was between developed countries, or rather the OECD countries. Today 1/5 of all foreign direct investments in the world are worsened, of which 3/5 are worsened in trade as a service type work. Services in some countries as seen in table 26, are successful in about 20% of the total the international exchange of services with a rise in growth popular.

The countries which succeeded in joining the good with the modern technology and the modern infrastructure, safeguarded a meaningful monetary income. Between these are counted USA, France, Italy, Spain and Austria. These five countries account for more than 50% of the total income in the world.

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1. Trade and Development Report, services, goods, 2008, UNCTAD, New York and Geneva, 2008
2. World Trade Developments, 2008, UNCTAD, New York and Geneva p.7
3. World Trade Developments 2005
4. World Trade Developments 2020, p.7 In the period 2019-2021, exports rose by 2,9% faster than that of the GDP.¹¹

¹¹ Ibidem.,

Healthy and safe working conditions in the healthcare organization

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Abstract: Ensuring health and safety at work reflects different interests that must be reconciled in personnel management. Safety and working conditions are factors affecting the overall operation of every health organization. Managers and contractors are involved in this process. Their main goals are to create normal working conditions and take preventive measures to preserve the health and working capacity of the staff health facilities. The performance of work duties can lead to adverse and sometimes fatal consequences on the health and working capacity of human resources.

The creation of healthy conditions for the implementation of the labor process is one of the most important factors for the labor protection of workers and employees, for the protection of their life and health and for the effective implementation of production.

Healthy and safe working conditions protect against occupational diseases and accidents at work and create a prerequisite for full physical, mental and social well-being of working persons. Healthy are the working conditions that remove the harmful things in the work activity. Working conditions that preserve the physical and mental integrity of employees are safe.

Keywords: safe work conditions, healthcare, labor protection,

Introduction

Healthy and safe working conditions are such working conditions that do not lead to occupational diseases and accidents at work and create a prerequisite for full physical, mental and social well-being of working persons. Healthy are the working conditions that remove the harmful things in the work activity. Working conditions that preserve the physical and mental integrity of employees are safe.

Healthy and safe working conditions in the healthcare organization

Safety and health at work is one of the main emphases in the modern social policy of the Republic of Bulgaria.

Ensured healthy and safe working conditions create the necessary prerequisites for effective use of the workforce and the successful achievement of the enterprise's production and economic goals.

For this, the policy of each management of a health facility should be oriented towards continuous improvement of the organization of the management of the activity to ensure healthy and safe working conditions and be an integral part of the control to reduce costs and increase the efficiency of work.

Creating good working conditions and optimal safety should be one of the primary concerns of healthcare facility management, as safety and health are a major aspect of its responsibilities.

The manager must ensure that each employee receives appropriate training (instructions). Instructions can be initiated at the employee's workplace; periodic, daily regularly; and extraordinary (e.g. in the event of an occupational accident, fire, natural disaster, etc.):

- ✓ Initial instruction - It must be held on the day of starting work, regardless of whether the newly appointed person will work in a large or small health facility. At the beginning of his first day of work, the worker (employee) must be familiarized by an official with the basic rules for healthy and safe working, the nature of the work, specific health and safety risks, behavioral requirements, etc.

The structure of the health facility, the nature of work, the organization of work, the risks in places, the necessary personal and collective protective equipment, the signs of safety and health, the actions and behavior in case of fire and accidents, the evacuation routes, assembly point, rules for providing first aid, internal regulatory documents (instructions, orders, regulations, etc.) and many other staffs should be covered in detail.

- ✓ Instruction at the workplace - its purpose is the practical familiarization of the worker or the employee with the specific requirements for the safe performance of the labor activity in the specific place where he will work. If the worker's activity includes the use, service and maintenance of machines and other technical

equipment or the work creates a danger to the health and life of people, additional training is conducted after this instruction. It ends with an exam, for which a protocol is drawn up

- ✓ Periodic instruction - complements and maintains knowledge of worker safety at the workplace. As its name suggests, it is held periodically
- ✓ Extraordinary instruction - it is done after every work accident, when there is a change in the workplace, gross violations, by order of control bodies or at the discretion of the employer, as well as persons absent from work for more than 45 calendar days, and they are also subject to extraordinary instruction upon their return.

The employer is obliged to ensure safe and healthy working conditions, and the normal microclimate for work is an important part of them. Microclimate is the set of indicators of the indoor air environment: temperature, relative humidity and air movement speed. These indicators are important for the subjective feeling of comfort.

- ✓ Temperature - The optimal limit values, depending on the period of the year and the category of work, can be in the range of 16 to 25 °C
- ✓ Relative air humidity - It affects the human body and the relative humidity of the air.

This indicator also affects the feeling of comfort, cold and heat. Relative humidity is the ratio of the amount of water vapor present in the air to the maximum amount of water vapor the air can hold at the same air temperature. It is expressed in percentages.

- ✓ Speed of air movement

The occupational health and safety management system can be defined as a strategic document, as it defines the place and role of the occupational health and safety policy among other policies in the health facility. Therefore, it is developed by top management and should be an integral part of the overall management system of the enterprise. If the Occupational Safety and Health Activity Management System is well developed, it is equivalent to a self-regulating management system that ensures the development of the health facility itself in an upward spiral.

The guidelines and recommendations of the International Labor Organization are also in this direction - every enterprise, regardless of its size and type of production activity, must create its own system for managing safety and health activities.

The employer is obliged to carry out a risk assessment at the workplace and, if necessary, take measurements. Measurements of temperature, humidity and air movement speed at workplaces are carried out at least on two consecutive days during the warm and during the cold period of the year. If it is established that there is a discrepancy with the established optimal or permissible limit values (for workplaces in buildings), the employer must take measures such as: changing the work equipment; reorganization of the work process (including provision of breaks with appropriate frequency and duration); provision of collective means of protection, ventilation, insulation and others; provision of appropriate work clothing; sufficient amount of drinking water, as well as hot and cold drinks.

Every employer has an obligation to provide sanitary and medical care to its staff.

Sanitary and household services consist of providing water for drinking and washing, detergents, toilets, etc.

Medical care is expressed in the giving of medical assistance in case of occupational accidents or illnesses, as well as disease prevention. It is especially necessary in productions with harmful working conditions. In order to provide this service, it is planned to create special services for occupational medicine.

An occupational medicine service can be established by the employer alone or jointly with other employers. The main functions of this service are preparation and implementation of measures to reduce the risk at work, providing first medical aid, monitoring the health status of the personnel, training on occupational safety and health and others.

The provision of conditions for sanitary-domestic and medical care is carried out by providing financial resources from the employer, etc.

In fulfillment of the requirement to ensure healthy and safe working conditions when carrying out the activities of the health institution, the employer is obliged to develop rules for ensuring such. These rules will be required by the employer upon inspection by the control bodies of the Labor Inspectorate.

In work with a high nervous-psychological load, imposed rhythm, monotony, a certain work rate and in shift work, the employer develops a physiological regime of work and rest, which helps to preserve the health and working capacity of the working persons. An assessment of its effectiveness is made by the occupational medicine service or by specialists working in the field of occupational medicine, based on physiological and health criteria. The deadline for carrying out the assessment is one year after the introduction of the physiological regime of work and rest.

The obligations of workers and employees to ensure safe and healthy working conditions in healthcare facilities are related to the performance of their work activities. In accordance with the assigned work, the worker or employee is obliged to comply with the technical and technological rules, as well as to comply with the rules for health and safety at work.

In connection with the fulfillment of his obligations to organize protection from occupational risks and prevention of these risks, the employer is obliged to carry out a number of activities depending on the volume, the nature of the work and the nature of the occupational risk. He may appoint or designate one or more officials with appropriate education and qualifications to perform the functions of an occupational safety and health authority. The determination is made with an Order, which the employer should present to the control bodies of the Main Labor Inspectorate. It is possible, depending on the volume of activity, the nature of the work and the nature of the occupational risk, that the employer himself performs the functions of a safety and health authority, when he is a natural person, or creates a specialized service.

In all enterprises and places where work is carried out, when performing work related to a health and safety risk that cannot be removed in any other way, the employer provides workers with the necessary personal protective equipment. Personal protective equipment is any device, equipment designed to be worn or used by the worker to protect him from one or more possible hazards threatening his health and safety at work, as well as any accessory, accessory or special work clothing designed for the same goal.

Personal protective equipment is provided to workers on the day they start work. They must comply with the norms and requirements for ensuring safety and health protection, contained in the regulations applicable to the relevant personal protective equipment, related to the essential requirements for the products that are intended to be placed on the market and/or put into operation. The employer informs each worker in advance about the risks from which the personal protective equipment he provides for his use protects him. It compiles a List that contains the workplaces, professions and types of work for which personal protective equipment is used, the period of wear, providing a certain reserve of personal protective equipment.

The employer is obliged to carry out periodic checks on the quality of personal protective equipment, certified by protocols.

The employer also prepares a list of the distributed personal protective equipment and special work clothing, according to the identified risk to which the workers are exposed, and written documents certifying their provision. He should prepare an order for the storage of personal protective equipment that is used in an emergency.

The essence of the risk assessment is to identify the hazards associated with the work, the work process and the work environment with a subsequent decision to limit or eliminate this risk. This aims to reduce occupational injuries in healthcare facilities. The legal framework for risk assessment is contained in the Health and Safety at Work Act and Ordinance No. 5 on the order, manner and frequency of risk assessment of the Ministry of Labor and Social Policy and the Ministry of Health.

Employers and persons who work on their own or in a partnership are obliged to assess the risk to the health and safety of workers. The risk assessment is carried out by the specialists of the enterprise, if necessary assisted by external specialists, with the assistance of persons involved in the labor process - managers, workers or their representatives, committees and groups on working conditions.

In order to ensure a higher efficiency of the management of the healthcare institution and to ensure healthy and safe working conditions, the organizational and management structure must meet the following basic requirements:

- ✓ ensuring the management of the health facility and health and safe working conditions as a system of interrelated activities;
- ✓ coverage in one structural unit of functionally related activities and processes;

- ✓ avoiding duplication in the activities of units and information flows;
- ✓ providing conditions for interaction between individual structural units for formation of general working groups on health and safety at work;
- ✓ raising the role and responsibility of the individual structural unit;
- ✓ ensuring a high degree of commitment of every manager, worker or an employee in
- ✓ the processes of managing health and safety at work;
- ✓ teamwork and interchangeability;
- ✓ determining and fulfilling the responsibilities of each employee through motivation,
- ✓ evaluation, remuneration, etc.

Since the employer has the greatest responsibility for safety and health at work, it also sets the company's occupational safety policy and publicly supports all those who work to implement it. Together with the administrative management, it secures and appoints competent workers and employees at all levels to answer, advise and consult on all matters concerning safety and health at work. It ensures that the risk assessment is complete and of the required quality, the protection systems - in working order, the equipment for emergency situations - available and in the places designated for the purpose, etc. He organizes and supervises the annual report on the implementation of the company's occupational health and safety policy.

Occupational accidents, general illnesses and occupational diseases are phenomena with adverse consequences for the worker/employee. They are regulated in the insurance legislation, because social risks causing temporary or permanent incapacity for work are insured, upon the occurrence of which the worker/employee receives benefits, benefits and pensions from the state social insurance. They may also cause death, which is grounds for paying insurance benefits and pensions to the heirs of the insured persons. Their regulations are contained in the Social Security Code and other by-laws of the insurance law, among which the Ordinance on the establishment, investigation, registration and reporting of occupational accidents and the Ordinance on the procedure for notification, registration, confirmation, appeal and reporting should be specifically mentioned of occupational diseases.

Every working person who has a contract (employment or civil) and is monthly insured under SSI (State Social Insurance) and more specifically in the "Work accident and occupational disease" fund (for work accident and occupational disease, which includes disability, death, temporary incapacity for work and temporarily reduced ability to work due to an occupational accident and occupational disease) is entitled to compensation in the event of an occupational accident. An accident in which the worker intentionally harmed his health is not considered a work-related accident. Pathological conditions due to illness of any nature, including epilepsy, chronic ischemic heart disease (in all its clinical forms, including myocardial infarction), brain stroke, diabetes mellitus, atherosclerosis, high blood pressure, are not considered sudden impairment of health. pressure, mental illness.

Conclusion

Safety and health at work is one of the main emphases in the modern social policy of the Republic of Bulgaria. Ensured healthy and safe working conditions create the necessary prerequisites for effective use of the workforce and the successful achievement of the goals of the healthcare facility. For this, the policy of each management must be oriented towards the continuous improvement of the organization of the management of the activity to ensure healthy and safe working conditions and be an integral part of the control to reduce costs and increase the efficiency of work. The creation of good working conditions and optimal safety should be one of the primary concerns of the management of a healthcare facility, as safety and health are a major aspect of its responsibilities.

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Management decisions in health care

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Abstract: Nowadays, people are the most important but also the most expensive resource of an organization. They are the "engine" of the organization - without them it will not function properly and will not be able to achieve its goals. Therefore, the people working in any health company are a special object of management. The management style is directly related to the behavior of managers. It characterizes the way of carrying out the leadership role and the approach to subordinates. In their work, managers must judge the situation well in order to choose the leadership style that is determined by the needs of the tasks for the groups and for the individuals.

Nowadays, a manager must be a leader, an innovator and be able to recognize the attitudes of both workers and the people he communicates with. Managers are the ones who should plan the activity in every health organization, to bring order and predict the results of the teamwork.

Keywords: management, decisions, leadership, health care,

Introduction

The role of the manager is to achieve the goals of the organization. In this regard, he makes a wide range of contacts, providing him with the necessary conditions for the successful functioning of the organization. The leader is an officially appointed person, the whole purpose is organization of the work in the work group./ Aleksiev, 2011 /

Management decisions in health care

The main functions of the manager of any healthcare facility are as follows: goals setting , planning, organizing, leading, controlling, evaluating, analyzing and correcting.

- ✓ Goal setting accurately, concisely and clearly synthesizes the final expected result of
- ✓ the work, the organization of resources and the actions taken to achieve the ultimate goals of the organization. It also determines the time for which this result is to be achieved;
- ✓ Planning allocates duties by job, by type, determines by what how to do it, with what
- ✓ resources, and when to do it. The planned objectives must be in full accordance with the available equipment, resources and people, and it is desirable to always demand and expect accuracy and integrity.
- ✓ Organizing creates all the necessary conditions, prerequisites and preparation to
- ✓ achieve the set goals. It requires a sober and clear assessment of both the objective and subjective circumstances of the employee's qualities.
- ✓ Management uses the resources of the organization and the potential of the team
- ✓ to achieve the goals of the organization. In this function, the personal and professional qualities of the respective leader clearly stand out.
- ✓ Control regulates the correspondence between the desired goal and the actual
- ✓ state of affairs. The control functions assume that the leader is as well acquainted as possible with the entire arrangement of forces and means in the organization, as well as with the capabilities of each employee.
- ✓ The assessment should be carried out on the basis of a previously developed and
- ✓ a well-established system of evaluating individual achievements, which excludes subjective attitude. This is quite difficult to achieve in practice, since subjective fact and personal biases always exist in human judgement.

- ✓ Analysis and correction – mistakes and omissions are analyzed and indicate actions
- ✓ for correction and avoidance of the same in the future.

Managers have certain rights relative to their subordinates, which arise from their responsibility for the behavior of the team in the healthcare facility. The principle of correspondence between assigned responsibilities and granted rights applies here. Administrative methods are based on the authority that derives from each manager's position in the organization. This power is called positional and gives the manager three interrelated rights:

- ✓ Right to reward
- ✓ Right to punish
- ✓ Right to demand

Administrative management methods have the following general characteristics:

- ✓ They are mandatory
- ✓ They are applied to a hierarchical organizational structure in which each direct
- ✓ leader has authority over his subordinates.
- ✓ The impact is direct, i.e. to the subordinates in a clear form are asked
- ✓ requirements, limitations and expectations for their behavior.
- ✓ Various forms of pressure are exerted on subordinates, which creates and
- ✓ reinforces their fear of managers.

Administrative methods give managers great opportunities to influence subordinates. The result of them manifests itself immediately. It is important that line managers widely and correctly use these methods

The immediate supervisor has the right to select his subordinates with whom he will work. This right gives him confidence in his own authority, gives him authority among subordinates, and transfers to him all responsibility for the general result of their work. When applied consistently and principledly, line managers' right to select subordinates creates an efficient and accountable organizational structure.

Exercising the right of selection means that the manager himself or with the help of specialists for each of his directly subordinate workplaces performs the following actions:

- ✓ Defines the main characteristics of the workplace that matter to find a suitable worker.
- ✓ Determines the type and meanings of educational, qualification and the personal requirements for this position.
- ✓ Attracts a sufficient number of applicants for this job to have opportunity for real choice.
- ✓ Maximally objectively determines educational, qualification and the personal characteristics of the candidates
- ✓ Chooses the candidate who, in terms of his qualities, is closest to the real worker.

The right of selection is realized with two different situations. In the first case, a suitable worker is sought for a vacant position. Here the problem of the immediate supervisor is not to allow a new worker to be appointed without his consent. The simplest and most efficient solution is for the employment contract itself to contain a field for coordination with the immediate supervisor. Other employees of the organization can and should participate in the selection procedure itself.

In the second case, the newly appointed manager inherits the previously appointed subordinates and must decide with whom he will work in the future. In order to realize the right of selection, it can be considered that each workplace is vacant, but for it there is already one privileged candidate - the worker who occupied it until now. The right of selection is most easily exercised if each subordinate submits a request to be released from the position held. This starts a procedure that ends with three possible solutions for the new manager:

- ✓ Offers the employee to remain in the position held.
- ✓ Gives consent to the release or transfer of the worker.

- ✓ Determines a reasonable probationary period for the employee.

The right to true selection of subordinates is limited by several objective and subjective factors:

- ✓ Many organizations avoid publicizing information about vacancies and so limit the pool of candidates from which to make the selection.
- ✓ The 'ideal worker' is difficult to define and changes over time.
- ✓ The procedure of evaluation and selection of the candidates requires an expenditure of time and money. The existing real danger of abuse of selection is overcome by making the procedure itself as clear and transparent as possible. Each candidate is evaluated only on the basis of his educational, qualification and personal qualities, abilities and skills

The immediate supervisor has the right (and obligation) to instruct his subordinates before performing new work. The purpose of the briefing is for the subordinate to clearly understand the nature of the assigned work. The subordinate is given the opportunity to ask the necessary questions in order to have full confidence that he already knows everything about the work before doing it. Full instruction is a prerequisite for avoiding many errors, which is why it is rightly considered an efficient form of preventive (anticipatory) control. It should not be perceived by the worker as an expression of distrust or doubt in his qualifications, but as a necessary orientation, guidance and removal of uncertainty.

The immediate supervisor has the right to formulate some rules for performing the repeatedly performed works and require the worker to perform them according to these rules. The purpose of the regulation is to ensure quality, economical and uniform performance of the works by all contractors. The object of regulation can be sequences, deadlines, documents, protection measures, etc. Regulation is often carried out with documents such as job descriptions, instructions, control charts, etc. Another part of the regulations is learned by the worker during his training or the first days after taking up the position. Regulation plays a very important role in quality management systems as well. It should not be forgotten that regulation gives good results only under sufficiently stable conditions. If conditions change rapidly, there is a real danger that an outdated regulation will do more harm than good. This requires either timely updating of the regulatory document or limiting the scope of the regulated activities.

The immediate supervisor has the right and obligation to control and continuously evaluate the work of his subordinates. His presence at the workplace and ongoing familiarization with the worker's results is part of his routine activity. Control is active observation and comparison of the worker's actions with the rules established in the regulations or with the instructions given by the supervisor during the instruction. Effective control is permanent and benevolent. Economic control targets only the nodal points of the processes and identifies deviations when it is still possible to make corrections. Through the ongoing evaluation, the supervisor provides the employee with useful information, which is sometimes called feedback, which is incorrect. In fact, this estimate gives the deviation of the actual result from the desired one. It is only the first necessary element that stratifies a corrective cycle such as feedback. The other elements are the desire of the worker to improve the quality of his work, to influence the result and the resources provided to him. If the manager has created the necessary conditions, he will very often have reason to give a high current rating to the worker, and he should not spare it, because a high rating is the worker's first reward.

The manager has the right and obligation to periodically perform attestation (overall assessment) of his subordinates. The most important requirement for this evaluation is that it should not be formal, i.e. to have consequences for evaluations. Depending on the nature of the secondment position and the traditions in the healthcare organization, periodic evaluation is done at periods of six months to two years. The certification period for each position is determined by its description (job description). The periodic evaluation is done by the immediate supervisor or by an attestation committee in which he participates by right as a rapporteur on the matter. The assessment has two aspects:

- ✓ Conformity of the worker to the requirements of the workplace.
- ✓ Perspective for professional growth of the worker.

The assessment of the degree of compliance is the basis of the worker's results during the past certification period. The indicators for this evaluation should be:

- ✓ Maximum objective
- ✓ Directly related to the results of the position held.

- ✓ Known to the worker at the beginning of the assessment period.

Instead of the frequently used point systems, a better result is given by relatively simple attestation documents, based on which only three degrees of conformity are determined:

- ✓ Excellent compliance – the worker fully meets the requirements of the position and can be given as an example.
- ✓ Satisfactory compliance – the worker meets the basic requirements of the position held and can continue to perform it, in which case he can improve his results.
- ✓ Insufficient compliance – the worker does not meet important requirements and he needs to significantly improve his work if he wants to stay in the position for which he receives recommendations.

The direct manager of the healthcare organization has the right to order his subordinates to perform certain tasks under set deadlines, resource costs and other essential conditions, and to demand reporting of the performance result. By order, one-time or episodic tasks lasting up to one month are assigned, since permanent or periodically performed activities are described as duties in the worker's job description, and long-term tasks are subject to the planning system. The order may be oral, written or recorded on a technical means at the time it is given. The written form and record are used for orders that involve a great deal of responsibility or concern many recipients. The order clearly states the tasks, the contractors, the deadlines, the management and the conditions for implementation.

The manager has the right to permanently transfer part of his duties and powers to his subordinates, while remaining fully responsible for the results of the activity of the managed unit. Strictly speaking, delegation and especially empowerment of subordinates are not purely administrative methods. Delegation serves at least three purposes. The first is expressed by the paradox of control, which states: 'The more control you give up, the more true control you retain'. The second goal is to motivate subordinates through the great responsibility and cultivate an entrepreneurial spirit in them. The third goal is to assign responsibility for final results to evaluate subordinates more reasonably and to create conditions for their behavior. Delegation is an agreement between a direct supervisor and a subordinate on three issues:

- ✓ Scope of tasks that gives rise to responsibility for the work assigned.
- ✓ Powers of decision and action which define the power delegated to subordinates.
- ✓ Expected results that determine the subordinate's accountability to the supervisor.

Empowerment is giving the direct contractor (who works with the patients of the health facility) the right to evaluate, decide and act without prior agreement with the manager only on the basis of common guidelines, principles and values. Without a doubt, it is not possible without proper selection and good preparation. It is also necessary to create the right prerequisites for a full performance of the performers. The most important of them are the material and technical conditions, access to the necessary information, material and moral incentives. In order for the performer to be freed from the feeling of shame, he must also have the right to make a mistake. Empowering performers is a means to solve two important problems of the modern organization:

- ✓ Reduction of administrative costs.
- ✓ Overcoming the division of personnel into people who decide and people who which perform.

Conclusion

The truth is that the behavior of a leader can both successfully raise the level and reputation of an institution or company, and it can also cause irreparable damage to the relationship between people in the collective, which in turn would collapse labor productivity and bring inevitable loss. For this reason, a quality, adequate, reasonable and educated leader is an invaluable asset and advantage for any organization. Health facility managers use a variety of means to directly or indirectly influence individual units and teams within the organization. They elicit and sustain the behavior they desire in employees. These means are called human resource management methods. Management methods should reveal the capabilities of people and direct them to achieve the goals of the organization.

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The Impact of Electronic Banking on Customer Satisfaction

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Abstract: Nowadays technology is a key factor to business success, it is also giving a different shape to everyday life. The banking sector is also included in this technological revolution, where consumers are no longer required to appear in one of the bank's branches to perform a transaction, withdraw or deposit money, or receive the activity of their bank account.

This study explores the development of technology and how it affects the banking sector. Banks use a lot of financial or IT technology and have access to a variety of information that can be useful in understanding how changes in technology affect society as a whole.

This research aims to investigate and develop how some constituent elements during the processing and formulation of E-banking can affect consumers' intentions to use it. We used three criteria to see customers' satisfaction, benefit criteria, reliability criteria, and perceived ease of use criteria. In order to verify these criteria, we used a questionnaire addressed to bank consumers to see how they perceive these criteria for the use of e-banking.

The results show us that, in terms of adaptation by users of E-banking services, the three highlighted criteria are significant. Security and privacy concerns are the main drivers of dissatisfaction and have significantly reduced customer satisfaction. Perceived usefulness is the reason for persuasion to use and perceived ease of use is a source of temporary gratification.

Keywords: E-banking, effectiveness, usefulness, reliability, security

1. Introduction

In recent years, e-commerce has increasingly become an essential component of business strategy, as well as having a significant economic impact. The Internet has become a useful business tool because of its already ubiquitous connectivity. These changes have resulted in the emergence of a new type of economy, called the "digital economy". This rapidly developing economy brings with it rapidly changing technology, increased information intensity in all areas of industry, and the creation of virtual supply chains, new types of companies, and new channels of delivery service such as e-banking.

E-Banking is performing financial activities, checking bank accounts, or offering banking products and services through the use of the Internet (Rupa et al, 2015). There is no need to be near a physical location, with a mobile phone or personal computer, with one click you can transfer money, pay bills, or buy financial instruments. The definition of e-banking varies partly between studies since electronic banking refers to several types of banking services performed electronically (Mols, 1998).

The growing level of usage of online banking has encouraged banks to reformulate their way of doing business, to remain competitive. Since the clients are the promoters and initiators of innovation, they require more flexible and innovative banking services (Oertzen, Odekerken-Schröder, 2019).

Internet banking means providing financial services via the internet, including traditional services banking, transfer of funds, and opening of new deposit accounts, as well as new services such as electronic payment of monthly bills and automatic payments via the website of the respective bank (Lin et al., 2020).

According to several studies, the main benefits of using e-banking for customers are:

- Time-saving.
- 24/7 availability.
- Queue avoidance.
- Lower transaction fees.
- Access from everywhere.
- Ease of use.

- Transaction speed.
- Transaction range.
- Elimination of the need for physical records.
- Easier transactions for persons with special needs.
- Better Transaction Management and Control
- Available Information: Customers gain access to large amounts of information regarding their banking, professional and private needs
- Increased Security

And the disadvantages of using e-banking for customers are as follows:

- Security Issues.
- Inadequate technological competence:
- Ownership of the necessary equipment:
- Absence of personal contact

Regardless of the increase in Internet banking services, customers still have some reluctance towards them mainly due to risk concerns and trust-related issues (Lee 2009). In other studies, it has been found that internet banking is considered an efficient and profitable strategy for providing banking services that contribute to the increase of the loyalty of customers toward the bank (Carranza et al., 2021)

Currently, banks and other financial institutions (FIs) anywhere in the world can efficiently fulfill their purpose and objectives by implementing the implementation of technology, i.e., electronic banking. As a result, FIs must ensure that their technology systems and business goals are always in sync. Rapid technological advances have increased the demands and rivalry among banks to provide high-quality services to their demanding customers, making e-banking a vital option that can serve and add value to you (Al-Sartawi, 2020; Tandon et al., 2016).

Technological progress and socioeconomic changes along with globalization increased customer demands, and rising competition have led to the rapid development and adoption of alternative banking channels such as ATMs, POS, phone banking, internet banking, mobile banking, and automated branches. These innovative forms of banking are becoming the new mainstream and are expected to completely replace most of the functions of a traditional branch in the coming years.

Kostopoulos et al. have founded that the coronavirus pandemic has played a significant role in enhancing the acceptance and penetration of alternative banking channels in Greece. In addition, the extensive use of alternative banking channels appears to have reduced the banks' operating expenses by lowering banks' personnel expenses, while operating revenues per employee have increased.

The literature on e-banking is constantly growing and a content analysis of the literature is reported by Brunei and Mahbubur (2017). Reviewing the available literature, e-banking studies can be classified into five main groups based on research topics. They include a) factors that influence potential customers' decisions to use e-banking; b) behavioral concerns of customers with e-banking; c) bank managers to use e-banking; d) the impact of e-banking on the bank's performance; e) internet and e-banking features.

Electronic banking technologies are divided into two categories: active and passive (Kolodinsky et al., 2004). Active technologies require new behaviors and are more difficult to spread. On the other hand, passive technology such as direct deposit does not force consumers to modify their behavior, which leads to easier acceptance by the general public. E-banking requires perhaps the most customer participation, as it requires daily user interaction with additional technologies (Kolodinsky et al 2004). Customers who use e-banking regularly must develop a degree of familiarity with the technology in order to continue using it (Servon, Lisa J. Kaestner, 2016).

Web-based applications are new ways for banks to retain customers and provide new services to them (Martins et al. 2014). Several models have been used to study internet banking acceptance, and various conclusions have been drawn from previous research. Nevertheless, the lack of customer security and privacy, and trust are both attributes of the bank and the Internet, banking acceptance has been and remains a barrier to the widespread adoption of Internet banking.

In terms of security and privacy, the banking industry is associated with a higher level of trust than traditional banking (Yousafzai et al. 2009). The most common reasons for dissatisfaction with internet banking are privacy and security concerns (Poon 2007). Customers are concerned about security issues because several banking services are now available via the Internet and smart devices. Customers are concerned about privacy and security issues, so they keep an eye on what kind of data is collected, for what purpose, how long this data is stored, and for what purpose their data is processed (Yoon and Steege 2013).

According to Balasubramanian et al. (2003), customer interactions and perceptions about service attributes such as the reliability of the information, availability of the website, confidentiality of information exchange, and efficiency of transaction execution make trust in the e-banking environment. On the other hand, no matter whether consumers are adopters or non-adopters they perceive that they are very much concerned about accessibility and confidentiality in Internet banking (Gerrard and Cunningham 2003).

Our research aims to expand the topic by examining it as a digital banking strategy related to information quality, i.e., e-banking improves customer service performance. We show how the emphasis on information quality must take into account the complexities of the local environment. We extend research and previous studies that require a process-level investigation of digital technologies and consequences, looking at the effects considered by them on the relationship between the use of technology in banking services and customer satisfaction, including the main types of connections.

Recent years' competition, advancement in IT, and customers' lifestyles have changed the face of banking activities among Albanian customers as well. Yet, very limited attention has been paid to the acceptance of e-banking services in Albanian.

Drawing on the various studies in literature, the issue of security and privacy were found to be the most important determinant factor which obstructs customer adoption of Internet banking

Solomon et al (2013) in their conceptual paper reviews the extensive literature on the technology acceptance model (TAM) and explore the factors contributing to the consumer's acceptance of electronic banking transactions. Trust, financial security, information quality, time, and money were found to predict potential usage.

Though, in reality, Internet banking offers many advantages such as faster transaction and lower handling fee, there are a large group of customers who refuse to adopt it due to uncertainty and security concern (Chaouali et al. 2016;). The previous study's key attention was largely on single or multiple factors which limit user acceptance of Internet banking services. For example, trust (Benamati et al. 2010;), risk (Martins et al. 2014), security (Koskosas 2011), privacy (Lee and Turban 2001), and website usability (Casaló et al. 2008). Though these studies focused on the limiting factors for Internet banking acceptance, none of the studies has investigated security and privacy, risk, trust, and website usability together with the moderating effect which highly obstructs customer acceptance of Internet banking.

2. Research Methodology

The research design for this study was descriptive research. A survey was conducted to test the hypotheses. The population of the study consists of internet banking users. To assess the factors that influence the intention to use electronic banking, we conducted a study survey and submitted it to consumers of banking services of different ages, or different levels of education. We divided the questionnaire into two parts for this activity. The first part focuses on the basic profile of the respondent, including his/her age, education level, career, and gender. In the second part, we looked for elements that influence the customer's decision to use e-banking. A five-point liker scale with a range of 1 (strongly disagree) to 5 (strongly agree) was used for the measurement. Data were collected through self-administered questionnaires. Respondents were given a set of 12 questions, including four on perceived usefulness, three on ease of use, three on the trustworthiness of e-banking, and two to predict a future outcome. On a preference scale (1-5) with responses ranging from "strongly agree" to "strongly disagree", participants were asked to express their opinions.

The purpose of the study is to analyse the correlation between variables and then use that information to determine whether or not there is any relationship between the variables. We will deal with the impact of e-banking effectiveness based on the three aforementioned hypotheses: the point of view of usefulness, the concept of reliability, and the perceived ease of use. To present the results of our study based on the

questionnaire, we have based on the relationship of the variables that act as moderators and mediators (mentioned in the literature review), also with the method of T-test and ANOVA.

The main hypotheses are as follows:

H1: Electronic banking will affect consumer preference based on their view of the usefulness of this service.

H2: Electronic banking will influence consumer preference based on the security and reliability that the system offers you in banking operations.

H3: Electronic banking will influence consumer preference based on the ease of use offered by the application or electronic service.

3. Result and Discussion

According to the demographic data, we noticed that regardless of age, gender, educational level, or employment, the use of e-banking has become a practicality in everyday life and the number of uses is increased. Customers who use e-banking account for 72% of the total amount, i.e., a very satisfactory percentage pointing out the improvement over time from the focus on cash and bank branches to the use of electronic services and money movement transactions through applications.

Figure 1. Online Baking use



Source: Compiled and calculated by the authors

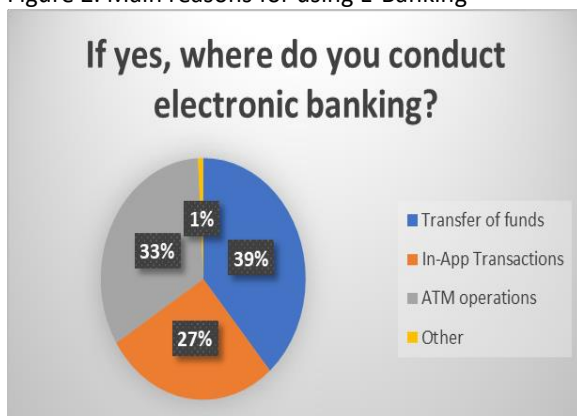
Table 1. Gender and usage of internet banking

Variable	Description	All respondents		Internet banking user		Non-internet banking user	
		Frequency	%	Frequency	%	Frequency	%
Gender	Female	107	64%	79	67.5%	28	56%
	Male	60	36%	38	32.5%	22	44%

Source: Compiled and calculated by the authors

Users declare that they mainly use e-banking for bank transfers at 39% and actions at ATMs at 33% and other actions at 28%.

Figure 2. Main reasons for using E-Banking



Source: Compiled and calculated by the authors

The main reason for not using banking is the fear of lack of security, 55%, and the rest from the difficulty of use.

Figure 3. Main reasons for not using E-Banking



Source: Compiled and calculated by the authors

The questionnaire made by us and studied with regression gives us concrete data about the effect of electronic banking. Clients have mostly expressed themselves in favour of the benefits that electronic services offer, but also the statistical results show us this. Looking at table 2, we see that $f > 1.9$, respectively 78.652, while $\text{sig} < 0.05$, i.e., 0.0025, where based on these figures according to the regression, we come to the conclusion that utility is a factor that influences directly customer response, so H1 is confirmed over H0.

Table 2. Usefulness

Hypothesis	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	0,799807	0,639691	0,63513	0,031519

Hypothesis 1	Sum of Squares	df	Mean Square	F	Sig.
Regression	92,4328	1	64,647	78,6520	0,0025
Residual	147,6804	115	0,5904		
Total	240,1132	116			

Source: Compiled and calculated by the authors

The study of Htay (2013) also reaches the same conclusions, where it shows that the utility has a compact positive correlation to the impact it has on consumers, so much so that he considers it as the main influencing factor in the use of online banking services.

We are based on the Riyadh et al. study (2009), for reliability and safety, to compare the study in the current period. The study states that reliability and security are positively correlated, but in a negative context as the main concern of the mass non-use of electronic services. But in 2022, our questionnaire reflects that this reliability has increased and the development of technology has provided high security against cyber-attacks of misuse of data. It cannot be denied that the feeling of uncertainty and doubt still exist, but there is a drastic decrease, where customers now come to see more clearly applications and online services as efficient solutions. We confirm this from the regression according to f and sig , $f = 69.127 > 1.9$ and $\text{sig} = 0.0037 < 0.05$ (table 3), where the concern is present but the effect of this factor is significant in the progress of use and operation of e-banking.

Table 3 Reliability and security

Hypothesis	R	R ²	Adjusted R ²	Std. Error of the Estimate
2	0,59148	0,34984	0,34161	0,629171

Hypothesis 2	Sum of Squares	df	Mean Square	F	Sig.
Regression	78,5077	1	54,126	69,127	0,0037
Residual	166,1248	115	0,8012		
Total	244,6325	116			

Source: Compiled and calculated by the authors

Consumers would be more willing to disclose credit and financial information online if they saw a reduction in transaction risk, so H2 on reliability and electronic security is confirmed.

Ease of use (Al-Sharifi et al., 2016) is classified as the main factor that has a distinct effect, but we do not agree with this statement. According to table 4, the regression $f > 1.9$ and $\text{sig} < 0.005$ respectively in the values 56.4439

and 0.0043, we come to the conclusion that the ease of use is a component with a positive correlation influence but lower than the usefulness, so not as a primary influencing factor in the use or non-use of e-banking by customers. Although this result, we support hypothesis H3.

Table 4. Ease of Use

Hypothesis	R	R ²	Adjusted R ²	Std. Error of the Estimate	
3	0,651504	0,42445	0,417172	0,670038	

Hypothesis 3	Sum of Squares	df	Mean Square	F	Sig.
Regression	55,9801	1	53,025	56,4439	0,0043
Residual	116,0057	115	0,7801		
Total	1719858	116			

Source: Compiled and calculated by the authors

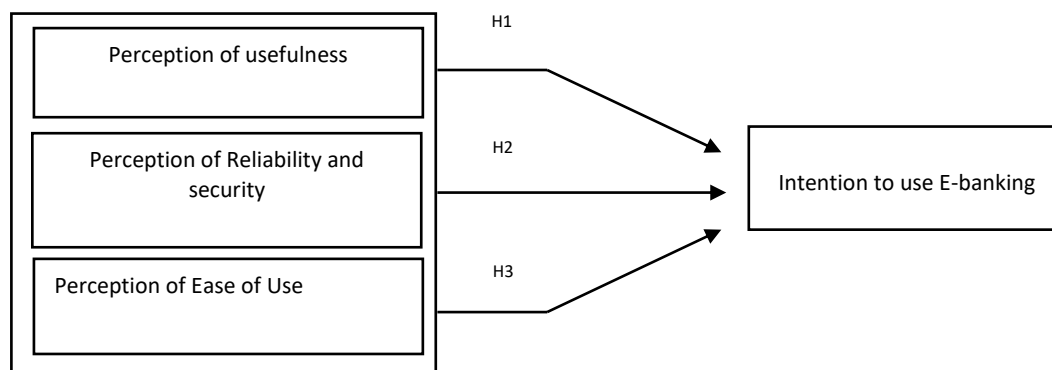
Our findings are consistent with Muzividzi et al. (2013) research on e-banking users in Germany, who found that e-banking users tend to be younger, more educated, and have higher professional statuses. The Beta coefficient in our regression analysis describes the relative weights of each independent variable. The analysis of Table 5 with the largest Beta coefficient reveals that usability is the main influencing component regarding the usage and satisfaction that customers have (as a dependent variable), compared to the lower numerical results of other independent variables. The result also shows the strong predictive ability of the regression model, with the three variables accounting for 78% of the variation in the data.

Table 5 Standardized and non-standardized coefficients (Usefulness)

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
Constant	0,5987	0,420		1,412	0,333
Usefulness	0,8183	0,0931	0,6057	12,024	0,002

Source: Compiled and calculated by the authors

Many customers mentioned as problems in the use of e-banking, their lack of knowledge of the Internet and the slowness of performing actions, as well as offering to complete surveys for changes made or desired by users on the websites of some banks. Customers themselves expressed that they could more easily adapt to these technologies if they were useful, easy-to-use, and secure applications/services for their confidential data. However, the overall level can be lowered or raised appropriately since we are only analysing the regression results for a single variable. People may believe that convenience is essential to usefulness in their perception of e-banking. Although electronic banking is still a new experience for many customers, most of our respondents had traditional bank checking accounts in addition to their online accounts. Consequently, these people will use electronic banking services such as ATMs, POS, or banking applications offered by traditional banks at the same time in the absence of comprehensive Internet-only banks that offer a wide variety of advanced features. Given the level of services applied here and the lower terms of telecommunications, as well as the availability of the Internet for most customers, it is possible to see these facilities as close substitutes for Internet-related goods and services. The conclusion of the regression that the speed of action or other factors not related to safety or usefulness are statistically insignificant, does not contradict the fact that the three variables we took in the study are essential in relation to perceived satisfaction since conditions of these tend to be minor and have minimal impacts on readiness for use.



4. Conclusion

This study showed that both theoretically and in the real world of the economy, especially the functioning of the banking system, the concepts of satisfaction, utility, and loyalty have often been discussed and interpreted in different research methods. Even people who see them as distinctly different from ideas assume a close relationship between them, which has traditionally been seen as a linear relationship.

Three different hypotheses relating to satisfaction, usefulness, and ease of use have been proposed and evaluated in order to highlight the effect of e-banking. The main finding of the study is that the relationship between online satisfaction and usefulness is accentuated by the provision of security and loyalty and somewhat mediated by the ease of use, based on the findings of calculations and comparison of alternative models.

Research on the dynamic effects of e-banking supports the idea that bank consolidation has increased their performance efficiency and expected utility margins, and that they are able to offer customers new or improved banking services enabled by technological advances with condition reliability and safety from cyber risk.

Internet banking enables the improvement of the banking industry through new services, in specific in developing countries. In addition, at this stage of economic difficulties that developing countries are facing, technological improvement and within this, the application of online services is considered the major facilitator of the overall development of the banking industry, upon which the entire future banking services are to be created and directed. Even if it provides benefits to banks and their clients, using internet banking services in Albania remains very low.

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Annex

Table 6 Demographic Data

Category	Frequency	The percentage %
Gender		
<i>Female</i>	107	64%
<i>Male</i>	60	36%
Age		
<i>18-25</i>	58	35%
<i>26-30</i>	35	21%
<i>31-35</i>	24	14%
<i>36-40</i>	28	17%
<i>41</i>	22	13%
Education level		
<i>0-4 years of education</i>	0	0%
<i>8-9 years of education</i>	2	1%
<i>Secondary education</i>	23	14%
<i>Bachelor/Master</i>	142	85%
Occupation		
<i>Employed</i>	99	59%
<i>Self-employed</i>	23	14%
<i>Employed and studying at the same time</i>	22	13%
<i>Student</i>	17	10%
<i>Unemployed</i>	6	4%

Source: Compiled and calculated by the authors

Table 7 Standardized and non-standardized coefficients (Reliability and security)

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
Constant	2,502	0,299		11,025	0,00315
Safety	0,6307	0,073	0,528	7,955	0,003

Source: Compiled and calculated by the authors

Table 8 Standardized and non-standardized coefficients (Ease of Use)

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
Constant	1,6687	0,304		1,412	0,096
Credibility	0,8995	0,0688	0,08814	3,4205	0,004

Source: Compiled and calculated by the authors

Econometric Analysis of Economic Growth Parameters Between Russia and Azerbaijan

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Abstract: The analysis of economic growth parameters has a major role in the development of inter-country economic relations in modern times. In general, economic growth includes long-term positive dynamics of the economy. The rate of sustainable economic development in post-Soviet countries is taken as the main factor of macroeconomic indicators affecting economic development. In the article, a multi-factor regression model was established between the trade balance between Russia and Azerbaijan and the GDP of Azerbaijan and the GDP of Russia. Based on the 28-year statistical indicators of economic growth parameters, an econometric study of dependence was conducted in the time period covering the years 1994-2021. Appropriate statistical methods were applied to identify the model and check its significance for each parameter, to determine adequacy. Stability of parameters of multifactor regression model was checked by CUSUM test and CUSUM of Squares test. In this work, the question of stationarity of the series was checked by means of the Dickey-Fuller test, and the stationarity of the new series adjusted from the second order difference operators of these time series was revealed. Then, mutual cause-effect relationships between time series were studied by means of Grainger's test. Using the procedures of the Eviews package, the adequacy of the multifactor regression model was determined, and economic interpretations of the results were analyzed and recommendations based on econometric approaches were given for forecasting.

Key words: GDP, Azerbaijan, Russia, trade , econometric analyses, multiply model.

Rusya ve Azerbaycan Arasındaki Ekonomik Büyüme Parametrelerinin Ekonometrik Analizi

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Özet: Ekonomik büyüme parametrelerinin analizi, modern zamanlarda ülkeler arası ekonomik ilişkilerin gelişmesinde büyük rol oynamaktadır. Genel olarak ekonomik büyüme, ekonominin uzun vadeli pozitif dinamiklerini içerir. Sovyet sonrası ülkelerdeki sürdürülebilir ekonomik kalkınma oranı, ekonomik kalkınmayı etkileyen makroekonomik göstergelerin ana faktörü olarak alınmaktadır. Makalede, Rusya ile Azerbaycan arasındaki ticaret dengesi ile Azerbaycan'ın GSYİH'sı ile Rusya'nın GSYİH'sı arasında çok faktörlü bir regresyon modeli kurulmuştur. Ekonomik büyüme parametrelerinin 28 yıllık istatistiksel göstergelerinden yola çıkılarak 1994-2021 yıllarını kapsayan zaman diliminde ekonometrik bir bağımlılık çalışması yapılmıştır. Modeli tanımlamak ve yeterliliği belirlemek için her parametre için önemini kontrol etmek için uygun istatistiksel yöntemler uygulandı. Çok faktörlü regresyon modeli parametrelerinin kararlılığı CUSUM testi ve CUSUM of Squares testi ile kontrol edildi. Bu çalışmada serilerin durağanlığı sorusu Dickey-Fuller testi ile kontrol edilmiş ve bu zaman serilerinin ikinci mertebeden fark operatörlerinden düzeltilen yeni serilerin durağanlığı ortaya konmuştur. Daha sonra zaman serileri arasındaki karşılıklı neden-sonuç ilişkileri Grainger testi ile incelenmiştir. Eviews paketi prosedürleri kullanılarak çok faktörlü regresyon modelinin yeterliliği belirlenmiş ve sonuçların ekonomik yorumları analiz edilmiş ve tahmin için ekonometrik yaklaşımlara dayalı öneriler verilmiştir.

Anahtar kelimeler: GSYİH, Azerbaycan, Rusya, ticaret, ekonometrik analizler, çarpma modeli.

Introduction

Today, Azerbaijan acts as a very important country for security and sustainable economic development in the region. Official Baku's political will, initiative, and the economic power of our country perform the regulatory and locomotive function not only for Azerbaijan, but for the entire region. In this sense, cooperation relations, projects implemented or supported by Azerbaijan, whether within the region or internationally, are the main stimulator. The historical connection between the two countries was accompanied by the consistent nature and deepening of close political, economic, social, humanitarian and cultural relations during the years of independence.

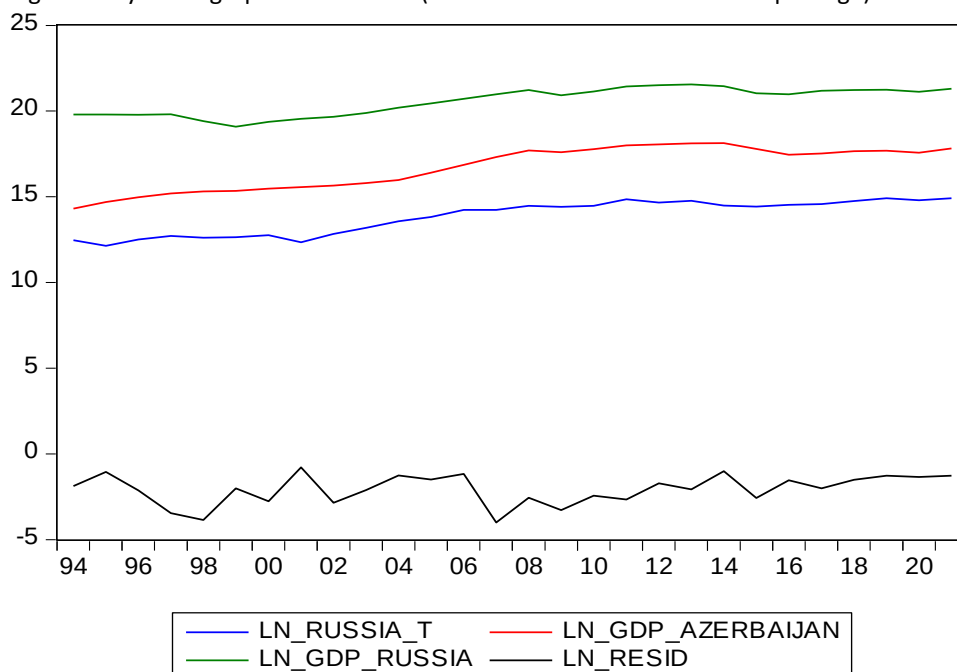
Recent Publications

In recent years, it can be seen that more researches of the econometric analyses about interrelations of growth parameters between the countries [1-6]. In the conducted researches, a model was established by evaluating the GDP of country on the components of the trade turnover of the countries, analyzing the theoretical-methodological bases of macro variables [2-6]. In research paper is used annual data from State Statistics Committee of Azerbaijan and World Bank [7,8]. EViews 8 software package was used for calculating econometrical procedures

Methodology

The aim of this article by the econometric methods to analyses the interrelation of growth parameters of Azerbaijan, Russia during the period 1994-2021. In this article, we study the growth indicators by the natural logarithmic values. All time series will be transformed into natural logarithmic ones. This transformation makes it possible to more visually represent the relationship between the expected results. The first differences of the natural logarithms are an approximation of the similarity growth rates. Dynamic description of the data from [7,8] by natural logarithms is shown in Figure 1.

Figure 1. Dynamic graph of indicators (Author's work based on EViews package)



Descriptive statistics is represented the statistic estimation of natural logarithmic indicators. Table 1 result is shown as below.

Table1.Descriptive statistics (Author's work based on EViews package)

	LN_RUSSIA_T	LN_GDP_AZERBAIJAN	LN_GDP_RUSSIA	LN_RESID
Mean	13.82563	16.70566	20.56651	-2.076429
Median	14.32758	17.38151	20.94930	-2.016807
Maximum	14.91480	18.13612	21.55487	-0.785526
Minimum	12.14692	14.30366	19.09311	-3.998671
Std. Dev.	0.972397	1.239983	0.788788	0.872878
Skewness	-0.456335	-0.433556	-0.388483	-0.606118
Kurtosis	1.528757	1.639619	1.608237	2.519010
Jarque-Bera	3.497107	3.036272	2.964128	1.984347
Probability	0.174026	0.219120	0.227168	0.370770
Sum	387.1177	467.7584	575.8623	-58.14000
Sum Sq. Dev.	25.52999	41.51403	16.79903	20.57171
Observations	28	28	28	28

The study of statistical dependence between random quantities of great importance. Determining the analytical form of the correlation dependence and the degree of density of this dependence is the main task of correlation analysis.

Table2. Correlation matrix (Author's work based on EViews package)

	LN_RUSSIA_T	LN_GDP_AZERBAIJAN	LN_GDP_RUSSIA
LN_RUSSIA_T	1.000000	0.967911	0.953824
LN_GDP_AZERBAIJAN	0.967911	1.000000	0.943601
LN_GDP_RUSSIA	0.953824	0.943601	1.000000

Table 2 shows the parameters of the multivariate linear regression model estimated by Least Square Method using the Eviews 8 software package.

Table 3. The multivariate regression model (Author's work based on EViews package)

Dependent Variable: LN_RUSSIA_T				
Method: Least Squares				
Date: 11/13/22 Time: 13:06				
Sample: 1994 2021				
Included observations: 28				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_GDP_AZERBAIJAN	0.492997	0.108147	4.558577	0.0001
LN_GDP_RUSSIA	0.441464	0.171644	2.571973	0.0167
LN_RESID	0.017257	0.051548	0.334771	0.7407
C	-3.453754	1.945109	-1.775610	0.0885
R-squared	0.952041	Mean dependent var		13.82563
Adjusted R-squared	0.946046	S.D. dependent var		0.972397
S.E. of regression	0.225868	Akaike info criterion		-0.006168
Sum squared resid	1.224393	Schwarz criterion		0.184147
Log likelihood	4.086349	Hannan-Quinn criter.		0.052013
F-statistic	158.8091	Durbin-Watson stat		1.170679
Prob(F-statistic)	0.000000			

The natural logarithm of the Russia tradeturnover between Azerbaijan (LNRUST) is dependent from natural logarithm of the GDP of Russia (LNGDPRUS) and natural logarithm of the GDP of Azerbaijan (LNGDPAZ). The form of the multivariate linear regression model will be as follows:

$$\text{LN\_RUSSIA\_T} = 0.492996856788 * \text{LN\_GDP\_AZERBAIJAN} + 0.441464340108 * \text{LN\_GDP\_RUSSIA} + 0.0172566963155 * \text{LN\_RESID} - 3.45375419309 \quad (1)$$

The result of Table 3, Determination coefficient equal to 95%. This means that the variance of the corresponding regression equation is the result of a factor that explains 95%.

By the F-Fisher-Snedekor criterion we can define importance of regression model, the α significance level criterion, degrees of freedom $k_1 = 2$, $k_2 = 25$ and F-table=3,4. From Table 1, F-statistic=158.8091. In result F-statistic=158.8091 > F-table=3,38 and the model is considered significant.

Autocorrelation was tested using Durbin-Watson d-statistics. According to the table of critical values of d-statistics for the number of observations 28, the number of explanatory variables 2 and the given significance level 0.05, the values $d_{\text{lower}}=1.26$ and $d_{\text{upper}}=1.56$, which divide the segment [0.4] into five regions, the observed value $d_{\text{obs}}=1.17$. In result $1.26 < d_{\text{obs}}=1.17 < 1.56$ the observed value falls into the zone of uncertainty, then nothing can be said about the presence of autocorrelation using the Durbin-Watson test.

CUSUM test and CUSUM square test define the stability of parameters of regression model. Figure 2 and Figure 3 is shown the result of CUSUM test and CUSUM square test.

Figure 2.Result of CUSUM test (Author's work based on EViews package)

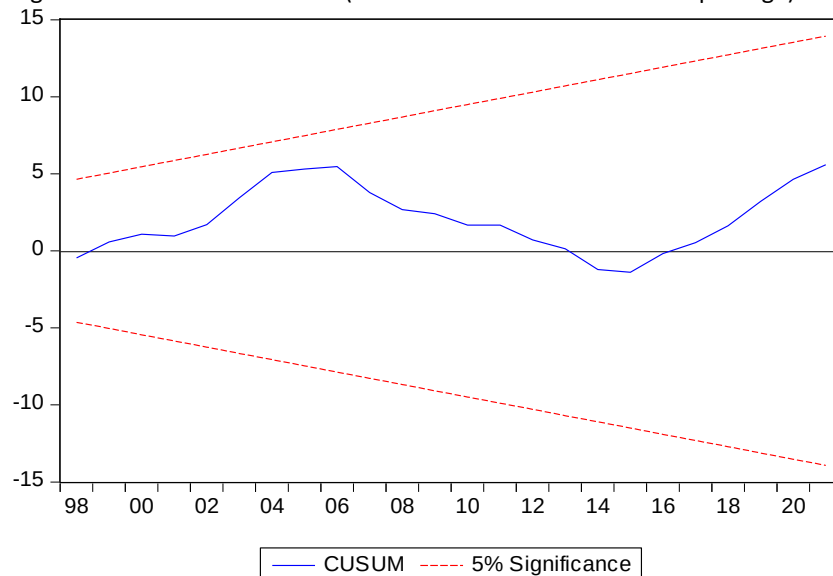
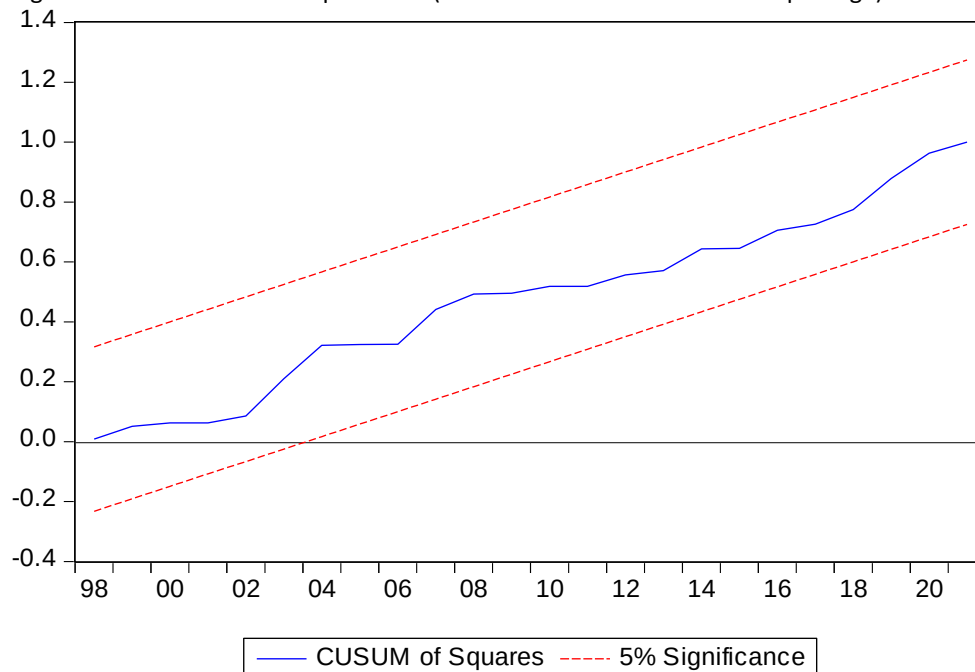


Figure 3.Result of CUSUM Square test (Author's work based on EViews package)



Let us now consider the problem of varying variance. Heteroskedasticity causes the estimations of the regression coefficients to be ineffective, increasing the dispersions of the estimations of the coefficients. Here, the varying variance of the residuals is validated by the White test by value. $R^2 = Obs * R - squared$, $n = 28, R^2 nR^2 = Obs * R - squared$, $n = 28, R^2$ - The coefficient of determination for all regressors, their squares, their binary products, and the auxiliary regression of the square of the residuals on a constant, equals 0.936406, and less than this value $\chi^2_{0.16}(5) = 1.14$. The corresponding P value is greater than 0.05, the null hypothesis that the random term is homoscedastic is not rejected.

The results of the extended Dickey-Fuller test showed that the original series and their first differences are non-stationary, while the second-order difference operators are stationary. The test results are shown in Table 4.

Table 4. Results of Dickey-Fuller test

Variables	The statistic value	The critic value 1%	The critic value 5%	The critic value 10%	Probability
The second difference, trend and intercept					
LNRUST	-9.56731	-4.374307	-3.603202	-3.238054	0.0000
LNNGPAZ	-4.692484	-4.394309	-3.612199	3.243079	0.0053
LNNGPRU	-5.616583	-4.394309	-3.612199	-3.243079	0.0007
LNRESIDS	-5.290595	-4.440739	-3.632896	-3.254671	0.0017

Result

As a result of the conducted researches, effective regulation of trade turnover of Azerbaijan – Russia is impacted to GDP of Azerbaijan and GDP of Russia .By the econometric analyses we show that development of econometrically based recommendations that allow to conduct dynamic analyzes for the long-term sustainable development of the country's economy are considered as one of the most urgent and priority issues of our time.

Multivariate regression models were used in the research and econometric analysis was carried out, and the regression equations of the model was constructed. To check the statistical significance of the established regression model by determination coefficient, Fisher statistic, Darbin Watson statistic, White test, Correlation coefficient, Cusum test, etc. Are shown that created multiply regression model is adequate .

Azerbaijan and Russia economic relationship effective result is impacted to development growth of country .Effective trade turnover between the countries gives opportunity to Russia is taking advantage of investment opportunities in Azerbaijan, and this is also important for Azerbaijan as a foreign investment.The relationship is based on political dialogue, reliable partnership, alliance, which acts as a solid pillar for all other cooperative relations.These relations strengthen the interests and trends of stability, security and sustainable development in the region.

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Analytical Procedures In Conditions Of Increasing Concern For Ensuring The Profitability Of Business Entities

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Abstract: Today we live constantly in dynamics and new circumstances. Every business entity strives for constant adaptation to news, through improving results, optimization of operations, and making correct business decisions.

Hence, we emphasize the essential task of accounting, as well as the recording and presentation of the state and changes of property and the results of business entities. Based on the records, the necessary data and information are provided about the state and dynamics of the assets, liabilities, and capital, as well as about the income and expenses from the operations of the enterprises.

In this way, an insight into the state and changes in the assets and liabilities is possible, that is, an insight into the results achieved during the operation, but also the definition of the goals and tasks of the analysis of the financial statements.

Namely, defining the analytical procedure which, under specific conditions, starts from the needs and goals of the subject for whom the analysis is performed.

There are many interested parties in the financial situation, as well as the observance of the principle of profitability in enterprises.

The analysis of the financial statements in the best way shows the results obtained after its conclusion.

The multidimensional meaning of the objectives of the financial statements offers the users the analysis of the data and indicators, but also different information.

That is, interested groups such as owners, shareholders, creditors, auditors, tax authorities, potential investors, etc. have only one goal: to gain knowledge about the "financial health of the company".

Of course, all data becomes transparent, whether through a publication in print or electronic form.

The usefulness of the analysis is realized through the possibility to make quick and simple decisions based on insight into the financial situation and the comparison of the different financial positions.

Keywords: asset size, financial positions, balance sheets, users of financial statements, analyst.

INTRODUCTION

Financial statement analysis applies general-purpose analytical tools and methods. The assessment of financial statements can be done through the analysis of the same basic instruments in the economic management and planning of business entities.

That is, in the market environment and the free transfer of different types of resources, the indicators of the financial situation, and the growth of the property, it is necessary to observe the principle of profitability.

It is of crucial importance both at the level of business entities and more broadly for the economy and society as a whole.

It has been emphasized by many authors, both in the Macedonian and foreign literature, that financial reports offer users numerous information and data. The analysis of the balance sheets transforms the accounting data into useful information.

Hence, the objectives form the basis of the analysis, or "the analytical objectives of the financial statements refer mainly to managers, creditors, equity investors, auditors, directors, participants in the merger of enterprises, regulatory institutions and the like".¹ All doubts and reliance on premonitions, intuition, etc. are rejected through analysis.

Namely, all users have the same characteristic in the analysis, which is to gain as much insight as possible into the profitability of business entities.

¹ Markovski, Nedev, Managerial Accounting, pp.595

The purpose of the analysis of the financial reports for these users is to supply them with strategic information to improve the efficiency and effectiveness of the operations of the enterprises.

That means users have the opportunity to see how much their capital has increased from the achieved positive financial result, i.e. the profit.

Namely, external users (shareholders, consumers, suppliers, regulators, lenders, etc.) are not directly involved in the management of enterprises.

They are interested in the analysis of financial statements to make better decisions that will be based on facts in the realization of their goals.

Certain users can receive specially prepared financial reports for their analysis needs.

That is, as an example, management discussions and analyses outside the set of financial statements can be cited. Although, through the basic financial reports, the profit and loss account, the balance sheet, the cash flow report, and the capital change report, as well as the notes from these reports, a sufficiently large volume of information about the success and operation of the enterprise is obtained.

1.USE AND IMPORTANCE OF ANALYTICAL PROCEDURES

When analyzing the financial result, it is necessary to perform the following analytical procedures:

- ✓ To analyze the structural content of the total income,
- ✓ To carry out an analysis of the situation and dynamics of the separate income positions,
- ✓ To analyze the origin of income by positions and their participation in the size of the financial result,
- ✓ To perform an analysis of the distribution of profit and to perceive the effects of the application of accounting policies,
- ✓ To analyze and evaluate profitability as a significant factor for increasing capital,
- ✓ To analyze a certain loss,
- ✓ To analyze the separate positions of expenses, that is, their condition and dynamics,
- ✓ To perform an analysis of the origin of expenses and their participation in the structure of the negative financial result, as well as
- ✓ To bring together analyses for understanding the positions in the balance sheet, as well as the balancing of its active and passive positions.

In doing so, the analyst performs analytical procedures on:

- ✓ Analyzing the structure of assets,
- ✓ Analyzing the situation and changes from a qualitative and quantitative aspect for a certain period,
- ✓ To perform an analysis of cash assets,
- ✓ To perform an analysis of claims according to time, payment deadlines, possible disputes, suspiciousness, etc.,
- ✓ Analysis of the size of the financial resources engaged,
- ✓ Analysis of investments in fixed assets,
- ✓ Analysis of the transformation of funds in the circular movement,
- ✓ Analysis of active time allocations, as a position for monitoring payments made in advance and expenses that should be converted into costs in a future period.

2.ANALYTICAL TOOLS FOR OBTAINING SIGNIFICANT INFORMATION

The management of business entities implies a set of activities during operation to achieve higher production and financial results.

Namely, the examination of the relations between the property and the analysis of the financial structure represent initial steps for the evaluation of the operations of the enterprises.

The three most common tools for analyzing financial statements are:

- *Horizontal analysis – comparison of the company's financial situation and performance over time,*
- *Vertical analysis – comparison of the company's financial situation and performance with some basic value,*
- *Analysis of indicators – a measure of key relationships between items in financial statements.*²

2.1.Horizontal analysis

When performing the horizontal analysis, it is necessary to compare the amounts of the financial statements from the last two or more years.

That is, to perform a side-by-side comparison of the financial amounts in each report's columns.

Through this comparison, the changes that occurred in the current period, compared to the previous period, are determined.

2.2.Trend analysis

Trend analysis should be used to perceive changes in quantifying and measuring the economic and financial performance of enterprises for a longer period (usually 10 years).

This analysis includes percentage trends in a series of financial figures and is a variation in the use of percentage change.

Trend analysis can focus on the enterprise as a whole, but often this analysis is performed on individual segments of the operation, eg. the sale.

When analyzing trends, analysts take into account the various business and geographic segments of the enterprise's activities.

In this way, information is obtained on segmental revenues and profits that reveal that not all segments are equally profitable.

Also, analysis of balance sheet item trends may involve comparing relationships between items from different financial statements.

That is, the analysis of financial statements has a role to answer the questions that are of interest to the company, that is, the management.

The management, by understanding the factors of the analyzed period, can very easily decide on the future of the enterprise.

2.3.Vertical analysis

Vertical analysis is a tool for assessing individual balance sheet items.

First of all, it is necessary to determine a key common figure that will represent our basis, and most often that figure represents the income in the income statement.

Here the balance sheet comparison shows the change in each item over time without expressing the relative importance of each item.

All individual amounts in the reports are redefined in terms of common-size percentages.

² Wild, Shaw, Chiappetta, "Fundamental Accounting Principles", pp.682

2.4. Analysis of indicators

Analytical indicators represent an implicit part of the analysis of financial statements. They are one of the most widely used tools of financial analysis.

Only one indicator is not a sufficient basis for a reliable assessment of business entities. A group of indicators that examine non-financial indicators and provide non-financial information is needed.

The former information is useful for financial management, but the latter information is useful for operational management which tracks the day-to-day activities that generate revenues and expenses.

Namely, indicators help us discover conditions and trends that are difficult to detect by examining individual components. Each indicator expresses the mathematical relationship between two values or measures.

Considering the permanent importance of analytical indicators, it is noted that, "everything that started in the field of analytical indicators in the USA has been maintained until today".³

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$\text{Net Profit Margin} = \frac{\text{Net Income}}{\text{Net Sales}}$$

$$\text{Total Assets Turnover} = \frac{\text{Net Sales}}{\text{Average Total Assets}}$$

3. ANALYSIS OF THE LOWER BREAK-EVEN POINT

In theory and practice, many authors deal with the profitability chart.

The need arises when we want to answer more questions.

"How will costs and revenues react if more sales are made?

What will happen if costs are reduced by 10%?

What effects will there be on the financial result if the prices are reduced by 5%?"⁴

In each of these questions, multiple answers can be complex. Due to the need for precise and accurate assumptions, managers are obliged to analyze the profitability chart and determine the lower profitability point. The analysis of the so-called break-even point aims to determine the point at which revenues equal expenses.

The break-even point represents the volume of production where the sale ensures that costs are covered through realization, without incurring a loss or profit.

That is, equality is,

$$TV + TF = RU$$

TV – total variable costs

³ Horigan, A Short History of Financial Ratio Analysis, pp.248

⁴ Markovski, Nedev, Accounting Of Business Management, pp.61

TF – fixed costs

RU – total realization

The necessary business income to achieve a neutral business result is determined as follows:

Fixed costs _____ x 100

% of margin share

to cover business

revenue for normal volume

of engagement

Namely, the volume of engagement ie. the degree of utilization of the real-normal capacity that provides the neutral business result is leveled as follows:

Fixed costs _____ x 100

Margin to cover the the

normal volume of engagement

The point at which the business income is equal to the sum of the variable expenses contained in them, fixed, almost fixed costs, and net financing costs, represents the lower point that provides a neutral gross financial result, ie. the point where the gross financial result is equal to zero.

That is, the necessary business income to achieve a neutral gross financial result is determined as follows:

Fixed costs + Net financing costs _____ x 100

% of margin participation to cover

business income

Here it can be underlined that the greater the realized income that ensures the neutral financial result, that is, the higher the degree of elasticity of the neutrally realized financial result, the lower the risk of its realization and vice versa.

CONCLUSION

The paper emphasizes the need and importance of analysis and analytical procedures.

Which means, to analyze, means to examine a certain object or phenomenon.

Namely, analyzing enterprises means analyzing and evaluating the work of an enterprise. If the analysis is performed for the needs of management, then it is performed to create a database and information for providing an easier way of decision-making and managing business processes.

Therefore, the examination and evaluation are done on the balance sheets of the business entity, that is, on the financial statements. Financial statements are of crucial importance in designing strategies and managing business entities.

Namely, the availability of data and information from such reports enable an easier way of discovering some deficiencies arising from certain operations.

The paper emphasizes the analytical procedures of balance positions with the aim of greater profitability in the work of enterprises. Because the success of the operation depends on the established productive relations, as well as successful management.

That is, the analysis of financial statements provides data and information about:

- ✓ The condition between separate parts of the asset structure,
- ✓ The condition and relationships of individual subgroups, eg stocks,
- ✓ The condition and relationships of the individual parts of the asset,
- ✓ The condition and relationships between various types of obligations of the business entity, etc.

The purpose of the paper is to emphasize the inevitability of the analysis and the interdependence of the data contained in the income statement, the balance sheet, the report on changes in capital, etc.

The analysis is necessary to assess the prospects of the enterprise.

It is necessary to distinguish between the elements of the current financial statements that show the recurring aspects of the business entity from others that reflect events only at one point in time and the probability that they will not occur in the future.

Such non-recurring items are special items, extraordinary items, discontinued operations, and changes in accounting principles.

Because, if the management achieves rational and objective decision-making and management of enterprises, successful operations with higher profitability will be achieved.

This means that the obtained analyzed data and information need to be used by managers at the right time to achieve improved results.

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Management of communications in medical teams

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Abstract: In business relations between health enterprises, health companies, establishments, institutions, as well as between the individual participants in them - employees, various connections and contacts take place, which are manifested through different forms and ways of communication. The activity of people involved in every health organization requires them to communicate, behave, exchange information, ideas, plans, place orders for necessary supplies, offer goods and services, negotiate, hold meetings, conferences, discussions and proposals, conclude contracts and agreements. Communications and good relations with counterparties are of great importance not only for the efficient functioning of the health enterprise, for business work, but they play an essential role in the success of both the employee's work and his life. Effective communication between employees improves relationships within the work group or team, creates a climate of trust and support, and enables easier adaptation of new employees and acceptance of established values, norms and principles of behavior.

Keywords: communication, management, team, employee,

Introduction:

If the leadership of the given healthcare organization demonstrates attention to all elements of culture and communication in the team, and therefore to the values of each person, then this collective culture will begin to change and work in the interest of the goals of this organization. This helps to acquire a sense of teamwork in the work, to create the feeling that everyone's work is important for the general development and success of the company.

In any healthcare organization, the role of communication is huge. As a type of human activity, it is a factor of socialization, turning a person from a biological into a rational and social state, into a person and a member of the team and society.

Regardless of the type of healthcare facility, the exchange of information between employees is of great importance. Communications are equally important for both the organization and the individuals working in it.

Management of communications in medical teams

The growing role of communication is of primary importance in building a professional environment for development, in building corporate responsibility, in protecting business competitiveness. The ability to communicate effectively with the external and internal audiences of a company, to stimulate trust and open dialogue in the management of an organization is part of the winning formula of modern management.

Many organizations today realize the importance of people in fulfilling your goals. Human resource management balances between two main responsibilities: assist the organization in its strategic direction and represents and advocates for the employees of the organization. It is clear that human resource management has significant role in modern organizations. HRM is not merely reactive the management state. Quite the opposite, human management resources should take the lead in helping to manage the "people" component of the organization. In addition, the employees of the organization may assist in the acquisition and maintenance of competitive advantage. Attracting and retaining them employees require the HRM policies and practices they desire. / Aleksiev, 2012 /

Much of the information between people in an organization is not directly related to their work, but at the same time is vital to them. Since communications is a critical success factor, many organizations train their employees to communicate successfully.

Usually, communication in the business sphere has the task of reducing to the maximum extent the uncertainty regarding the specific situation, the mechanisms for managing human resources, the achievement of closer or more distant goals, or in other words - to ensure the normal functioning of the enterprise, of the organization. The timely and correct delivery of the necessary information either for raw materials or for special offers; for individuals and for entire teams, it allows the quick and clear analysis of an adequate solution.

The personal efficiency and professionalism of the individual team members in the healthcare organization are not a guarantee of achieving high team efficiency. This teamwork in itself is also a skill that needs to be developed. In addition to personal skills, high team effectiveness also requires the observance of principles that, if not implemented by the team manager, may make the interaction between its members ineffective. Some of these principles are:

- Pursuing a common goal - if there is no common goal, then there is no team. The common purpose is the meaning, the main reason why the team exists. Entering the team, each of its members has their own goals, such as financial remuneration, opportunities for development, contacts, etc. and if the manager does not pay attention to the common goal, then it is very likely that each member of the team will only pursue his own goals. High motivation and best results are achieved when the team goal overlaps with the individual goal.
- Adherence to common rules - Common rules when we talk about working in a team are those rules that regulate the way they interact with each other. What is allowed and what is not allowed in the team, what are the unwritten rules, what are the responsibilities between you and in relation to the work. These are some of the topics that are good to include in team rules.
- Conducting effective communication - even if there is a common goal and common rules, if there is no effective communication in the team, then the movement towards this goal will be slow and ineffective. Objectives must be clearly stated, reach every member of the team. The same goes for the rules. And what remains if we do not communicate effectively while doing the work itself. Processes, procedures, operational activities, meeting deadlines. If the team does not communicate effectively, this will affect the achievement of its goals.
- Conflict management - conflict is one of the natural things that can happen when people interact in a team. Few managers think about how to effectively manage conflicts in their team and prefer to ignore or avoid them. At the same time, if the conflict is managed well, it can lead to finding an optimal solution or at least to dealing with destructive behaviors such as creating intrigues, gossiping, conspiracies and others. What will help you in conflict management is the knowledge of the process, the phases and what behavior the manager should have in the different stages of the conflict. Effective conflict management is also helped by the rules that the manager has established in advance in case conflict situations arise.
- Maintaining a high level of trust - Is it possible to work together with someone you don't trust? What remains to achieve high efficiency. The lack of trust leads to a significant increase in the consumption of all resources (time, information, people, etc.) that the team uses to achieve its goals. When there is no trust, a person tends to spend more time checking, looking for additional information to confirm what the other person said. When there is no trust, we look for someone else to do a given task. All this, of course, has an impact on the money resource. Building trust is not something that happens overnight, it takes time and constant effort.

It is believed that the efficiency in the work of a collective is achieved on the largest scale and fastest through people. Motivation is different for different people. They differ from each other in content, characteristics and strength of motivation, and the behavior of people in the organization is the result of the influence of the environment on them and their personal motivation. Human resource effectiveness has three dimensions: skill, motivation and adaptability.

A worker may be skilled and motivated, but he will not be useful if he is unable to adapt to the necessary changes in production conditions. It is therefore essential to foster these critically important workforce characteristics.

In the sense of team work (team work), each manager must find an approach to encourage, influence, inspire and stimulate his employees, providing them with reasons to work well; to make them feel that they want to work and like their work together. Motivation is the set of reasons and goals pushing a person to do something, it is also the thought process of psychological metamorphoses until a person makes a decision.

The leader of the health organization must be able to make people empathize with the work of the organization and work to achieve its goals.

Employees need to know what results are expected of them and what the consequences will be if they are not achieved. They must also be aware of the role they are performing and the behavior that is expected of them. They should be aware of both the incentives for compliance and the penalties for non-compliance.

People need to feel involved in what is happening in the healthcare facility. They must understand that if the organization prospers with their help, they themselves will prosper.

When the work performed is tied to the appropriate incentives, the work brings satisfaction. As a result, people maximize their potential and arrive at solutions that lead to enrichment and refinement of work.

The management team of a healthcare organization not only develops empathy and identification, but also provides security and guides people. It clarifies roles and sets goals.

Teamwork is highly effective because the goals are clear to everyone and they participate in their achievement. In addition, people have the freedom to express their opinion and thus participate in the development of management decisions. There is consensus and trust between team members.

Implementing training and development programs motivates people because it gives them the opportunity to expand their knowledge and skills and achieve greater competence.

Along with the motivational tactics described, there are also those that demotivate, which is why it is necessary to do so as to remove their influence.

Managerial teams should use the described motivational methods, being guided by the fact that this should be tailored both to the individuality of the specific individual and also to the specifics of the organization itself.

Conclusion

Clearly, the best way to guide behavior is to understand people's hidden cognitive processes, their perceptions of fairness and unfairness. An extremely important place is occupied by the communication between individual units in the team, the employees' understanding of justice and injustice, rather than the management itself. The point of view of each of the employees should be approached carefully, they should be appropriately involved in making decisions that relate to receiving benefits that are important to them. In this way, the belief that management is being treated fairly will be maintained. And the feeling of being treated fairly helps to increase job satisfaction and empathy for the organization.

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Organization of work and work time of healthcare workers

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Abstract: In order for a separate health facility to function, it is necessary to have a form of organization of the work. These are conditions, order and requirements for the main work processes. The volume of work is distributed among individual categories of personnel with specific tasks and functions, work schedule etc. In order to make such an organization, it is necessary to make a detailed analysis of the specific nature and the type of activity. The degree of utilization of working time is one of the most important indicators characterizing the level of organization of medical work.

Keywords: organization, work, healthcare workers, activity,

Introduction

Labor organization is an activity that is carried out by managers that use special methods and strategies aimed mainly at better teamwork in the collective.

The division of labor in any healthcare institution is a qualitative and quantitative separation of the individual types of labor activity in the joint work of people. Co-operation of labor is an inseparable part of the division of labor and is a uniting of people for joint participation in labor activity.

The separation of individual work activities leads to an increase in the specialization and professional skills of employees in health facilities, the accumulation of knowledge of the individual, improvement of work habits, reduction of the time required for production and thus to the improvement of the overall work process.

Organization of work and work time of healthcare workers

The functional division of labor is determined not by the skills of the employees in the health organization, but by the division of the work process into its component parts, as a result of which its employees encounter different situations.

Functional division includes the division of personnel into managers, specialists - doctors, workers, administrators, and others.

The qualification of the employees is taken into account in the qualification distribution of work.

The differences in qualifications between the groups of persons employed in health facilities are due to the different complexity of the work performed. Employees of the same profession or specialty may have different knowledge and experience. All this is their qualification, they are divided into different categories, classes, etc.

For the better efficiency of the labor process, a number of rules and conditions of work are drawn up, such as: regime of work and rest, improvement of the working environment, of labor discipline, standardization of labor, and from here also determination of labor remuneration.

Labor standards are norms, criteria, rules and regulations on which the organization is built and functions.

- Job description is part of the mandatory documents accompanying the employment contract. It regulates the rights and obligations of the worker related to the nature of the workplace, the conditions of the working environment and the necessary education and qualification.

- Work schedule - this is the schedule of work and rest of employees, work shifts, the type of work week, the length of the work day.

- Rules of internal order. These are the rights and obligations of workers and employers in the employment relationship

- The salary is one of the main labor standards of the enterprise. It is concluded between the employee and the employer and determines the guaranteed amount of remuneration.

In order to reduce the time for adaptation of the newly appointed personnel to the workplace conditions, to the internal rules and norms of behavior, they must be sufficiently well informed about the basic aspects of the

health organization's activities. Orientation also has long-term goals – to win new people over to the goals, interests, and future of the organization. This is achieved by developing and assimilating by all personnel the values, norms, traditions, customs, customs of the so-called company culture.

A major part of management in any healthcare organization is coordinating its activities and directing the efforts of its members toward achieving its goals.

The path to high quality patient care and greater efficiency of the work process goes through changing the organizational culture and especially the knowledge, skills and attitudes of all employees. They must understand, embrace and practically support organizational efforts to improve quality.

The pursuit of high quality and competitive prices is accompanied by the implementation of modern information technologies and cost reduction.

In recent years, flexible forms of employment, such as part-time work, division of duties between several employees, working at home, etc., have become increasingly popular. All these initiatives are aimed at more fully satisfying the needs of the employed in order to gain their loyalty and commitment to the organization.

The work of the medical teams should be aimed at protecting the rights of the patient and should be present with regard to the specifics of each patient's condition. For doctors, this is related to responsibility for the health and life of the patient, making a quick and accurate diagnosis, prescribing effective treatment, responsibility to the patient's relatives and to society.

The activity of doctors in a given healthcare facility is mainly related to:

- ✓ Diagnosis, treatment, rehabilitation and monitoring of patients;
- ✓ Diagnostics and consultations,
- ✓ Prevention;
- ✓ Prescription for:
 - Laboratory and other types of research;
 - The performance of medical activities and manipulations under their control and responsibility;

Observation, control and care for the physical and mental development of persons up to and over 18 years of age;

Perform health promotion and prevention activities, including preventive examinations and immunizations; implementation of national and regional health programs;

Issue documents related to their activity;

They refer patients for consultation and hospital care.

During the initial examination of the patient, the doctor performs the following actions:

1. Review of available medical documentation;
2. Reviews the history of the disease
3. Medical examination of the patient, including determination of the objective status
4. If additional tests and/or consultations are necessary, the patient is directed to medical-diagnostic and/or imaging diagnostics or consultation with the relevant specialist;
5. After receiving the results of the tests and/or consultation with a specialist, the doctor assesses and makes a decision regarding the necessary follow-up actions (appointment of treatment, need for additional tests, referral for hospitalization, etc.);

The patient or his legal representative is provided with information, necessary for his consent to the proposed procedures and methods of treatment. This information contains information about:

- the disease
- the aims and nature of the treatment,
- the potential risks associated with the proposed diagnostic and treatment methods, including side effects and adverse drug reactions, pain and other inconveniences
- the likelihood of a favorable impact

- the risk to health when applying other methods of treatment or when refusing treatment; the benefits and possible risks of the proposed treatment
- possible financial participation and for his right to informed consent regarding upcoming medical activities.

After issuing a referral for consultation or examination, the patient must carry out the examination or examination within 30 days and promptly bring a photocopy of the outpatient list or the results of the examinations.

In cases where the desired effect cannot be achieved from the ongoing diagnostic and treatment plan, the patient is referred to another medical facility where he can receive medical assistance in the required type and volume.

Upon arrival, patients approach the duty registrar, who registers them in the system. If necessary, the patient waits for the completion of the examination of the previous patient in the corresponding waiting room.

After carrying out the examination, the doctor fills in the electronic outpatient list, marking the activities he has performed. Marked activities are valued electronically and submitted to the registry, where payment is made against a receipt and invoice /on request/.

The registrars keep an electronic register for each company-subscriber, in which the researches and manipulations of the insured employees are reported

The fees for the laboratories (clinical, microbiological, X-ray) are paid at the registry office.

The working time, its duration for the individual structures and employees of the medical facility, as well as the alternation of work and rest is regulated by an order of the manager in compliance with the legal requirements and in accordance with the risk assessment and the recommendations made by the occupational medicine office. The normative requirements are regulated in the Labor Code, the Ordinance on working hours, breaks and vacations, the Ordinance on determining the types of work for which reduced working hours are established

Conclusion

The policy on human resources is directly related to the strategic plans for the development of each health organization, the organizational culture, values and management behavior arising from this culture, has an impact on the development of the organization. The success of a healthcare facility is determined by the degree of team motivation of employees and their commitment to achieving the organization's goals.

The division and cooperation of labor are the first and most important condition for organizing the labor process, as they shape the content and structure of individual labor processes and determine their interrelationships.

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The six thinking hats theory in elite football clubs: Is it worth mentioning?

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Abstract: Today's elite football organizations, perhaps due to the highly competitive domestic and international sports environment, often experience an inexplicable obsession with ill-conceived authority, administrative and coaching, resulting in frequent wrong decision-making with "heavy", in most cases, negative consequences on their path to domestic championship, but also towards a lasting international success and constant recognition.

The theory of the "six thinking hats" approaches the problem of one-dimensional will and action through the synthesis of individual (psychological, emotional, social, economic, sports / competitive) impulses, in synthetic interaction and practice which is related to making, ultimately, key decisions, providing a holistic approach method for the various human groups to plan their thought and action processes, in a detailed and coherent way, so dialectically through the individual to the collective, to think and work together, more effectively, for the good of the football organization.

This article approaches this theory by applying it in an original theoretical and empirical way to the historical and European-recognized football club Panathinaikos (Panathinaikos F.C.), utilizing the rich multilevel bibliography from 1979 onwards, with the ultimate goal of specific "thought hats" to help and direct the members of this football organization to deal with timeless problems and situations from various creative perspectives and focus on the shortcomings in an efficient way.

Since to this day all this significantly inhibits, its evolutionary course, worthy of its reputation and history.

Keywords: football club, six thinking hats theory, football management, decision making, group orientation, case study.

Introduction

Several distinguished academics and researchers in the sports field, argue that in the last three decades the various elite sports organizations, and especially the football ones, face a highly dynamic competition, constant turbulence and uncertainty due to rapid environmental changes, such as in the economy, society, technology, culture, etc. (Gilmore, & Gilson : 2007, Fiksel :2015, O'Brien et al. : 2019). And it is perfectly normal that if these organizations want to survive or even grow, they will have to constantly improve their individual and overall performance under a regime of creativity and innovation (Kosiol: 1962, Ferruzca-Navarro et al.:2013).

The members of the sporting, in this case football, organization, undoubtedly play a dominant role in this respect. Its people, as living and separate organisms, in most cases think and function in different ways, allowing them to develop strategies and tactics of thinking about specific issues- issues under a different perspective.

Acting themselves in a state of constant questioning, a result of human selfish behavior and jealous reaction, De Bono in 1971 and 1973, develops the theory of six thinking hats, which refers to a framework of "brainstorming" and then to the transformation-transmutation of these ideas into different directions and levels of conscious thinking, with their metaphorical symbolism in six differently colored hats of expression and transfer of thought, which in turn indicate problems and solutions regarding an idea that the thinker can find.

The whole idea appears as a dynamic technique-tool towards the group operation of the content of the discussion of dominant issues-issues of the organization and aims at an innovative and creative (parallel) individual thinking, so that its people can plan and develop mental processes in a detailed and coherent way.

This tool-technique examines the implications of a decision from various "angles", while at the same time allowing the necessary emotion and skepticism to enter together in them, which would otherwise be purely logical decisions. It thus gives the opportunity to develop creativity and innovation through decision-making to a clearer and more resilient degree.

Each "thinking hat" is depicted with its own distinct color (blue, white, red, green, yellow, or black), expressing a different way of thinking and is based on the fact that no subject-issue can be approached from all directions

at the same time and therefore ways of thinking should be separated on the basis of specific steps (De Bono: 1971, 1973, Birdi: 2005).

Based on the above references, this article approaches the theory of six thinking hats, applying it in a prototype for football data theoretical and research way to the historical and European-recognized football club Panathinaikos (Panathinaikos F.C.), utilizing the various personal experiences, journalistic reports, social media narratives, historical archives, etc. of the last forty years, with the aim of these "hats" to direct the members of this organization to deal with long-standing organizational problems, functional gaps and counterproductive situations from various creative perspectives and to focus on the shortcomings in an efficient way, since until today all this has been clearly proved to significantly inhibit its evolutionary course, worthy of its fame and history.

1. Theoretical Approach

When in 1962 the famous German Professor of Business Economics Erich Kosiol developed a "special" organizational concept-theory, that of the integrative constitution of individual project activities (tasks) in an overall organizational result (also known as the theory of analysis and synthesis of the business project or projects), he consciously or unconsciously laid the foundations for a broader view and development of the various "systems" of (varied) business processes and functions, through their close and interdependent connection with a series of human actions and actions.

Within an organization, of course also in a football one, human actions have greater value and better contributions when from the status of individuality targeted and with careful steps they are directed to the overall team action. In fact, given that now among elite football clubs there is a tremendously intensive and extensive competition, if they want to survive and succeed, they are obliged to constantly improve their performance, primarily the team performance, with creative and innovative human units with a very clear team orientation and composition (O'Brien, et al. : 2019).

The six hats of thought are a simple and effective technique that enhances the productivity and creativity of the teams, and therefore of the football organization as a whole. Teams learn to think through six different perspectives, where each perspective is expressed by adopting a differently colored "thinking hat".

By mentally wearing each team member's hat, he can on the one hand distinguish-divide his thinking into six clear functions and roles, and on the other hand focus on specific parameters of a problem and focus or redirect the thoughts, discussion or meeting, while changing hats to examine the problem from another side-perspective. In this way, the groups make the most of the individual knowledge, skills and creativity of its members, synthesizing them into an overall group result and expression.

	The White Hat asks for the various facts, known or necessary information.
	The yellow hat symbolizes brightness and optimism. Under this hat you explore the positives and look for value and benefits.
	Risks, difficulties, problems – The risk management black hat, perhaps the most powerful hat, but if overused identify the difficulties where things can go wrong, because something may not work, inherently a hat of action designed to highlight issues of danger with the intention of overcoming them.
	The red hat denotes emotions, premonitions and intuition. When using this hat, you can express feelings and emotions and share fears, likes, dislikes, affections and hatreds.

	The Green Hat focuses on creativity. Possibilities, alternatives and new ideas. It is an opportunity to express new concepts and new perceptions.
	The Blue Hat is used to manage the thought process. It is the control mechanism that ensures that the instructions of the Six Thinking Hats are followed.

Table 9 <https://www.debonogroup.com/services/core-programs/six-thinking-hats/>

The application of the six thought hats have multiple benefits to the functional way of thinking in terms of examination, approaching and drawing useful conclusions.

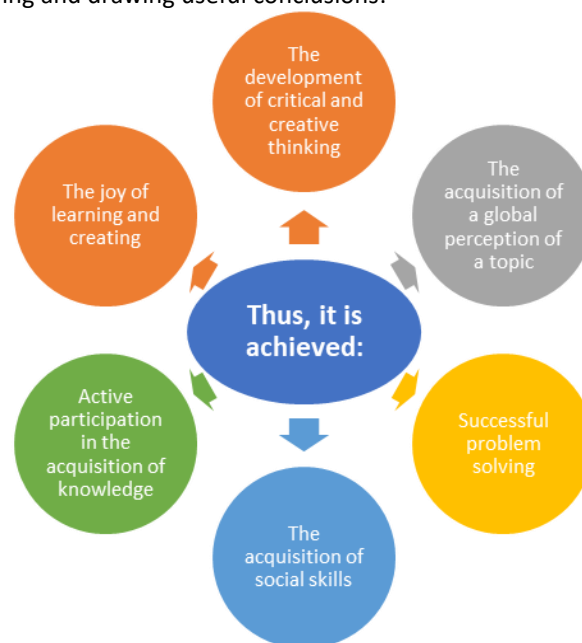


Table 10 <https://www.slideshare.net/katerinatragouda/6-28572795>

2. PANATHINAIKOS FOOTBALL CLUB (FC) : A brief acquaintance

Panathinaikos F.C., is a Greek professional football club, one of the oldest in the country, founded in 1908 (Panathinaikos FC Official Website/History/ Events, n.d.) It competes in the Super League and is one of the most popular and successful clubs in terms of distinctions in the history of Greek football, having won 20 championships, 24 cups, even scoring 8 doubles, and 3 Super Cups (Panathinaikos FC Official Website/History/ Titles, n.d.) . It is also the most successful Greek team in European competitions, as it is the only team that has played in the final of the Champions League (later Champions League) in the year 1971, and in the semifinals of the same competition in 1985 and 1996, while it has also reached the quarterfinals in 1992 and 2002. Finally, it participated in the final of the Intercontinental Cup in 1971 with the Uruguayan Nacional Montevideo, while twice qualifying for the quarter-finals of the UEFA Cup 1988 & 2003 (Panathinaikos FC Official Website/History/ European History, n.d.)

Like any other professional football team, possibly in the world, so in Panathinaikos we meet the triptych, perhaps more correctly the triarchy, which consists of the Administration – Football Team - Fans of the team.

However, although a football club could operate under the regime of triple management, for making supra-collective decisions, usually, the responsibility for final decisions lies solely with the management.

3. Methodology

3.1 A model conceived for the six thinking hats application

Initially, before the process of simulating and applying the six-hat model of thinking, we must ask those questions that will form the cognitive path for the design of the scholar's productive thinking towards his research object.

In this case, the question, for the needs of researching and recording our conclusions, focuses on the need to rebuild the decisive process for the future of the football team, by broadening the decision-making process, so that through the inter-participation of a) Administration, b) Football Team and c) Fans, the maximum possible approach to the emerging problems is achieved, so that it is offered, as a result, the best possible solution through participatory collectivity and the recording of aspects that can only be perceived and, ultimately, resolved.

Image 1. Six Thinking Hat model



Source: Personal Creation

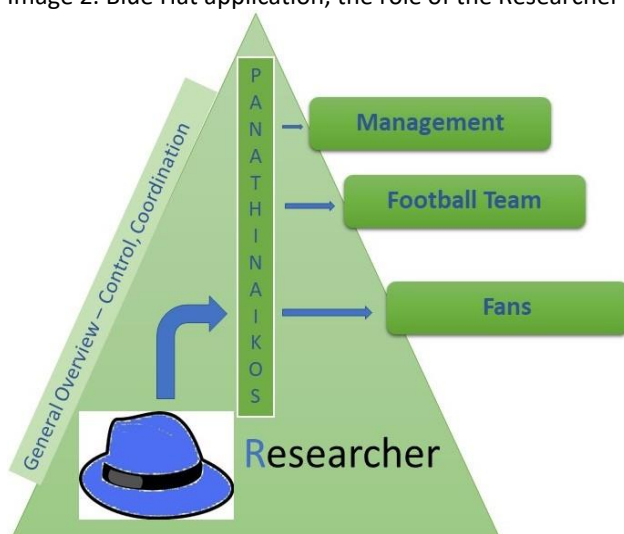
3.2 The application of the 'Six Hats of Thought' in the way the football team of the Panathinaikos Athletic Club operates: to think outside the box!

It would not be out of place to argue that the Six Hats of Thought, as a technique and at the same time as an unconventional or alternative way of perceiving and capturing reality, can be applied in the case of the Panathinaikos football club, drawing up a strategy that will perceive as a system the productive thinking for decision-making because it usually becomes difficult when it is not lateral and opposite: especially in the case where an individual or group decision needs to be made, it should be collaborative, supportive, understandable from all angles (Aithal et al: 2017).

In this case, the strategic relationship, under the approach of the researcher, in terms of Management, Football Team and Fans/Fans, can be depicted as follows:

A) regarding the hat worn by the Researcher:

Image 2. Blue Hat application, the role of the Researcher



Source: Personal Creation

B) as to the hats that the Administration may wear:

Image 3. Management application - examples of arguments and functionality of the Six Thinking Hats technique



Source: Personal Creation

C) as to the hats which the football team may wear:

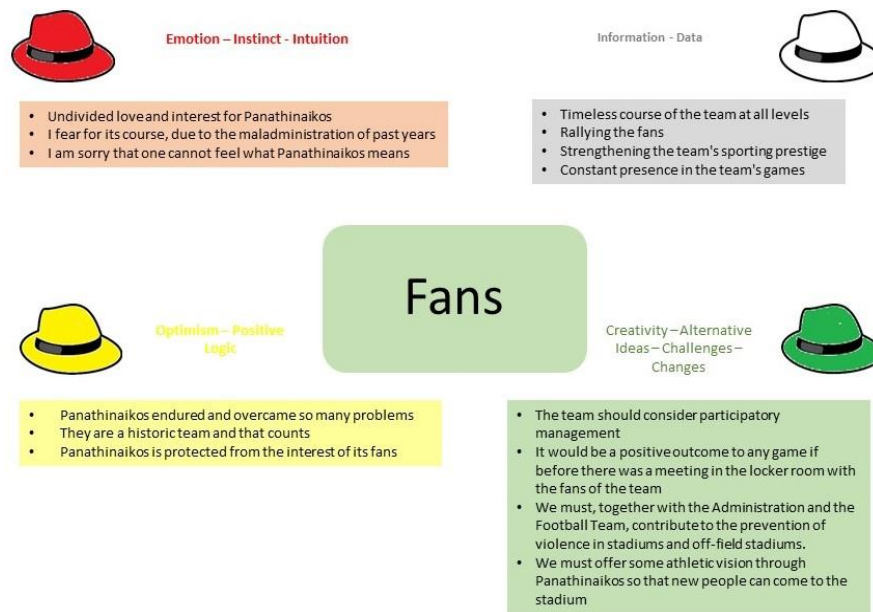
Image 4. Application to the Football Team - examples of arguments and functionality of the Six Thinking Hats technique



Source: Personal Creation

D) as to the hats that fans may wear:

Image 5. Fan application - examples of arguments and functionality of the Six Thinking Hats technique



Source: Personal Creation

4. Conclusions

The schematizations that preceded it does not lend itself only to the depiction of the technique of the Six Hats of Thought and, more or less, the functional application in a dialogue concerning the Panathinaikos football team. It is not about visual technique, but on the contrary, it is about starting, continuing and ending a discussion, in which different parties participate with dissimilar concerns, ideas, fears, anxieties and emotions.

Indicatively, without being to their extent real facts and opinions, we presented a few models of interactive simulation per participating side, with the main coordinating role being held by the researcher, wearing the blue hat.

It is noteworthy that the Six Thought Hats offer partial or holistic possibilities of their use, according to the examples we presented, since each group, each participating side, depending on the aspirations, its thoughts and strategy can contribute in a different way to the desired result.

Perhaps, the only thing certain can be the fact, which applies to every dialogical process of our daily lives, that the plethora of opinions, when put forward in an orderly manner, even if they involve negative and pathogenic elements, is the way out to a collective and common solution.

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Delimitation Of Nullity Compared to Other Civil Law Sanctions

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Abstract: The civil legal act represents the legal facts that serve as the basis for the emergence of civil rights and obligations or, as follows from the legal definition of the civil legal act, the civil legal act is the manifestation by natural and legal persons of the will directed to the birth, modification or extinction civil rights and obligations. Of course, even from the given notion, the fact of the parties' manifestation of will can be observed in the mentioned cases, but the legal act can be unilateral, bilateral and multilateral, which means that even in the given cases there must be the agreement of the parties or of a party, which can give rise to obligations for third parties only under the conditions provided by law. Otherwise, if the validity conditions of the legal act are not respected, its nullity will obviously be reached. Nullity is a sanction of civil law, but this sanction is also found in the matter of other legal acts, of substantive or procedural law, depending on the case knowing a specific legal regime and in some respects derogating from the nullity of common law. It consists in the abolition of the act which is considered to have never been concluded, so the nullity, unlike other civil sanctions, operates, in principle, ex tunc and not ex nunc, as in the case of termination, impossibility.

Keywords: : nullity, resolution, revocation, termination, expiration, reduction, unenforceability, civil legal act.

INTRODUCTION

Nullity is not the only cause of ineffectiveness of the civil legal act, which leads to the deprivation of the civil legal act of the effects for which it was concluded, but there are also other causes, subsequent to the conclusion of the act, such as: resolution, termination, expiration, revocation, unenforceability. In the doctrine, it is emphasized that the delimitation of nullity compared to these other causes of ineffectiveness of the legal act is important for a better configuration of the concept of "nullity of the civil legal act and to prevent their confusion. It is important to remember that each of these notions - nullity, resolution, termination, expiration, revocation, unenforceability - is an independent legal concept, each having its own legal regime.

The notion of ineffectiveness of the legal act includes all cases in which the production of the normal effects of the act is prevented, limited or disturbed. The concept of ineffectiveness can have several meanings. From a general point of view, we call an ineffective act a legal act, which is deprived of its effects.

Ineffectiveness also designates a legal act valid in principle, but unenforceable to third parties. We also call ineffective a legal act that lacks one of the essential extrinsic or intrinsic elements. In a broad sense, ineffectiveness concerns null or annulled acts, acts rendered ineffective by their valid revocation by the parties or as a result of resolution or termination, acts affected by a condition (Lupan, 2007).

In a narrow sense, ineffectiveness only considers the situation in which the legal act, although validly concluded, does not produce effects at all or produces them partially due to causes independent of the will of the parties.

Nullity of the legal act means the sanction that occurs if, at the conclusion of the civil legal act, the legal provisions regarding the conditions of validity of the legal act were not respected, abolishing it. The moment in relation to which the compliance of the legal act with the law is assessed is that of the conclusion of the legal act. It should be noted that nullity has a wide range of action, it can invalidate all legal acts (unilateral, bilateral and multilateral acts). We note that the matter of nullity does not have a unitary, compact seat, the regulation of nullity being dispersed.

BASIC CONTENT

Over time, the concept of the nullity of the legal act has experienced a certain evolution. Thus, in Roman law, the conception of nullity was crystallized in two adages: *qui contra lege agit, nihil agit* (he who does an act against the law, does nothing), as well as *quod nullum est, nullum producit efectum*. From this it follows that

the nullity was total and irremediable, or, in other words, the legal act was abolished in its entirety, there being no possibility of its partial maintenance, with the removal of the clauses by which the law was violated (Dogaru, 2017).

In the classical conception, under the influence of Roman law, nullity was assimilated to the ineffectiveness of the legal act in its entirety, being treated as an organic state of it, because it ended with disregarding the legal provisions. Nullity had the effect of abolishing the legal act in its entirety and, as a result, as in Roman law, the nullity was total and irremediable.

In the modern conception, the theory of the proportionality of the effects of nullity in relation to those causes that determined it was formulated, the consequences of nullity being limited only to those effects that contravene the law, the other effects of the act remaining valid. The finality of nullity, pursued in this conception, was the defense of the legal act, by maintaining it, after the effects that contravene the law have been removed.

Currently, it is accepted that the nullity is, in principle, partial and remediable, as it aims to suppress only the effects that contravene the legal provisions violated at the conclusion of the act, leaving the other effects untouched. Within this concept, total nullity intervenes only when the clauses that contravene the law constituted the "main and determining cause" of the conclusion of the legal act (Belei, 2001).

In our law of the Republic of Moldova, there is no legal definition of the nullity of the civil legal act, the doctrine being the one that tried to elaborate some definitions. The opinion was imposed according to which nullity is the civil law sanction that deprives the civil legal act of the effects contrary to the legal norms decreed for its valid conclusion (Boroi, 2001).

From this definition, the characteristic features of the nullity of the civil legal act can be derived, namely:

- the nullity of the legal act is a civil law sanction;
- affects only legal documents, not legal facts strictly speaking;;
- intervenes when the legal norms regulating the validity conditions of the legal act are violated;
- has the consequence of depriving the legal act of the effects that contravene the legal norms decreed for the valid conclusion of the legal act and, as a result, does not affect the legal act in its entirety;
- to establish the consistency or inconsistency with the law of the effects of the legal act, recourse is made to the finality of the law, in the sense that the legal act is deprived only of those effects that contradict the purpose pursued by the violated legal provision;
- the moment in relation to which the compliance of the legal act with the law is assessed, is that of the conclusion of the legal act (Dogaru, 2007).

Nullity and Resolution

By resolution is meant the judicial or conventional dissolution of the synalagmatic contract with *uno actu* execution, in case the obligations assumed by the convention are not fulfilled in a culpable manner, dissolution that produces retroactive effects.

Between nullity and resolution there are the following similarities:

- ✓ the nullity, like the resolution, annuls the legal act with retroactive effect;
- ✓ both the nullity and the resolution operate through a judicial decision
- ✓ However, there are also important differences between nullity and resolution:
- ✓ in terms of scope: the nullity applies to all categories of legal acts, the resolution applies only to synalagmatic contracts,
- ✓ under the aspect of the causes that determine them: the nullity intervenes for non-compliance with some validity conditions, while the resolution is caused by the culpable non-execution of the obligations by one of the parties to the synalagmatic contract, when the other party has executed its obligations.
- ✓ in terms of the date of the causes: the causes of nullity exist at the conclusion of the legal act, while the cause of resolution is subsequent to the conclusion of the contract: here is also a difference from the hypothesis: nullity presupposes an invalid act, while resolution presupposes a valid act concluded.

Although the principle of freedom of will is a fundamental one in civil law, the parties' freedom to contract is always subordinated to the imperative provisions of art. 5 of the Civil Code, according to which it is not possible to derogate through conventions or unilateral legal acts from the laws that concern public order and good morals.

Nullity and termination

Termination is the civil law sanction that consists in the termination of a synalagmatic contract with successive execution, for the culpable non-execution of the obligations by one of the parties. (Stoica, 1997)

If the resolution acts by canceling the contract for the past, the termination produces effects only for the future, the successive services performed cannot be returned.

As a specific element of this latter comparison, we note that, although the effects of nullity are produced in principle retroactively, and the termination operates only for the future, however, in the case of acts with successive execution, the nullity produces effects only for the future, not for the past.

Nullity and revocation

Revocation as a civil law sanction consists in removing the effects of the civil legal act due to the ingratitude of the recipient, example: revoking the donation for ingratitude, according to art.1210 Civil Code of the Republic of Moldova, of the culpable non-execution of the task, for example: conditional donation, according to art. 1204 Civil Code of the Republic of Moldova.

Regarding the comparison with nullity, revocation is similar to it, because it also represents a cause of ineffectiveness of the legal act. But there are also important differences between the two civil sanctions:

- difference in assumptions: while nullity implies causes contemporaneous with the moment of the conclusion of the act, revocation implies causes subsequent to the conclusion of the legal act;
- difference in scope: if the nullity is applicable to any legal act, the revocation applies, in principle, to acts with a free title (liberalities);

Nullity and inapplicability

Unenforceability in the narrow sense is the civil sanction that causes a legal act or a legal situation created by this act to produce effects and impose itself on the respect of third parties as a result of the party's non-compliance with the forms of publicity required by law because the act to be against third parties.

The main differences between nullity and indefeasibility are the following:

- difference in assumptions: nullity presupposes an invalid deed, while unenforceability presupposes a valid concluded deed;
- difference in effects: in case of nullity, the effects concern both the parties and third parties, and in the case of unenforceability, the effects are produced against the parties, but only against third parties;
- difference between causes: in the case of nullity, the causes are contemporaneous with the conclusion of the act, while unenforceability presupposes the non-fulfilment of some formalities subsequent to the conclusion of the act.
- a difference regarding the remedial methods: the relative nullity can be confirmed, while the unenforceability can be removed by ratification.

Nullity and expiration

Expiration is that cause of ineffectiveness that consists in the lack of effects of a valid civil legal act concluded, due to the intervention of a circumstance subsequent to its conclusion and which is independent of the will of the author (Dogaru, 2007).

As examples of lapsing, we can list: the valid will becomes lapsed, if the asset forming the object of the transmission perishes, or the testator alienates the tested asset, after drawing up the will, these determining the lapsing of this will.

There are the following differences between nullity and expiration:

- difference in hypotheses: nullity presupposes an invalid act, while caducity presupposes a valid concluded act, i.e. nullity affects the very validity of the civil legal act, and caducity only affects its effectiveness, the act being valid, but by virtue of certain circumstances it does not produce effects;
- the way of producing the effects: if the nullity is retroactive, the invalidity produces effects only for the future, i.e. - the invalidity does not operate retroactively, but only for the future, and the invalidity abolishes the legal act with retroactive effect, from the moment of its conclusion
- difference regarding the date of the causes: if the nullity implies causes contemporaneous with the conclusion of the act, the caducity implies a cause subsequent to its conclusion, foreign to the will of the author of the act.

Nullity and reduction

The reduction is a civil sanction applicable in the case of the legal act concluded with the disregard of some prohibitions established by law for the protection of some persons or for the restoration of the balance of consideration in a onerous and commutative contract. (Boro,

Consequently, we distinguish, on the one hand, the reduction of excessive liberalities, i.e. of legacies and donations made by the person who leaves the inheritance (de cuius) and violates the inheritance reserve, and on the other hand, the reduction of an injury benefit (Ungureanu, 2017; Beleiu , 2001), or in certain circumstances, for indifferent error, as well as in cases where the theory of unpredictability would find application.

The main differences between nullity and reduction are:

- different from hypotheses: the nullity is applicable to all legal acts, while the reduction is applied either to excessive liberalities or to onerous and commutative contracts
- nullity implies an invalid act concluded, while in the case of the reduction of excessive liberties and the application of the theory of unpredictability, the legal acts were validly made, but later the total or partial ineffectiveness intervenes, due to the violation of the succession reserve or due to the occurrence of circumstances not foreseen by the parties at the time of concluding the act, which lead to breaking the contractual balance.
- The cause of the nullity consists in the non-compliance with some legal provisions regarding the valid conclusion of the deed, and the reduction is determined either by the violation of the inheritance reserve (exceeding the available quota), or by the existence, from this date at the very moment of the deed's conclusion, of visible disproportions between the consideration .

The reduction of excessive liberties can only be requested by the heirs of the reservation, who are third parties in relation to the act whose reduction they request, the reduction of the benefit for the injury can only be requested by the minor with limited executive capacity who concluded administrative acts without the authorization of the parents, while relative nullity can be invoked only by those protected who are parties to the voidable legal act, and absolute nullity can be invoked by any interested person.

Nullity and Non-existence

In the civil law literature, the non-existent was defined as the sanction that declares the invalidity of a civil legal act performed without observing the essential conditions provided by law for its existence. (Ungureanu, 2017).

From this definition results a first and essential difference between nullity and non-existence: while nullity concerns the conditions of validity of the legal act, non-existence concerns the conditions of its existence.

Other differences between nullity and non-existence:

- nullity presupposes an imperfectly concluded legal act that determines its invalidation, non-existence presupposes an act that does not exist as a legal reality and has only a material physical existence;
- the nullity act will produce the specific effects until its declaration as such, the non-existent act is devoid of any legal effects right from its conclusion;
- the void legal act is sometimes susceptible to restoration, remediation, while the non-existent act can be subject to such operations;
- the effects of nullity consist in the annulment of the act declared null by the judicial body, the effects of the non-existence of the act operate by law.

From the above analysis, it follows that absolute nullity (not relative, which presupposes a voidable act, therefore provisionally valid) and non-existence are causes of independent ineffectiveness, the cases of non-existence not being able to simply overlap with the cases of nullity, as a rule absolutely

Hence the following main differences:

- from the point of view of the causes: non-existence implies the lack of natural conditions, without which the act cannot be conceived legally, theoretically and practically (consent, object, form ad substantiam, etc.), while nullity implies the absence or invalidity of the legal conditions (ability to use, lawful and moral object, lawful and moral cause, form ad solemnitatem, etc.);

- from the point of view of the applicable legal regime: non-existence can be invoked by any person, at any time, it cannot be confirmed and operates as a matter of law, while absolute nullity can be invoked by any interested person, it is only in principle imprescriptible, it can be confirmed in the specific cases provided by law and operate as a rule of law.

EFFECTS OF NULLITY

By the effects of the nullity of the legal act shall be understood the legal consequences of the application of the nullity sanction, i.e. the consequences due to the dissolution in whole or in part of a civil legal act that was concluded in violation of the legal provisions regarding its validity conditions.

The effect of nullity consists in the dissolution of the civil legal relationship born from the civil legal act hit by this sanction, restoring legality. Concretely, however, the effects of nullity differ, first of all, according to whether the nullity is total or partial, and secondly, depending on what happened after the conclusion of the invalidated legal act, more precisely, according to whether or not the act was executed and according to whether or not subsequent legal acts were concluded in relation to the same rights.

If the legal act has not been executed until the moment when it is annulled, the application of the nullity penalty means that that act cannot be executed even after that moment, i.e. the parties to the legal act are in a situation where the agreement would not have been concluded and neither produced no effects.

Conclusions

Any legal act concluded in violation of the conditions required by law for its valid conclusion is subject to nullity, unless another sanction is provided by law.

It follows that nullity is that civil law sanction that intervenes, unless the law provides otherwise, in the event that, at the conclusion of the civil legal act, the legal provisions relating to the validity conditions of the legal act are not respected, so that act does not will still produce (in whole or in part) the legal effects.

We are therefore talking about total nullity and partial nullity (depending on the extent of the effects of this civil law sanction). The total abolishes the act in its entirety, while the partial abolishes only part of the effects of that legal act, the others being maintained under the conditions in which they do not contravene the law. Partial nullity represents the rule and implies a legal act with a more complex content (an act that includes several clauses), because only in this case could it be about abolishing some effects and maintaining other effects of the said act.

We conclude that the nullity of the civil legal act has a sanctioning function.

sheoperates when the preventive function has not proven its effectiveness and consists in removing the effects that contravene the legal norms issued for the valid conclusion of the civil legal act.

We note that the nullity of the legal act is not confused with the nullity of the finding document. In order to prove certain legal acts, the law established the obligation to draw up a document that must meet certain conditions. The non-compliance with these conditions determines the ineffectiveness of the evidentiary document, which means that the document is devoid of its evidential effects, but does not affect the validity of the legal transaction, which can be proven, under the law, by other means of proof.

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Artificial Intelligence: Creating Value For Business And Beyond

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Abstract: Economic growth and a nation's wealth are closely related to how the countries will employ data and connected technologies. Artificial intelligence has become a reality of the world that can no longer be viewed as a technology of the future – it is already changing our lives and reshaping the future of humanity across almost every industry. The benefits of artificial intelligence for people are clearly visible in the opportunities of obtaining improved health care, getting easier access to information and education, and receiving customized, cheaper and longer-lasting products, to name but a few. Besides, artificial intelligence can significantly contribute to day-to-day business operations by improving the customer service, creating a personalized user experience, increasing production output and quality, reducing costs, boosting sales etc. This paper briefly explains the concept of artificial intelligence, including the difference between human and machine intelligence, and defines the major sub-fields of artificial intelligence, with special reference to machine learning and deep learning. Taking into account the potentials for developing a new generation of products and services, as well as the possibilities for changing job positions, the article also looks over the key threats and opportunities related to the applications of artificial intelligence across various industries.

Keywords: Artificial Intelligence, Machine Learning, Deep Learning, Business, Value Creation

1. INTRODUCTION

A few decades ago, information and communication technology has already established itself as a tool for complete transformation of both business operations and society as a whole. Today's world differs in many ways from that of our parents, but is more likely to be different from the world in which future generations will live, primarily due to the emergence of a relatively new scientific discipline based on a computer science - artificial intelligence (AI). The term "Artificial Intelligence" is a combination of two words, "Artificial" or anything that is made by humans (not natural) and "Intelligence" (referring to a human intelligence), or the human ability to adapt to changes, acquire and use knowledge in a productive way and ability to understand, think and learn. The visionary beginnings of artificial intelligence go back to the time of Second World War when Alan Turing (British mathematician and logician and artificial intelligence pioneer) constructed the famous Enigma machine. But the formal beginnings of artificial intelligence date back less than seven decades, when Marvin Minsky and John McCarthy, both computer scientists at Stanford, make use of this coin for the first time in a summer research project (Dartmouth Summer Research Project on Artificial Intelligence (DSRP AI)) at Dartmouth College in New Hampshire (Haenlein & Kaplan, 2019). In coming years, artificial intelligence has experienced a rapid expansion in many different segments. In 1966, Joseph Weizenbaum, German and American computer scientist at MIT, publishes an article describing the famous ELIZA computer program for Natural Language Communication Between Man and Machine (Weizenbaum, 1966). From 1960 through 1972, the Artificial Intelligence Center at Stanford Research Institute conducted research on a mobile robot system nicknamed Shakey (SRI, 1984). In 1998, Cynthia Breazeal, a researcher from the Massachusetts Institute of Technology (MIT), presented the first humanoid robot Kismet, which was one of the first robots able to demonstrate social and emotional interactions with humans. Since the early 2000s, artificial intelligence has started to develop dramatically and reshape the world we live in. From Roomba (autonomous robotic vacuum cleaners) in 2002, Watson (question-answering computer system capable of answering questions posed in natural language) in 2011, to modern virtual assistants such as Google Assistant, Amazon's Alexa, Apple's Siri, IBM's Watson, Samsung's Bixby and Microsoft's Cortana after 2011, the development and future of artificial intelligence is becoming more and more apparent.

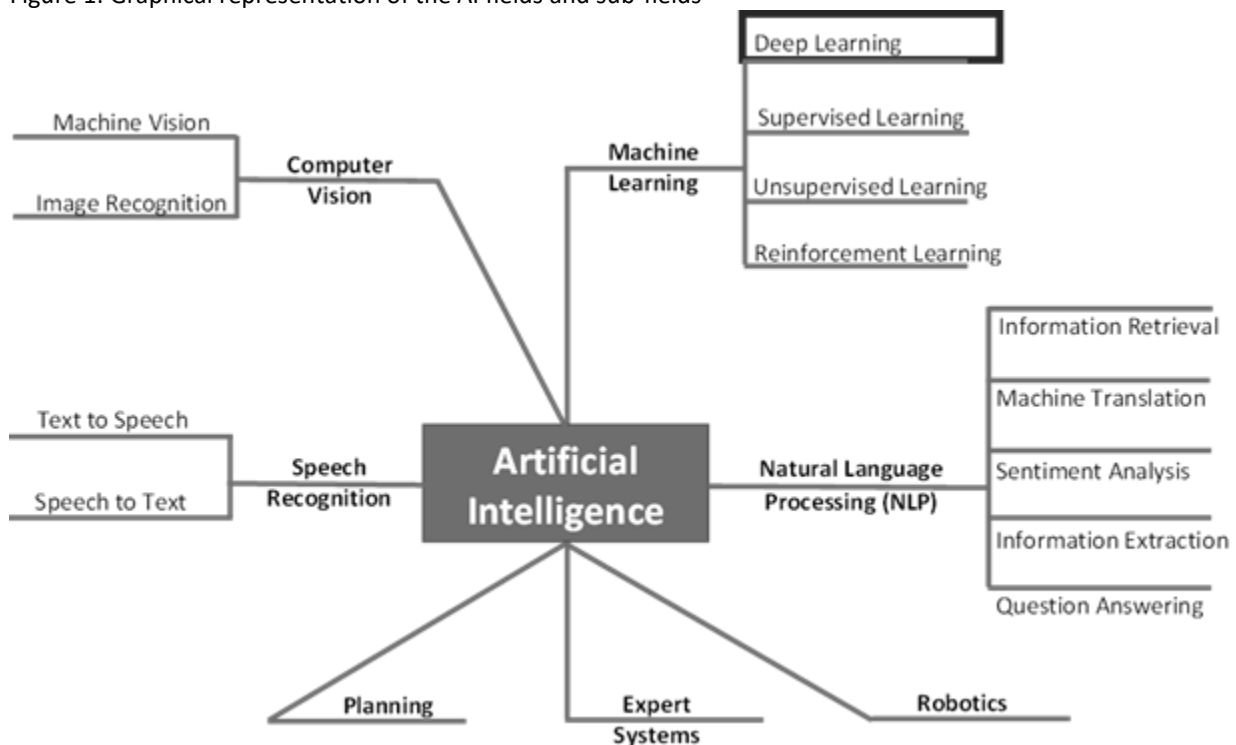
Despite the fact that there is a consensus regarding the subject of artificial intelligence research and a number of definitions "refer to machines that behave like humans or are capable of actions that require intelligence" (Samoili et al., 2020), there is no single definition of what artificial intelligence actually is. Some authors make it simpler and put definitions of artificial intelligence into four big points (Kok et al., 2009): systems that think like humans; systems that act like humans; systems that think rationally; and systems that act rationally, whilst

others classify the domains of artificial intelligence into two segments (Samoili et al., 2020): Core (Reasoning, Planning, Learning, Communication and Perception) and Transversal (Integration and Interaction, Services and, Ethics and Philosophy). Bearing in mind the above considerations, we can conclude that artificial intelligence is "based on modern algorithms, supported by historical data, and forms artificial programs or systems capable of perception, cognition, decision making and implementation like humans" and it is about creating technologies "that uses cognition to understand information and solve problems" (China Institute for Science and Technology Policy at Tsinghua University, 2018; ETSI, 2018).

2. FIELDS AND SUB-FIELDS OF ARTIFICIAL INTELLIGENCE

Artificial intelligence is a broad branch of research and its application comes to the fore in many different fields, starting with machine learning and deep learning as a subset of machine learning, natural language processing, as well as the large number of areas that belong to the so-called cognitive artificial intelligence such as: speech recognition, expert systems, planning, robotics, vision etc. Figure 1 provides a graphical representation of the fields and sub-fields that are part of the concept of artificial intelligence.

Figure 1: Graphical representation of the AI fields and sub-fields



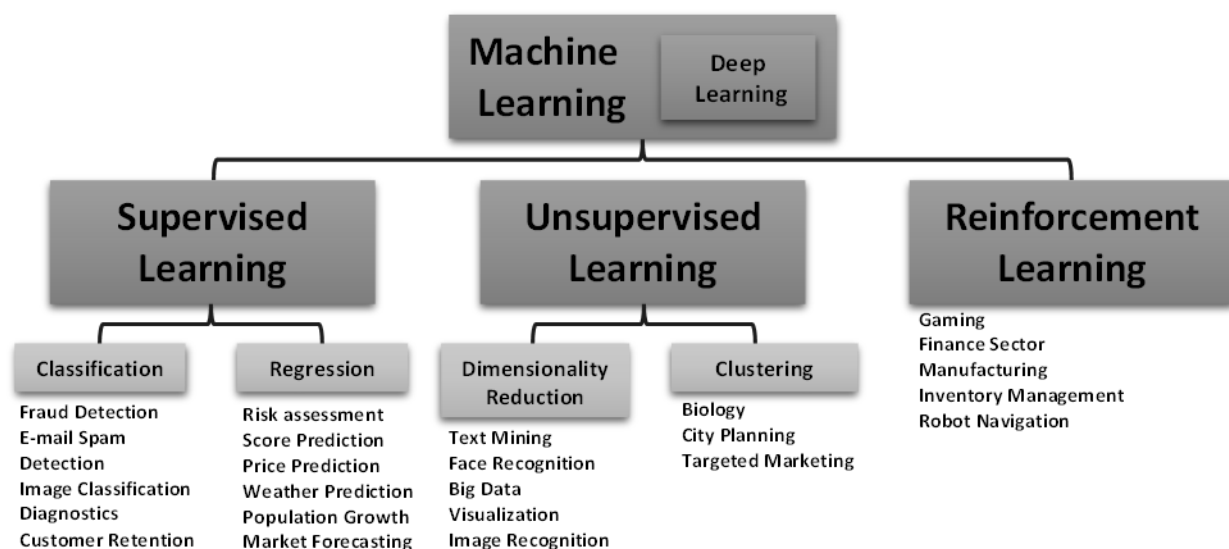
Source: Own representation

Machine learning is the oldest branch of artificial intelligence. Machine learning (ML) is "the ability of a system to automatically acquire, integrate, and develop knowledge from large-scale data, and then expand the acquired knowledge autonomously by discovering new information, without being specifically programmed to do so" (Sen, 2021). In general, machine learning is divided into three main branches: supervised learning, unsupervised learning and reinforcement learning. Additionally, one of the most exploited branches of machine learning and artificial intelligence today is deep learning. "Supervised learning is based on training a data sample from data source with correct classification already assigned" (Sathya & Abraham, 2013). Supervised learning solves classification problems where algorithms are used to predict discrete categorical values belonging to two or more classes by identifying the input data as members of a certain class or group. This type of machine learning is used to identify identity fraud, detect whether an e-mail is spam, classify images, etc.; and solving regression problems when dataset contains output variable with real or continuous values, such as problems related to price prediction, risk assessment, weather forecast, life expectancy prediction, etc. "In **unsupervised learning**, no specific output is available for the data in the training set, and the goal of the ML algorithm is to extract useful information using solely the input values" (Glielmo et al., 2021). Namely, Unsupervised Learning uses unlabeled data and algorithms trying to identify the associated patterns without the output being known in advance, as is the case with supervised learning. Unsupervised

learning is used for problems when it is necessary to divide the data into clusters such as customer segmentation or creating a recommendation system, but also for reducing the dimensionality of the data such as the method of Principal Component Analysis. Reinforcement learning is a type of machine learning and refers to ways of improving performance through trial-and-error, using feedback from one's own actions and experience (Barto, 1997). Reinforcement learning, among other possibilities, is widely used in creating and playing computer games, as well as producing effective adaptive control systems in robots to learn from their own experience and their own behavior. Figure 2 provides a visualization of the types of machine learning as well as the major fields of their application.

Deep learning is a sub-field of machine learning that uses algorithms similar to the way biological neurons work, creating an artificial neural network and layers based on the functionality of the human brain. Deep learning is based on Deep neural networks and represents the evolution of artificial neural networks (ANNs) towards increasingly deep neural network architectures with improved learning capabilities (Janiesch et al., 2021). In general, there are various types of Deep neural networks among which: Multi-Layer Perceptrons (MLP) - a class of a feedforward artificial neural network composed of a series of fully connected layers; Convolutional neural networks (CNNs), which are commonly used in computer vision and image classification applications, detecting features and patterns within an image, enabling tasks, like object detection or recognition, etc.; Recurrent neural network (RNNs) - typically used in natural language and speech recognition applications as it leverages sequential or time series data. Long Short Term Memory Networks (LSTMs), which are a type of the so-called Recurrent Neural Network (RNN) that can learn and memorize long-term mutual dependencies. Since LSTMs retain information over time, they are useful for predictions using time series such as financial markets (Fischer & Krauss, 2017) and short-term traffic flow prediction. This means that technologies based on Deep learning are found in a large number of products and services such as digital assistants, voice-enabled TV remotes, credit card fraud detection as well as self-driving cars.

Figure 2: Types of Machine Learning and major fields of application



Source: Own representation

3. A GLIMPSE INTO THE DEPTH OF AI POSSIBILITIES IN MAJOR INDUSTRIES

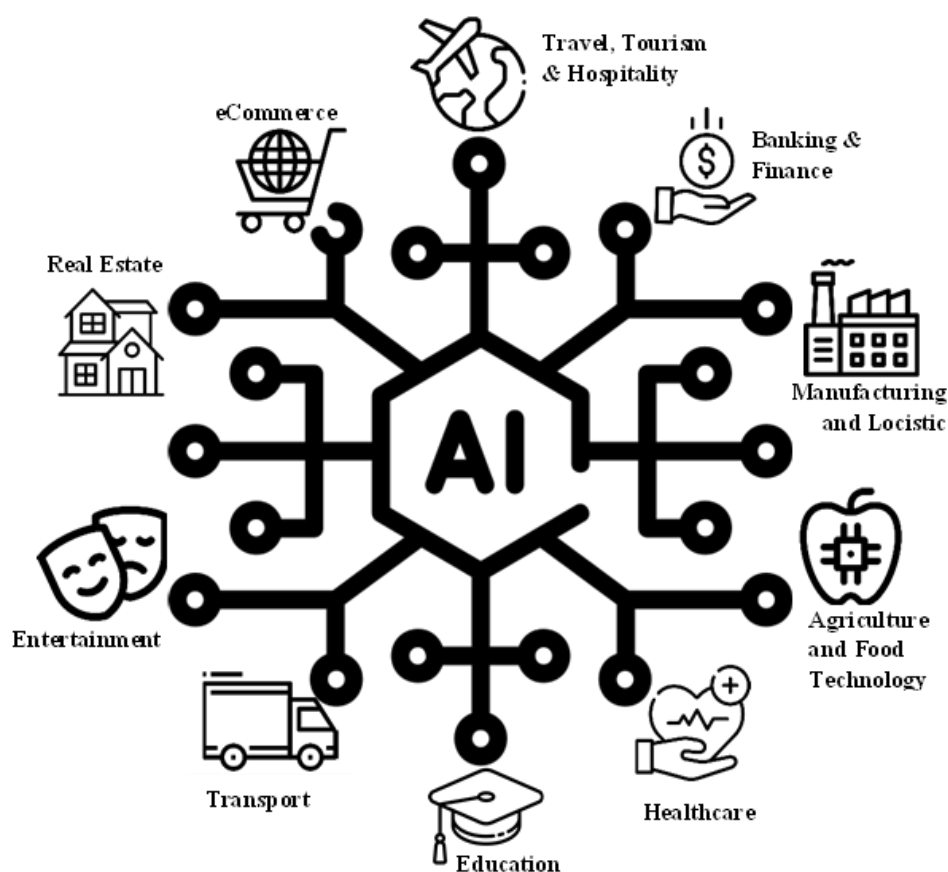
Artificial intelligence plays an active role in many scientific fields, but also in the implementation of many activities in people's daily lives and business operations in various sectors. A Gartner survey shows that, in 2019, 37 percent of organizations have implemented artificial intelligence in some form. According to Statista "The global artificial intelligence (AI) software market is forecast to grow rapidly in the coming years, reaching around 126 billion U.S. dollars by 2025" (Thormundsson, 2022). These statistics and predictions not only confirm the importance of artificial intelligence today, but also promise a bright future in terms of its development in a number of sectors. Taking all this into account, the rest of the paper will be devoted to

analyzing the possibilities of using artificial intelligence in various sectors. Figure 3 presents a visualization of AI applications in major industries.

AI in ecommerce. The use of artificial intelligence helps ecommerce companies to improve customer satisfaction and strengthen mutual interactions, but also to automate communication and increase the number of sales. Namely, every time we open a social network, search the Internet or get a recommendation for purchases on the famous e-commerce sites, some form of artificial intelligence is already lurking in the background. Examples of AI possibilities in electronic commerce are personalization (Recommendation Systems, Improved Search Algorithms), Improved Customer Services (Chatbots, Customer Feedback System), Analytics and Forecasting, Supply Chain Optimization, Marketing and Sales, CRM, ERP and many others (Soni, 2020; Panigrahi & Karuna, 2021).

AI in the Travel, Tourism & Hospitality Industry. Artificial intelligence in the Travel and Hospitality industry can greatly improve the experience of end users or guests and offer opportunities for dynamic pricing of services. Moreover, AI enables personalized services, analysis of user reviews and virtual automated assistance. In general, five major types of AI applications have been identified in hospitality and tourism industry, that is: (1) search/booking engines, (2) virtual agents/chatbots, (3) robots and autonomous vehicles, (4) kiosks/self-service screens and (5) AR/VR devices (Huang et al., 2021).

Figure 3: Application of Artificial Intelligence technologies across major industries



Source: Own representation

AI in Banking and Finance. Artificial Intelligence has truly revolutionized the way customers and financial institutions access and manage their finances. Artificial intelligence and machine learning in finance includes a number of different technologies from chatbot assistants to fraud detection and task automation. In the financial sector, "AI is currently used in data mining, voice recognition, pattern recognition, market analysis, investment strategies and in IT systems development to reduce errors and efficiently adapt regulatory and infrastructural changes" (Agarwal, 2019).

AI in Agriculture and Food Technology. Computer vision and artificial intelligence in the field of agriculture and food industry can be applied in a number of different segments starting from food processing, farm production, plant data analysis, smart irrigation, smart pest identification, smart herbicide spraying, etc. (Kakani et al., 2020). Today, many studies confirm that AI algorithms can be applied in various clusters of the agricultural supply chain and there is a growing trend in the adoption of these technologies to improve the food industry (Ben Ayed & Hanana, 2021).

AI in Entertainment. "AI applications in television broadcasting like content personalization, targeted ads, video recognition, voice assistance with search and playback, enhanced translation and closed captioning, video compression, and optimization" (Chan et al., 2022) have already become a reality today. Streaming platforms such as Netflix and Amazon Prime; Social media platforms such as Facebook, Instagram, Snapchat, and Pinterest; algorithmic journalism such as Forbes' Bertie, The Washington Post's Heliograf, and Bloomberg's Cyborg; Music streaming companies such as Spotify and Apple Music; Virtual Reality and Augmented Reality games are just a segment, among others, of the possibilities for applying AI capabilities in Entertainment.

AI in Healthcare. Machine learning is improving diagnostics, predicting outcomes, and encourage the creation of the so-called personalized care. AI offers opportunities for using intelligent systems that are capable of detecting risk of cancers but also identifying drug sensitivity and predicting which treatment protocols are likely to succeed on a patient based on the patient's characteristics (Lee et al., 2018). As technologies develop, new and improved treatments and diagnoses will save more lives and cure more diseases (Panesar, 2019).

AI in Manufacturing and Logistics. AI finds great application in manufacturing starting from Defect Detection, Quality Assurance & Inspection of a Manufactured Product with Computer Vision, Assembly Line Integration and Optimization, Creating generative design algorithms, Reading text and barcodes, Inventory Management and Warehouse Automation, Predictive Maintenance to improve safety and lowers costs, etc. Today, robots developed with AI algorithms can perform various operations and handle high volume repetitive and risk tasks that require a human workforce. Additionally, machine learning can be used for demand forecasting to improve supply chain efficiency and predict buying behavior.

AI in Transportation. "Artificial intelligence is changing the transport sector. From helping cars, trains, ships and airplanes to function autonomously, to making traffic flows smoother, it is already applied in numerous transport fields" (Maria, 2019). AI traffic management, Delay predictions with AI and computer vision, Fleet Integration, Drone Taxis are just some of the conveniences provided by AI.

AI in Real Estate. AI is transforming the real estate industry in many ways. Enhancing real estate marketing, prediction of market-competitive property value, personalized customer experience and property recommendation based on customer preferences, transforming the home search process, creating virtual tours are just some of the possibilities where AI can be applied in real estate.

AI in Education. Although many experts believe that the physical presence of teachers is indispensable, AI heralds major changes in both the teaching profession and traditional educational practices, but also has a significant impact on the learning habits. Personalization, i.e. adjusting learning based on specific needs of a particular student, tutoring and support outside the classroom, creating smart content and virtual learning environment represent only a small fraction of possibilities that AI provides for Education.

4. CONCLUSIONS

Undoubtedly, artificial intelligence has brought many benefits to both people and businesses, but it is fair to say that AI is not without serious drawbacks. Namely, artificial intelligence is completely dependent on the people who develop the technology. Given such dependency and bias, there are so many risks related to the actual use of AI technologies. Some of the risks are existential in nature, but others are closely related to certain ethical and moral norms. Jobs losses driven by automation, invasion of people's privacy, deepfakes, algorithmic bias caused by bad data, socioeconomic inequality, market volatility, automation of weapons that can be used to destroy property or people are just a few of the disadvantages of artificial intelligence if used inappropriately. That's why, although it is considered an extremely useful tool, it is quite important for governments, businesses and the public in general to be aware of what could happen if AI is used indiscriminately or without a diligent human oversight. For this reason, one of the most prominent scientists of modern times, Stephen Hawking, said: "AI is likely to be either the best or worst thing to happen to humanity". It depends on all of us if it will be used to make a better society and future or applied for a negative purpose and destruction of the human species.

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Regimes In Economic Growth In Balkan Countries

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Abstract: The most usual concept of economic growth starts with the assumption of linear trend in the data series, mainly based on the “Solow” model growth pattern, characterized by linear trend in the data series. However, when big shocks happen such as pandemic, war or conflict, they seriously impact the growth patterns in the countries, causing big “tectonic” changes in growth processes in the countries. The impact is actually result of the tectonic movements in the main growth determinants such as physical capital, human capital or total factor productivity. This impact and its effects has been especially relevant in the case of Balkan countries, where dissolution of the former state, but also the consequent changes caused shifts in growth patterns. In this paper they are defined as growth regimes with specific changes in determinants for each regime. The main goal of this paper is to examine the determinants of GDP growth rate that diverts the growth pattern from some linear trend in the case of selected Balkan Countries. They are good example to test for regime switches in growth patterns due to the big shocks and adjustment happening in the course of last three decades such as dissolution of former state, structural changes in transition, wars, conflicts, Global Financial Crisis, Covid-pandemic. The results from Markov Switching VAR model suggest that the real economic activity experience regime shifts, characterised with specific determinants movements within the regime. Hence, the conclusion is that the possible nonlinear notion of economic growth should be further explored especially in the case of countries where big shocks cause big shifts in growth patterns.

Key words: Economic Growth, Economic Theory, Markov Switching Modeling, Balkan Countries.

Introduction

Usually, growth analyses start with the assumption linearity implying only linear or trended movement in output growth and its relation with the explanatory variables in most of the studies of economic growth. This assumption when growth moves as variation around a single trend, which means that the variations are negligible and do not affect the linear trend in the data (Pritchett, 2000). However, in some cases, growth process can be better depicted by shifts in growth regimes due to its great instability over time. Even more so, this movement of growth process is caused by the switches in the main variables that determine the growth pattern, such as big shifts in capital, human capital and total factor productivity factor. This idea was supported by the findings of many scholars who called for specification of a nonlinear data generating process (Durlauf et al., 2004, Pritchett, 2000, Easterly et al., 2000). Still, there is no clear guidance with respect to the empirical specification of growth nonlinearities, or with respect to the variables that should be used to capture the big shocks.

Our approach is designed to fill this gap in the literature by introduction of a review of the literature of non-linear approach in the modified growth regression for Balkan countries. This group of countries represents a good candidate for non-linear modelling for several reasons: firstly, the output growth actually recorded was not genuinely linear. Additionally, the collapses recorded in the Balkan countries have a peculiar nature and causation and in most cases last much longer than the collapses characteristic for the recession phase of the business cycle in developed countries (Aquiar and Gopinath, 2004, Pritchett, 2000). Finally, Balkan countries experienced big shifts in the determinants of growth. Hence, Balkan countries are appropriate example to be used to test the regime switches since they have experienced big structural shocks especially in recent three decades.

1. Theoretical background

Jerzmanowski (2006) has built on Pritchett’s observations on growth regimes and he characterized various growth regimes and the countries’ transitions among them using a Markov-switching regression using cross-country data for 89 countries over a period of 1962-1994 on growth rates of output per worker from the Penn World Tables 6.1. He estimated four distinct regimes corresponding to four growth processes.

- A stable growth regime corresponds to the growth experience predominant among developed economies, with long-run average growth of about 2 per cent and low growth volatility.
- A stagnation regime is characterized by no growth on average and larger volatility of growth shocks. In this regime, periods of growth and decline occur but are not very persistent.

- He also identified a separate regime of one-time large shocks to growth, claiming that while these shocks tend on average to be negative reflecting economic crises, the dispersion is very large and positive shocks are possible. However, he found that these shocks have no persistence.
- Finally, he identifies a regime of fast, miracle-like growth with an average long-run growth of 6 per cent.

The specification he uses combines simple within-regime dynamics with transition probabilities, which depended on countries' quality of institutions. The quality of institutions is measured by the index of government anti-diversion policies¹ borrowed from Hall and Jones (1999). This index combines measures of rule of law, risk of expropriation, corruption, bureaucratic quality, and government repudiation of contracts. His results show that countries can switch among regimes of stable growth, "miracle" catch-up, stagnation and crisis with the transition probabilities determined by the quality of institutions. In his research, he offered the estimated transition probabilities to switch into certain regimes for four countries with various levels of quality of institutions, such as US, with the highest quality, Korea with high quality, Brazil intermediate quality and Nigeria with low quality of institutions. Better institutions appear to improve long-run growth by making episodes of fast growth more persistent. Low average growth rates in countries with weak institutions are a result of these countries spending more time in stagnation regimes rather than being incapable of fast growth at all. He argues that weak institutions do not rule out growth take-offs but limit their sustainability. Although focused on the institutions' role in growth, Jerzmanovski's approach was crucial for the empirical strategy in this paper because it motivated the idea of growth regimes and switches, while at the same time suggesting the Markov Switching Modelling as an appropriate technique for identifying breaks in data series.

In addition, many other studies on the East Asian episodes of growth illustrated the importance of neoclassical transition dynamics. Young (1995) provides a careful analysis of the historical patterns of output growth, factor accumulation and productivity growth in the newly industrializing countries of East Asia: Hong Kong; Singapore; South Korea and Taiwan. He claims that the East Asian growth miracles, characterized by unprecedented growth in output and manufacturing sector exports, were fuelled more by growth in labour and capital than by rising total factor productivity as many authors had asserted before. More precisely, he argues that expanding investment rates (particularly investment in machinery) accompanied by rising labour force participation rates, intersectional transfers of labour and improved levels of education are the main factors behind the growth miracle occurrences. In his paper, he offered detailed descriptive analysis of the data on two aggregate inputs, capital and labour² and estimated their share in various sectors in the economies. Once he accounted for the dramatic rise in factor inputs, he arrived at the estimated total factor productivity growth rates for his case countries that are closely approximated by historical performance of many of OECD and Latin American economies. Hence, he concluded that the "neoclassical theory with its highlight on factors changes and its well-articulated quantitative framework, can explain most of the difference between the performance of the newly industrialized countries and that of post-war economies" (Young, 1995, p. 675).

As mentioned, many researchers have performed empirical tests for various factors that may have caused the variation of growth such as for example: De Melo et al. (1996 and 2001) Fidrmuc (2003), Havrylyshyn and Rooden, 2000, Fischer and Sahay (2000), Falcetti et al. (2002), Eschenbach and Hoekman (2006), Hamma et al., (2012) bringing forward several general conclusions.

The core variables that proved to be statistically significant in most of the studies are physical and human capital (Havrylyshyn et al., 1998). In most of the studies change in physical capital is proxied by the 'Investment annual growth rate' or the 'Share of Investment in GDP' (Iradian, 2007, Dragutinović-Mitrović and Ivančev, 2010, Mervar, 2002). In the case of developed countries studies this approximation holds because the depreciation rate in the physical capital equation is considered as constant and proved constant in the studies. However, in the case of Balkan countries, the depreciation rate was changing drastically in the course of transition especially at the beginning, which in turn suggests that the simple investment rate could not proxy the movements of the physical capital. This conceptual flaw is usually repeated in empirical studies. In addition, human capital is mostly measured by the secondary school enrolment, which again does not represent human

¹ In general, the anti-diversion policies in Hall and Jones' model (1999) are the policies that encourage productive activities such as the accumulation of skills or the development of new goods and production techniques in the society, and discourage predatory behavior such as rent-seeking, corruption, and theft.

² Young (1995) divided capital input in five categories: residential buildings, non-residential buildings, other durable structure, transport equipment and machinery; while labour is distinguished into seven categories on the basis on sex, age and education.

capital as an augmentation to labour as in developed countries growth analysis (Mervar, 2002, Arandarenko, 2007). This is because in the case of Balkan countries, the basis that is the labour quantity was the one that drastically changed rather than its augmentation or quality.

2. Problem of endogeneity in modeling instable economic growth

One important source of endogeneity relevant for the dynamic systems econometric modelling, in particular, is simultaneity. Simultaneity arises when one or more of the explanatory variables and the dependent variable mutually determine one another (Wooldridge, 2000). In fact, simultaneity is the situation when the one-way causal relationship between the independent and dependent variable is accompanied by a backward causal relationship i.e. the dependent variable affects the independent variable, creating a two-way causal connection(s) among the dependent and independent variable(s) in the model. This situation is particularly relevant in the context of time series analysis of causal processes. Simultaneity occurs in dynamic models and systems where the variables, dependant and independent, are interconnected.

The possibility of mutual causation between determinants of growth and the growth of GDP has been already recognized in the growth literature (Mirestean and Tsangarides, 2009, Durlauf et al., 2008). Many authors have stressed that alongside the main relation – from the growth determinants - physical and human capital- to GDP growth, there is also a backward relation; that is:

- GDP growth is a determinant of the flow of investments and hence the physical capital flow (Jorgenson, 1963, Lucas and Prescott, 1971, Hall and Jorgenson, 1971, De Long and Summers, 1991); and,
- GDP growth is a determinant of employment and human capital development (Lucas, 1988, Barro and Lee, 2000).

Conventional economic thought has already established the relation between the growth of the economy and the *physical capital changes* in the concept of the accelerator effect. According to this conception, businesses will be encouraged to make new investments increasing the physical capital stock, determined by - among other factors - the expected profit rate; which in turn depends on the growth of the economy (Jorgenson, 1963). Broadly, rising GDP (in an economic boom or prosperity) implies that businesses expect increasing sales, cash flow, more efficient use of the capacity and rising profits, which would encourage further investment in physical capital such as equipment and improved technology (Hall and Jorgenson, 1967). The opposite happens in the case of falling GDP when businesses are reluctant to invest as they expect falling sales and a worsened economic environment. As business confidence falls, the discouraged businesses may lead to negative growth of the economy through the further destimulation of consumer incomes and purchases resulting in negative multiplier effects (Lucas and Prescott, 1971). Although mainly related to business cycle movements and the business cycle concept, the feedback relationship between GDP growth and physical capital growth has general economic relevance, because it is part of the reasons behind deeper recessions (Hall, 1993, Kornai, 1994). Namely, Hall (1993) found that the falling investment played a part in deepening recession. Explaining the vicious circle that developed in the course of the recession in United States in 1990-91, Hall (1993, p.5) concluded:

Firms cut all forms of investment; again as they would if there had been some permanent adverse shock. As usual in a recession, firms cut production by more than their sales fell, making up the difference from inventories.

In similar vein, Kornai (1994, p.54) found that the investment fall not only resulted from the fall in economic activity, but also contributed to the whole recession, as “...the investment activity was completely paralyzed in certain periods of negative economic growth”.

The economic literature also documents the two-way relationship between GDP growth and changes in the labour market (employment growth and human capital development). Namely, economic growth is not only determined by the labour and human capital among other factors, as discussed by the endogenous growth theories (Lucas, 1988, Barro and Lee, 2000); but also economic growth causes changes in the employment and human capital in an economy (Hull, 2009, Satchi and Temple, 2006). Although it is not always clear how economic growth translates into labour market outcomes, in general, the literature suggests that positive economic growth exerts two main effects on labour markets: firstly, it stimulates job creation or employment increase (changes in the quantity of labour); and, moreover, it stimulates human capital development (changes

in the quality of labour)³. The first effect is usually measured by the employment intensity of economic growth that is the growth in employment resulting from the growth in output (Hull, 2009). High employment intensity indicates that growth in output leads to considerable job creation, while low estimates of employment intensity suggest little correlation between economic growth and employment. The latter case is usually referred to as a “jobless recovery”, which can happen due to a variety of situations (Glosser and Golden, 2005). Namely, in some cases, economic growth favours increase in labour utilization rather than increase the number of jobs. This is especially emphasized in the eve of recessions, when companies are more reluctant to hire new workers until they are convinced about the sustainability of a new economic recovery (Glosser and Golden, 2005). Finally, another possibility is that companies employ new technologies and high-skilled labour resulting in increased productivity instead of mass job creation. In the latter case, the effects are related to improving the labour quality that is human capital development instead of increase in employment (Hull, 2009). In the opposite case of negative economic growth, the relation between the economic decline and labour market outcomes is again confirmed; with prompt or lagged conversion of economic downturn into increase in unemployment and negative impact on human development (Maddison, 1987).

Although brief, the above discussions suggest that economic growth measured by the GDP growth affects the two main determinants of growth, thereby implying the problem of endogeneity in the empirical model. This is an important empirical problem that results in biased regression coefficients; hence, the results of the single equation regime switching regressions undertaken in the course of this research are not reported. Instead, in order to address the possible mutual determination of the dependent and independent variables, the Markov Switching Vector Autoregressive (MSVAR) model can be applied in modelling of GDP growth dynamics in the course of big shocks. The MSVAR system addresses the problem of endogeneity as it allows modelling a system whereby each potentially endogenous variable is regressed on lags of all other potentially endogenous variables subject to the switch. In addition, this methodology has several other advantages: it not only allows for the inclusion of variables that are endogenous in a statistical sense, but it also encompasses the dynamic relationships among the variables and, also, the dynamic evolution of the growth process we are interested in. All of these - modelling the dynamics of growth as switching regimes and incorporating endogeneity - are issues of particular relevance to growth analyses that have been rarely considered jointly and, to our knowledge, have never been considered jointly in studies of growth, especially in the case of big shocks. Hence, the following analysis attempts to fill this gap in the growth literature.

The following approach is designed to fill this gap in the literature by introduction of a non-linear approach in the modified growth regression for Balkan countries.

3. The modeling procedure

The merger of Markov switching models with the empirical regression seems a reasonable next step in the model construction. As a result, the main formula to be estimated gets the following form:

$$\text{Equation 1} \quad \left(\frac{\Delta Y}{Y}\right)_t = \alpha_0(s_t) + \beta_1(s_t)\left(\frac{\Delta K}{K}\right)_t + \beta_2(s_t)\left(\frac{\Delta L}{L}\right)_t + u_t,$$

$$u_t \sim N(0, \sigma(s_t)^2)$$

whereby, t – is the time subscript, $\frac{\Delta Y}{Y}$ is the GDP growth rate, $\frac{\Delta K}{K}$ is the fixed physical capital growth rate,

$\frac{\Delta L}{L}$ is the growth in employment, β_1 and β_2 are the coefficients on the variables (dependant on s_t) and u_t

is the error term dependant on s_t . The constant term α_0 captures technological progress which is a sufficiently broad concept to include the effects of shocks to human capital $\frac{\Delta A}{A}$ and is also dependant on the specific

³ Indeed the impact and the effects of the interrelations depend on many factors studied in the literature, such as: the level of development of the country, the type of growth, the level of urbanization of the country, the labour market characteristics such as its sectorial structure, the share of informal sector, labour income and so on (Satchi and Temple, 2006).

regime (s_t). The term (s_t) designates the specific regime in which the system exists. The equation relates the output growth in each regime with the growth rates of capital, labour and technical change specific for a certain regime.

This approach identifies the regime classification in the growth process in each country, based on the information on the output changes ΔY (GDP), and on the information on the main determinants of output growth. This fusion should shed some new light on the contributions of various ingredients of growth in the different identified phases of transition or different regimes in the countries under analysis. As mentioned, one additional advantage of this framework is the fact that it enables the constant term of the “Solow residual” to be interpreted differently, depending on the conditions in the real economy. The authors from the endogenous growth strand of the literature give additional theoretical content to the Solow residual, arguing that it reflects not just technology but resource endowments, climate, institutions, social capital, macroeconomic policy and so on and hence it may differ across countries (Mankiw et al. 1992, Barro, 1996a, Barro, 1996b). Due to all the different conditions, the various countries use their existing resources with diverse degree of efficiency. In addition, countries’ capacity for developing or adopting new technology differs greatly depending on the institutional arrangements and the organization of the society (Abramovitz and David, 1994). Empirically, the extended interpretation of the Solow residual offers the appealing possibility of negative changes in the Solow residual. Namely, even in the neoclassical context of freely available technology, the possible technological regress in one country instead of progress can be attributed not only to the developments in the technological sphere but also to the developments in the human and social capital, such as inadequate education and skills, undeveloped institutions, legal and regulatory barriers and macroeconomic instability (Parente and Prescott, 1994, Howitt and Mayer-Foulkes, 2002, Fischer, 1993).

As mentioned above there is some potential endogeneity of the variables used in Equation 1. The endogeneity stems from the interrelation of the determinants within the system and needs to be taken into account in the empirical modelling. In order to resolve endogeneity in the MS regression, Krolzig (1998) developed the MS methods in the context of vector auto-regressions (MS-VAR)(Krolzig, 1998; Krolzig and Toro, 2001). These are standard VAR models, whereby some or all of the interrelated parameters are allowed to switch when the regime changes. The most general form of the MS-VAR process is the following:

$$\text{Equation 2} \quad y_t = \alpha(s_t) + \sum_{i=1}^p \chi_i(s_t) y_{t-i} + u_t;$$

Where $y_t = (y_{1t}, \dots, y_{nt})$ is an n -dimensional transposed vector, α is the vector of intercepts, $\chi_1, \dots, \chi_p$ are the matrices with the autoregressive parameters and u_t is the white noise vector process ($u_t | s_t \approx NID(0, \Sigma(s_t))$) and all can be dependent on the switching variable s_t . In general, MS-VARs appear in a variety of specifications depending on which variables are allowed to switch. By allowing the potential determinants of the switch to interact in a dynamic framework, the issue of endogeneity as explained above arising from the potential simultaneity of the relationship between GDP growth and the accumulation of both capital and labour is addressed.

In our research, the empirical model will be defined in a reduced form vector-autoregressive model:

$$\text{Equation 3} \quad y_t = \alpha(s_t) + \sum_{i=0}^p \beta_i(s_t) x_{t-i} + \sum_{i=1}^p \chi_i(s_t) y_{t-i} + u_t;$$

where y_t is our three-dimensional vector comprised of: GDP annual growth rate, $(\frac{\Delta Y}{Y})_t$; gross fixed capital annual growth rate proxied by the annual electricity consumption growth rate $\frac{\Delta K}{K}$; and employment growth rate, $\frac{\Delta L}{L}$; x_t is a vector of exogenous variables which could enter contemporaneously or with a lag, but is not mandatory; α is the vector of intercepts, $\chi_1, \dots, \chi_p$ and $\beta_0, \dots, \beta_p$ are the matrices containing the autoregressive parameters and u_t is the white noise vector process ($u_t | s_t \approx NID(0, \Sigma(s_t))$).

In this research data on GDP growth rates, annual electricity consumption growth rate and employment growth rate for Balkan countries are taken from the World Development Indicators.

4. Interpretation of the results

This aprt will condense the results of the empirical analysis into one Table, in order to extract additional information and to draw some general conclusions.

The table reports the estimated coefficients, that is the results for the DY vector, i.e. annual GDP growth rate, where

- the constant term captures the so-called Solow residual or change in the GDP growth rate due to systematic changes not captured in the model variables;
- DY_1 captures the impact of the past GDP growth rate on the contemporary GDP growth rate;
- DE_1 captures the impact of the past employment growth rate on the contemporary GDP growth rate;
- DC_1 captures the impact of the past physical capital growth rate on the contemporary GDP growth rate; and,
- SE measures the standard error, which in this case is the indicator for measuring the volatility of the GDP growth rate variable.

The regime switches and changes that happened in the GDP growth rates, are of primary interest, hence the focus will be on these results. The results on DE and DC show the dynamics and regime switches for the Employment and Physical capital growth rates, but these are not our primary interest.

Table 1 The results from the MSM analysis DY (GDP annual growth, in per cent)

Country	Constant 1 (1)	Constant 2 (2)	Constant 3 (3)	DY_1 (4)	DC_1 (5)	DE_1 (6)	SE (7)
Bosnia and Hercegovina††	-1.62***	2.59*		-0.44	0.73**	-0.81**	1.29
Serbia	-11.01*	3.64**	6.87	-0.31	0.80**	-0.16	2.84
North Macedonia	-3.98	1.03**	3.98**	0.42	-0.05	-0.01	1.10
Croatia†	-5.79*	4.20	5.98**	0.64*	0.97*	-0.93***	2.95
Albania	-10.92	5.85*	10.33		0.09	-1.35***	4.14

Note: *-marks 1% level of significance, **-marks 5% level of significance and ***-marks 10% level of significance.

† - part of EU now, however, shared similar past to ex- Yu countries.

†† - for BiH the data series are shorter, hence only two regimes could be identified.

As the table shows, the MVAR analysis confirms the idea of the non-linear growth hypothesis and reveals that Balkan countries for which the model could be estimated have experienced various regime switches. This estimation procedure reveals some of the features of each regime in each group enriched by the additional information on the added variables – physical capital and labour and Total factor productivity term.

The technical progress changes (column 1) in sign and sizes are similar to the mean GDP growth rates in the countries, suggesting negative changes and ‘technical regress’ in the first regime and positive changes or ‘technical progress’ in the next two regimes, with the third regime experiencing the highest positive changes.

Namely, the once-lagged GDP growth rate (DY_1) is statistically insignificant, which is an unexpected outcome as usually the GDP growth processes is described as an autoregressive processes. However in the case of Balkan countries where big switches in GDP growth rates from one to another in successive year were experienced, this result is perhaps not surprising.

The once-lagged Employment growth rate (DE_1) has a negative and statistically significant impact, according to the results. This is rather counterintuitive, since it implies that the decrease in employment should lead to increase in GDP growth rates. However, there are two possible lines of argument peculiar to Balkan countries that may explain this atypical effect:

Firstly, in the course of transition, the actual increase of economic activity was achieved parallel with the decreasing of the employed labour force as the actual data of many countries on GDP growth and employment

growth shows. In fact, in early transition, as a result of the over employment specific for socialism, the reduced employment did not reduce the output, because reduced employment was part of a process of dramatic structural change, hence of reallocation of resources that – even at a constant technical level – enabled productivity growth sufficiently large to increase output. In addition, the reduced employment reduced the wages' bills for the firms, releasing extra funds for raise in the production. Both lines of argumentation fit better the early rather than the later transition, which would suggest that in the estimated coefficient dominates the effect of the early transition. In fact, the estimated coefficient aggregates different effects as it was not allowed for it to switch across various regimes⁴; however in this case it is capturing mostly the effects of the early transition rather than the later. Namely, in this case, our employment growth variable may be acting as a proxy for productivity-enhancing structural change. Unfortunately, data limitations, and the corresponding limitations on the richness of our model, preclude further investigation of this possibility.

The second explanation is empirical but is related to the one given above, i.e. to the economic explanation. Namely, the whole interpretation of the results needs to be observed in a system in which everything depends on everything, since everything is modelled in a small VAR system. Further investigation would lead to impulse response analysis that cannot currently be performed in the context of our MS-VAR model. In addition, the employment and GDP dynamics are not the focus of our research.

Finally, the once-lagged Gross Fixed Capital growth rate (DC_1) impact on the current GDP growth rate is positive and statistically significant. Every increase in physical capital by 1 percentage points in the past year will result in increase in the contemporary GDP growth rate by 0.73 percentage points in BiH, 0.80 percentage points in Serbia and 0.98 percentage points in Croatia. This effect is in accordance with the literature findings.

Conclusion

One general conclusion that can be made with great certainty is that the MVAR analysis does confirm the notion of non-linearity of GDP growth in the course of transition. In addition, it confirms the existence of three regimes and they can be identified when other variables are included in the analysis.

Thirdly, the size of the estimated constant coefficients in the multivariate analysis reveals a huge impact of the 'technical progress' or Solow residual on GDP growth rates in the various regimes, with it being the most prominent and positive in the third regime. Again, this is confirmed by the growth theory that suggest that move into higher regime will come as a result of the moving of the country among various balanced growth patterns different by their specific level of technology.

Finally, as mentioned, the results of the multivariate MSVAR analysis does not point directly to particular policies, but it does have profound implications for analysis and, hence, indirect implications for policy. Namely, the peculiar breaks of growth in the course of growth in Balkan countries should be considered both - theoretically and empirically - at the early stages of future research and corresponding policy formulation, as they might drastically change the approach and, hence, the results and conclusions.

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⁴ Switching lagged variables would burden additionally the otherwise overburdened models.

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Two stage duopoly model with investment

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Abstract: Aim of this paper is description and numerical analysis of two stage Cournot-Stackelberg model. The duopoly game is divided into two stage – i. game in new technology investment strategy space and assumption of Stackelberg Leader-Follower situation where the leader invest in new technology as first and has benefits from the investment. Additionally, some benefits splits also to a follower. ii. Game in optimal output space, where the investment made in previous step is well known. In this game we assume a Cournot strategy for both firms on the market. In a whole paper we assume companies and production differentiation in a field of different marginal cost and production differentiation coefficient. On the end of the paper we made also a numerical example of presented model and found equilibrium points.

Keywords: duopoly model, two stage game, differentiated production, differentiated companies

1. INTRODUCTION

The microeconomic literature knows two basic, extreme, market structures: a perfectly competitive market and a monopoly. In the case of a perfectly competitive market, the number of companies is very large, which results in a small market share for each company. That is why companies in a perfectly competitive market consider the market price to be fixed and independent of their decisions, which they make regarding the size of their offer on the market (quantity of goods supplied by them)¹. In the case of a monopoly market, there is one company on the market (some authors state that the market is dominated by one company²), the supply of which significantly affects the market price, which the monopoly uses to determine a so-called monopoly price by deliberately reducing supply in the industry (Puu, 2005). It follows that a monopoly does not take the market price as a fixed price, but it is aware of its impact on the price and therefore seeks to maximize its profit by determining not only the volume of production offered but also the price. Pekár (1999) states that a monopoly, despite its position on the market, cannot arbitrarily determine the volume of production and the price. It is only able to sell the quantity it decides to produce at a price that the market is able to accept.

A duopolistic and subsequently oligopolistic market can be considered as the first step in the transition from a monopoly market to a perfectly competitive market. The analytical expression of a duopoly (or oligopoly) does not represent a simplification of the problem of a monopoly or a perfectly competitive market; on the contrary, it is much more complicated than any of the above market extremes. This complexity stems from the fact that a company operating in an oligopolistic market must take into account the behaviour of all consumers in the market through the market demand curve in its decision-making but must also take into account the behaviour of its competitors, including their reactions to its decisions.

The foundations of oligopoly theory were laid by Augustin Cournot in 1838 in his work *Recherches sur les Principes Mathématiques de la Théorie des Richesses* (Research of Mathematical Principles of Wealth Theory) (Cournot, A. A., 1838), where the author formulated the problem of oligopolies and created an extensive analysis of the formulated problem. Later, this work was used to formulate various mathematical models, as well as to create other economic debates of various authors.

We would like to extend the basic Cournot duopoly model with investment in new technology, production and companies differentiation. With these extensions we would like to go closer to the real market situation.

¹ A more detailed definition of a perfectly competitive market is given, for example, by Fendek (2008), Goga (2001) or Besanko (2007) and others.

² For example Sushko (2002).

According Long and Huang (2020) Technological Innovation is the sustained driving force for the survival and development of firms, and R&D activities are important carriers of technological innovation, while they are also crucial means for firms to acquire core competitiveness. According our opinion, investment in new technologies will be much discussed in near future because of necessities of energy consumption reduction and waist and pollution minimization in production. R&D spillovers inevitably occur in the R&D activities with both positive and negative effects (D'Aspremont & Jacquemin, 1988), (Tesoriere, 2006), (Bischi & Lamantia, 2012). From mentioned works, R&D spillovers can reduce the willingness of the firms for invest in research because of other firms "hitchhike", and it could also reduce all firms' production cost due to the positive externalities. In our work we apply one way R&D spillovers as D'Aspremont (1988) and Tesoriere (2006), R&D spillovers only flow from enterprises with stronger R&D capabilities to weaker ones in the R&D process.

for our model we use inverse demand function as Singh and Vives (1984) and later Häckner (2000). These authors state that it is possible to divide consumers on the basis of their behavior into groups, while it is possible to create so-called representative agent (consumer) who buys the products of the analyzed oligopolists. We can write down the utility function of such a consumer

$$U(q_i, I) = \sum_{i=1}^n \alpha_i q_i - \frac{1}{2} \left(\sum_{i=1}^n q_i^2 + 2\gamma \sum_{i=1}^n \sum_{j>i}^n q_i q_j \right) - I \quad (1)$$

where

q_i – quantity of purchased goods

$$I = \sum_{i=1}^n p_i q_i$$

p_i – price k - th product

α_i – coefficient measuring the quality of the i -th consumed product

γ – coefficient measuring the degree of product differentiation

In this work we consider an oligopoly model for 3 companies whose inverse demand (price - sales) functions are linear in the following form:

$$p_k = \alpha_k - q_k - \gamma \sum_{l \neq k}^3 q_l, \quad k = 1, 2 \quad (2)$$

where

p_k – the production price of the k -th company

q_k – the production volume of the k -th company

α_k – coefficient measuring the quality of production of the k -th company

In this paper we consider a Stackelberg-Cournot model which includes the Stackelberg R&D phase with one-way spillovers and the Cournot production phase. We also consider a quadratic investment expenditure function as D'Aspremont and Jacquemin (1988), different marginal costs of companies before and after investment and production differentiation as we described in inverse demand function before. Two stage duopoly model with investment expenditure without spillovers could be found in Two Stage Stackelberg Duopoly Game with New Technology Investment (Grisáková, Kufelová, & Štetka, 2022)

2. THE MODEL

In this section we describe the basic idea of our model, our extension of basic Cournot model with production differentiation, company's differentiation via their different marginal cost and in new technology investment and our base assumptions.

As we mentioned, in our model we use an inverse demand function (2) for two companies. In this function α_k is the coefficient measuring the quality of the k -th consumed product, γ is the coefficient measuring the degree of product differentiation. In the model we have 2 assumptions previously made by Matsumoto and Szidarovsky (2010):

Assumption 1:

$|\gamma| < 1$ the products of companies in the oligopoly are not perfect substitutes or complements $\gamma \neq 0$
the production of companies is not independent of each other

If we consider $\gamma = 1$, possibly $\gamma = -1$, it would mean that the products of companies are perfect substitutes, complements

Assumption 2:

Firms have linear cost functions with a zero-level constant, which means that their marginal costs (MC_k , $k = 1, 2$) are constant for any volume of production. In order to exclude negative production in the model, we assume that $MC_k > 0$ and $\alpha_k - MC_k > 0$, $k = 1, 2$. The second inequality represents the net quality of the company's production. This assumption holds for companies before their innovation process.

2.1. Duopoly Stackelberg-Cournot two stage game

In this paper the duopoly Stackelberg-Cournot game is divided into two stage similarly as in (Bischi & Lamantia, 2012) (D'Aspremont & Jacquemin, 1988) (Grisáková, Kufelová, & Štetka, 2022) (Long & Huang, 2020) and other authors. Stage 1 we can call Stackelberg innovation phase where the strategy space is the choice of investment in new technology. Two company carry out the noncooperative game around new investment for higher revenues in the future. In this game we assume, that the first company is a leader and he made his investment as first. The follower determines his input after observing the opponent's decision. Furthermore, we assume that R&D spillovers onl flow from the R&D leader to the R&D follower. In Stackelberg R&D phase, it generates autonomous cost reductions under decreasing returns to R&D investments, that is, firms should define the optimal R&D level to balance the innovation cost and the marginal cost reduction (Long & Huang, 2020). Stage 2 we can call Cournot production phase where the strategy space is the choice of output and in this stage the choices about investments are common knowledge. In 2nd stage the companies made their decision simultaneously.

Let's consider investment efforts in new technology of company k , ($k = 1, 2$) denotes by x_k . Then the effective marginal cost of firm both firms can be represented as

$$\begin{aligned} MC_1(x_1) &= mc_1 - \beta_1 x_1 \\ MC_2(x_1, x_2) &= mc_2 - \beta_2(x_1 + \theta x_2) \end{aligned} \quad (3)$$

Where mc_k represent the marginal cost of company k , ($k = 1, 2$) before investment in new technology and $\alpha_k > mc_k > 0$, $k = 1, 2$. We consider quadratic investment function of company k , ($k = 1, 2$) expressed as $I(x_i) = \sigma x_k^2 / 2$, $k = 1, 2$, where δ is a parameter about the technical innovation cost of firm k . Due to R&D's one-way flow, the cost reduction accruing to the firm 1 just depends on his own investments x_1 (this assumption is the same as in Tesoriere (2006)) Marginal cost for R&D follower MC_2 is a function of leader's and follower's investment costs. β_k , $k = 1, 2$ is the technological innovation efficiency (TIE) of firm k and θ is the coefficient of R&D spillovers, which implies that some benefits of leader's R&D flow to follower without payment. The external effect of the leader's R&D is to lower the follower's marginal production cost. $\theta \in [0; 1]$, $\theta = 0$ means the technological innovation of the leader is not freely obtained by the follower, while $\theta = 1$ means fully obtained without any payment (Long & Huang, 2020).

Now we can construct the profit function of each firm

$$\pi_1(q_1, q_2) = [\alpha_1 - q_1 - \gamma q_2 - (mc_1 - \beta_1 x_1)]q_1 - \delta x_1^2 / 2 \rightarrow \max \quad (4)$$

$$\pi_2(q_1, q_2) = [\alpha_2 - q_2 - \gamma q_1 - (mc_2 - \beta_2 x_1 - \beta_2 \theta x_2)]q_2 - \delta x_2^2 / 2 \rightarrow \max \quad (5)$$

The marginal profit of each firm at point (q_1, q_2) are given by

$$\begin{aligned} \frac{\partial \pi_1}{\partial q_1} &= \alpha_1 - 2q_1 - \gamma q_2 - (mc_1 - \beta_1 x_1) \\ \frac{\partial \pi_2}{\partial q_2} &= \alpha_2 - 2q_2 - \gamma q_1 - (mc_2 - \beta_2 x_1 - \beta_2 \theta x_2) \end{aligned} \quad (6)$$

In order to maximize each firm's profits, we set $\frac{\partial \pi_1}{\partial q_1} = 0$ and $\frac{\partial \pi_2}{\partial q_2} = 0$. If we express from first derivative q_1 and from the second one q_2 , we get reaction function of duopolies.

$$\begin{aligned} q_1(q_2) &= \frac{\alpha_1 - mc_1 - \gamma q_2 + \beta_1 x_1}{2} \\ q_2(q_1) &= \frac{\alpha_2 - mc_2 - \gamma q_1 + \beta_2(x_2 + \theta x_1)}{2} \end{aligned} \quad (7)$$

After solving equations (7) or $\frac{\partial \pi_k}{\partial q_k} = 0, k = 1, 2$ simultaneously for q_1 and q_2 we obtain Cournot outputs of firms in following form:

$$q_1^C = \frac{-2(\alpha_1 - mc_1) + \gamma(\alpha_2 - mc_2) - M_1x_1 + \gamma\beta_2x_2}{D} \quad (8)$$

$$q_2^C = \frac{\gamma(\alpha_1 - mc_1) - 2(\alpha_2 - mc_2) + (\gamma\beta_1 - 2\theta\beta_2)x_1 - 2\beta_2x_2}{D} \quad (9)$$

Where $D = (\gamma^2 - 4)$ and $M_1 = (\theta\gamma\beta_2 - 2\beta_1)$.

Now we have an optimal solution of Cournot game, that means for second stage of our game, where investment expenditures are known. Now we have to calculate the first stage of the game, that means we try to find Stackelberg equilibrium in the space (x_1, x_2) , when the first company is leader and the second one is follower.

First, we substitute equations (8), (9) into equation (5)

$$\begin{aligned} \pi_2(x_1, x_2) &= [\alpha_2 - q_2^C - \gamma q_1^C - (mc_2 - \beta_2x_1 - \beta_2\theta x_2)]q_2^C - \delta x_2^2/2 \rightarrow \max \\ \text{where} \\ q_1^C &= \frac{-2(\alpha_1 - mc_1) + \gamma(\alpha_2 - mc_2) + M_1x_1 + \gamma\beta_2x_2}{D} \\ q_2^C &= \frac{\gamma(\alpha_1 - mc_1) - 2(\alpha_2 - mc_2) + (\gamma\beta_1 - 2\theta\beta_2)x_1 - 2\beta_2x_2}{D} \end{aligned} \quad (10)$$

Then we calculate a derivative of $\pi_2(x_1, x_2)$ with respect to x_2 and set it to zero ($\frac{\partial \pi_2(x_1, x_2)}{\partial x_2} = 0$). Then the optimization problem of the follower has a unique solution as

$$x_2(x_1) = \frac{4\beta_2[(2\theta\beta_2 - \gamma\beta_1)x_1 - \gamma(\alpha_1 - mc_1) + 2(\alpha_2 - mc_2)]}{\delta D^2 - 8\beta_2^2} \quad (11)$$

Now we can put equations (8), (9) and (11) into profit maximization of first company (4), equal the partial derivative of π_1 with respect to x_1 to zero ($\frac{\partial \pi_1(x_1)}{\partial x_1} = 0$). Then the optimal action of the leader and follower in first stage of a game are

$$x_1^S = \frac{-4z_1(\alpha_1 - mc_1) + 2\gamma D \delta z_2(\alpha_2 - mc_2)}{D^4 \delta^3 - (A\beta_2^2 - 4\theta\gamma D^2 \beta_1 \beta_2 + 4D^2 \beta_1^2)2\delta^2 + (16\beta_2^4 + \theta\gamma D - 2D\beta_1 \beta_2^2)16\delta - 32\beta_1 \beta_2^4} \quad (12)$$

$$x_2^S = -\frac{4\beta_2[z_3(\alpha_1 - mc_1) + z_4(\alpha_2 - mc_2)]}{D^4 \delta^3 - (A\beta_2^2 - 4\theta\gamma D^2 \beta_1 \beta_2 + 4D^2 \beta_1^2)2\delta^2 + (16\beta_2^4 + \theta\gamma D - 2D\beta_1 \beta_2^2)16\delta - 32\beta_1 \beta_2^4} \quad (13)$$

Where

$$\begin{aligned} z_1 &= (M_1 D^2 \delta^2 + 2M_2 D \delta \beta_2^2 - 8\beta_1 \beta_2^4), \\ z_2 &= (M_1 D \delta - 4\beta_1 \beta_2^2), \\ z_3 &= \gamma \delta (8\beta_2^2 - D^2 \delta) + 2\theta \beta_2 (M_1 D \delta - 4\beta_1 \beta_2^2), \\ z_4 &= D \delta (D \delta - \beta_1 M_1) + 4\beta_2^2 (\beta_1^2 - 2\delta), \\ M_2 &= (\theta \gamma \beta_2 - 4\beta_1), \\ A &= (\theta^2 \gamma^6 + (\theta^2 - 1)8\gamma^4 - (\theta^2 - 4)16\gamma^2 - 128). \end{aligned}$$

As a last step we substitute solution (12) and (13) in to equations (7), (8) for finding an equilibrium solution in the Stackelberg-Cournot game. This general solution is quite difficult; therefore, we show it in next part of paper on numerical example. The analytical solution of this two-stage game is difficult for general conclusion and further analyzing. Therefore, in next section we show a numerical solution of presented two stage model.

3. Numerical solution

We already present the basic idea of two stage Stackelberg – Cournot duopoly game together with extensions offered by us. Oligopoly markets are well known in the practice. Almost each industry is an oligopoly market. In present world there are no pure perfect competitive market or monopoly. Therefore, it is very useful to expand “classic” oligopoly models presented by Cournot or Bertrand and throw them analyze the company’s decisions.

We present a two stage Stackelberg – Cournot duopoly game, where production of oligopolies is differentiated (but they are no perfect substitutes or complements), marginal cost of each company is different, that means, they have different production technologies. In addition, we assume, that these two firms would like to invest in new technology and after investment they expect cost reducing.

This paper deal with random parameter values, but we can find real application of our model. For example, as Grisáková and Štetka (2022) shows, the telecommunication industry could be an oligopoly market with differentiated production. In their model coefficient which measure the quality of production α_k is presented

with ARPU (Average Revenue Per User) of each mobile operator company, marginal costs are operating cost per one active SIM card of each companies. In this industry we can imagine for example investment in new 4G signal transmission. Some application with R&D investment we can find for example in the work of Zhou at all (2020), Long and Huang (2020) or earlier D'Aspremont and Acquemi (1988) and oter.

To provide some numerical evidence of presented model, we assume, following parameters values: coefficient measuring the quality of production of the companies $\alpha_1 = 15.8$; $\alpha_2 = 10.9$, degree of production differentiation $\gamma = 0.7$, fix marginal cost of companies before R&D investment $mc_1 = 0.166$; $mc_2 = 0.106$, technical innovation cost parameter $\delta = 0.4$, technological innovation efficiency coefficient $\beta_1 = 0.6$; $\beta_2 = 0.3$ and R&D spillovers coefficient $\theta = 0.2$. With these parameters duopolies maximize their profit:

$$\pi_1(q_1, q_2) = [15.634 - q_1 - 0.7q_2 + 0.6x_1]q_1 - 0.2x_1^2/2 \rightarrow \max$$

$$\pi_2(q_1, q_2) = [10.794 - 0.7q_1 - q_2 + 0.6x_1 + 0.3x_2]q_2 - 0.2x_2^2/2 \rightarrow \max$$

And their reaction functions are:

$$q_1(q_2) = 7.817 - 0.35q_2 + 0.3x_1$$

$$q_2(q_1) = 5.397 - 0.35q_1 + 0.03x_1 + 0.15x_2$$

Cournot outputs, result of the second stage of the game, as a function of investment expenditure are

$$q_1^C = 6.756 + 0.33x_1 - 0.0598x_2$$

$$q_2^C = 3.033 - 0.0855x_1 + 0.171x_2$$

Now let's play the leader-follower game, first sage, where first company is leader and second one is follower. Follower maximize following profit:

$$\pi_2(x_1, x_2) = 9.196 + 0.007x_1^2 - 0.518x_1 - 0.029x_1x_2 + 1.037x_2 - 0.171x_2^2 \rightarrow \max$$

The unique solution of optimization problem of the follower is

$$x_2(x_1) = 3.035 - 0.086x_1$$

The optimal action of the leader and follower with respect to investment expenditures is $[x_1; x_2] = [25.099; 0.888]$ and the optimal quantities offered by duopolies on the market is $[q_1; q_2] = [14.983; 1.039]$.

4. CONCLUSION

This paper deals a two stage Stackelberg-Cournot duopoly game with one-way spillovers. Two companies determine their R&D investment sequentially in the Stackelberg RD phase and make output decisions simultaneously in the Cournot production phase. The R&D investment before the Cournot production phase have been solved backward induction. For better real situation describing by the model, we assumed differentiated production of a duopoly and also that companies use different production technology represented by their different marginal cost before investment.

For our future research we would like to investigate, if our solution is stabile for different expectations of companies about future market situation and make comparison with investment two stage investment model without spillovers published earlier (Grisáková, Kufelová, & Štetka, 2022) and with model without investment opportunities in the field of stability and different expectations. Other way of our research could move in involving marketing variables in the model and influence consumer's decisions about one company preferring.

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Shaping Entrepreneurial Intentions: The Moderating Role Of Entrepreneurship Education

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Abstract: Since entrepreneurship is commonly considered as a solution to the unemployment problem, higher education in general and entrepreneurship education in particular encourage entrepreneurial activity among students and generate more graduates who are the future entrepreneurs. The present study aims to investigate the effect of entrepreneurship education programs on students' intentions to launch a new venture after completing their studies. An ex ante/ex post study with 145 first-year students was conducted in a four-year public university. The association between entrepreneurial intention and its antecedents was examined using regression analysis, and the effectiveness of the intervention was evaluated using a Paired Samples test. The intervention had no discernible effects, but the only meaningful relationship found was that with Personal Attraction. In general, the research findings suggests that entrepreneurship education programs develop the students' intention to be self-employed. Practically, the present research provides useful information and insights for those who create, execute and evaluate educational programs to increase students' entrepreneurial intention. Our results clearly imply that the involvement in entrepreneurship education can significantly affect students' subjective norms and PBC, supporting the idea that universities can promote entrepreneurial abilities and subjective norms through entrepreneurship education programs.

Keywords: Entrepreneurship Education Programs, Personal Attraction, Perceived Behavioral Control, Social Norms.

1. INTRODUCTION

Entrepreneurship education is an important demographic factor in the literature which consists of any pedagogical or process of education and develops entrepreneurial attitudes and skills (Silangen, 2016; Sahinidis et al., 2021). Westhead and Solesvik (2016) describe Entrepreneurship Education (EE) as the main driver of entrepreneurial performance. Existed literature reveals that entrepreneurial studies through different teaching methods and courses have important impacts on student's intentions and their perceived planned behavior to become entrepreneurs. Sultan et al (2016) showed that the entrepreneurial education has a positive effect on students' entrepreneurial intentions and suggest that universities and other business schools must offer entrepreneurial education courses in order to motivate people to bring new ideas and contribute in their society. The current research aims to investigate the relationship between Entrepreneurship Education Programs (EEPs) and Entrepreneurial Intention (EI) and its antecedents using an ex ante/ex post design and a sufficient sample, in order to overcome the shortcomings of the vast majority of the existing studies. The methodology used is based on Ajzen's (1991) Theory of Planned Behavior (TPB), allowing for the analysis of the relationships between EI and Personal Attraction (PA), EI and Perceived Social Norms (SN) and Perceived Behavioral Control (PBC). The Theory of Planned Behavior, is one of the most thoroughly tested and validated theories which and has produced generally accepted outcomes, explaining variances in EI within a range from 0.27 to 0.65 (Steinmetz, et al., 2016). Personal Attraction (PA) refers to the degree of accepting the idea to become an entrepreneur (Ozaralli et al., 2016). Social Norms (SN) refer to the extent to which the social surroundings of an individual are supportive to his/her potential entrepreneurial initiatives. There is a shared view among researchers that these norms are directly associated with entrepreneurial intention (Meek et al., 2010) as they affect the ways that people make decisions and shape their thoughts. Perceived Behavioral Control (PBC) reflects the degree to which the person perceives himself/herself as capable of carrying a task out, in this case starting his/her own business. It is closely related to the concepts of self-efficacy and internal locus of control (Armitage & Conner, 2001).

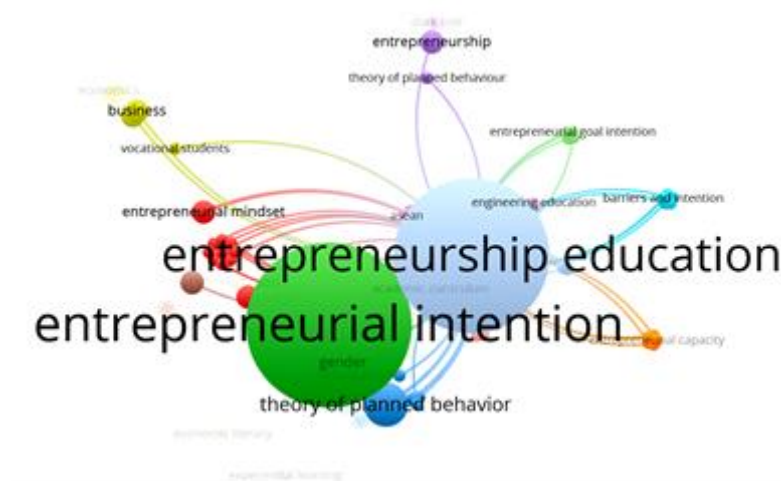
Although there are many studies concerning the relationship between entrepreneurship education and entrepreneurial intention of students, they focus on the later years of studies, closer to graduation, with only two exceptions of Nabi et al. (2018) and Majumdar and Damodharan (2013). This study adds value by examining how learning through EEPs is perceived and how it relates to the antecedents of intention. In order to evaluate these relationships, the same online questionnaire was distributed in two different times of the 3rd

semester (2nd year of studies). Additionally, the present research supports the features of the theory of planned behavior and how they relate to entrepreneurial intention when taking into account a large sample of university students. The following paragraphs include a brief literature review, the methodology used, the study results and the conclusions drawn. Furthermore, the limitations and suggestions for further research are also presented.

2. THEORETICAL DEVELOPMENT

The role of entrepreneurship in the socio-economic development of nations has long been discussed in the post-Schumpeter era (Crudu, 2019). The entrepreneurship education programs (EEPs) increase people's intention to become entrepreneurs and contribute to the success of the new venture created. Entrepreneurship education is commonly accepted as a determinant that enhances entrepreneurial activity (Bischoff et al., 2018; Xanthopoulou & Sahinidis, 2022; Sahinidis, Polychronopoulos, & Kallivokas, 2019). Literature suggests that the most suitable indicator to evaluate the results of entrepreneurship education is the rate of new business creation (Raposo & Do Paço, 2011). As Figure 1 presents, entrepreneurship is a vital determinant of students' entrepreneurial intention. Specifically, a study on 72 research papers through ScienceDirect database which have been published from 2012 until now shows that entrepreneurial intention is mainly studied in comparison with the entrepreneurship education and the theory of planned behavior. These three key-phrases were common in all 72 research items.

Figure 1: Network visualization (with the use of VOSviewer)



EEPs can create entrepreneurial mindsets and culture among students and help them to improve their career choices towards entrepreneurship (Jardim, et al., 2021). This view is commonly accepted by a large amount of studies (such as Tsaknis et al., 2022; Bae et al., 2014; Astiana, et al., 2022; Haddoud et al., 2022; Lv et al., 2021) who found that an entrepreneurship education increases students' awareness towards entrepreneurship, allows them to further develop their entrepreneurial skills, reveals them ways to turn theory into practice, and highlights the entrepreneurial path as a career option (Silangen, 2016). Ahmed et al. (2020) referred to many experts of the field who support that business education should start as soon as possible, for two reasons: first, since it plays a crucial role in preparing young entrepreneurs and equips them with the necessary skills to manage their own firm. Secondly, in the setting of a post-industrial, globalized economy, entrepreneurship education instills business habits and job abilities that may help young, talented individuals who wish to be self-employed. Entrepreneurship education has gradually expanded in recent years (Kefis & Xanthopoulou, 2015). The European Commission in 2004 proposed that all EU Member States should include entrepreneurship education in their national curriculum and in all educational institutions. Furthermore, EEPs as a determinant of entrepreneurial intention have been studied in different countries and for different scientific fields. Specifically, EEPs can be mainly found in departments of business and economic studies, where students are taught the concept of entrepreneurship and acquire the necessary knowledge for establishing and managing an enterprise. However, there is a lack in other scientific fields and departments, where entrepreneurship is taught only within the context of optional courses (Papagiannis, 2018). Among different countries there are

different pedagogical levels of entrepreneurship education, hence different outcomes from this education (Haase & Lautenschläger, 2011).

Much debate exists about whether entrepreneurship education programs can enhance the strengths, and overcome the limitations, associated with individual characteristics, such as openness to experience, and personal circumstances, such as family and social background (Liñán, 2004). At the same time, entrepreneurial beliefs, intentions and practices change throughout time (Lee & Wong, 2004). Specifically, over time, the entrepreneurs' personal experiences, including their formal educational experiences as well as the opportunities and barriers to entrepreneurship afforded by their environment, may have an impact on their decision to be self-employed. Although there is a lot of literature on EEPs, with the majority of studies concluding in the hypothesis that EEPs have a positive effect on entrepreneurial intention (EI) and its antecedents including "Personal Attraction", "Perceived Social Norms" and "Perceived Behavioral Control", there are still concerns regarding the appropriateness of the methodologies used and the lack of rigor in the majority of the extant research (Fayolle & Gailly, 2015; Sahinidis, et al., 2019; Wijayati et al., 2021; ZHANG & SOROKINA, 2022). Lorz, et al. (2013) in their systematic review of 39 related studies, suggest that the majority of them indicate a positive relationship between EEPs and EI, as well as its antecedents. The same authors categorized their sample into two types: the ex post and the ex-ante/ex post and recorded the sample sizes of each study. They observed that only 12 studies, or the 31% of the sample, used ex ante/ex post designs, and that half of them had sample sizes under 71. Other researchers such as Shah et al. (2020), Van Graevenitz (2010), Oosterbeek et al. (2010), Van Praag, and Ijsselstein (2010), Von Graevenitz, Harhoff, and Weber (2010) refer to an inverse relationship between EEPs and EI mainly due to the fact that individuals are becoming more conscious of their own limitations and the difficulties that come with starting a business. Earlier studies however such as Lopez et al. (2021), Hassan et al. (2020), Ndofirepi, (2020) and Wu et al. (2021) showed a significant influence of EEPs on EI and its antecedents.

The majority of the EI studies reports significant relationships between EI and its antecedents, especially in the cases of PA and PBC (Ajzen, 2005; Armitage & Conner, 2001). These theoretical and practical findings point to several relationships. First, entrepreneurship education programs provide advantages for learning, motivation, and practice. From the perspective of the TPB, it is proposed that each of the three advantages of entrepreneurship education have an impact on each of the antecedents of entrepreneurial intentions. Based on these, the researchers conclude in the following hypotheses:

H1: Entrepreneurial Intention relates positively with its antecedents.

H2: Entrepreneurship Education Programs positively affect EI and its antecedents.

3. METHODOLOGY

An ex ante/ex post study was used to evaluate the impact of an entrepreneurship course, taught by the authors at a public University of Athens. The duration of this module was 36 hours for the total semester for approximately 300 first-year students. For its successful completion, it was required by the students to attend the class and to prepare, submit and present a coursework. The coursework was about a business plan, for the launching of a new, innovative venture, by teams of 4-5 students. The questionnaire was distributed online in two different times (October 2021 to January 2022): when starting the entrepreneurship course (T1) and shortly before its completion (T2) in order to evaluate any changes in students' entrepreneurial intention and to measure the impact of the EEP on it. Before distributing the questionnaires, the students were informed of the study's objectives and the voluntary and private nature of the replies. Students were given the assurance that they may submit a questionnaire that was blank or incomplete without their teacher finding out who had or not taken part in the study. The sample reached the 187 students who completed the first round of the questionnaire and 145 of them completed the second one too. Therefore, the final sample is limited to 145 students, somewhat smaller than the first group of participants, however large enough to reach reliable conclusions. Table 1 below presents the demographics of the research sample. The 46,3% of the respondents consisted of females and the 53,7 of males, aged from 18-25 (94% of the participants), to 45-54 (2% of the participants). As regards family occupation background and especially father's occupation which is considered as major determinant of students' entrepreneurial intention (Sahinidis et al., 2019; Nowiński & Haddoud, 2019; López et al., 2016), 2% of the subjects' fathers are unemployed, 24 percent were self-employed, 0,5 % are freelancers, 52,5% worked for private organisations, 17,3% are self-employed and 27,7% worked for public sector.

Table 1: Demographic characteristics of the participants

Gender	
Females	46,3%
Males	53,7%
Level of education	
Undergraduates	100%
Age	
18-25	94%
26-34	3%
35-44	2%
45-54	2%
Father's Occupation	
Unemployed	2%
Freelancer	0,5%
Employee	52,5%
Self-employed	17,3
Public servants	27,7

In order to ensure the validity of the research, the online questionnaire that was constructed was based on previous studies on EI, measuring the effects of the intervention (the one semester course) on EI, PA, SN and PBC.

4. RESULTS

With the use of SPSS v.20.0 statistical tool, a paired samples T test was conducted in order to find possible differences before and after the intervention relationship. Table 2 shows that there are no significant changes found before the intervention and after that, in all, EI (24 Before and 27 After), PA (21 Before and 20 After), SN (22 Before and 25 After) and PBC (23 Before and 26 After). In order to test the predicting power of the antecedents in explaining EI, the Linear Regression procedure was used. As table 3 illustrates, only one of the antecedents, specifically the "Personal Attraction" was significantly associated with Intention.

Table2: Paired Samples Test

		Paired Differences			95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	VAR00021 - VAR00020	-,01655	1,74555	,14496	-,30308	,26997	-,114	144	,909
Pair 2	VAR00022 - VAR00025	,08506	1,82860	,15186	-,21510	,38521	,560	144	,576
Pair 3	VAR00023 - VAR00026	-,10759	1,61847	,13441	-,37325	,15808	-,800	144	,425
Pair 4	VAR00024 - VAR00027	,03678	2,17621	,18072	-,32043	,39400	,204	144	,839

Table 3: Relationship between EI and PA, SN and PBC

Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	-,656	,367		-1,787	,076
	VAR00020	,959	,077	,784	12,481	,000
	VAR00025	,022	,066	,021	,339	,735
	VAR00026	-,002	,081	-,002	-,029	,977

5. CONCLUSIONS AND SUGGESTIONS

Although students' entrepreneurial views and intentions are positively affected by entrepreneurship education programs, limitations regarding their personal characteristics may prohibit them from acting in an entrepreneurial manner. Intentions cannot be carried out in situations that forbid action, and they won't be carried out when fear of failure is high since entrepreneurial behavior follows the formulation of intentions. Therefore, while if entrepreneurship education programs give students ways to learn about entrepreneurship, develop their entrepreneurial skills, and expand their entrepreneurial capacities, it should not be assumed that these programs will directly change how people behave. Therefore, it should not be assumed that entrepreneurship education will instantly result in a more entrepreneurial society.

Based on the pertinent literature, the findings of this study do not support the preceding hypotheses that were mentioned above. This is related to the fact that many of the studies in the literature lack rigor, leading them to draw findings that are not adequately supported. The findings proved that among the antecedents studied, only "Personal Attraction" was significantly associated with entrepreneurial intention. A reason for the divergence of the study's results may be the fact that the students who constituted the research sample were relative "new" in the university and their still not thinking seriously about their career future. Therefore, it is possible to infer that students' exposure to entrepreneurship education programs has an impact on their psychological development. Through seeking to clarify the process by which entrepreneurship education affects entrepreneurial intention, the study adds to the body of literature. It rekindles the connection between certain antecedents and the growth of entrepreneurial traits. Second, the study adds to the body of research on entrepreneurial intention because its measures took place in two different phases of the early semesters. This has practical implications for teachers who must target their teaching methods and strategies and adjust course material to suit the students' academic needs.

There are several limitations that should be mentioned. First of all, the primary data came from a sample of students chosen from a single institution, thus the results' generalizability is compromised by their restricted spatial emphasis. Future research should include students from various universities and various scientific fields in order to evaluate the differences and yield insightful information. Future studies should also use an experimental design and more situational factors to increase the scientific rigor of their research. The same study may also be carried out by comparing differences between genders. Finally, it is suggested that more research on the effects of EEPs may be required, particularly when considering pedagogical, interventional, and methodology-related concerns.

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Challenges of Project Portfolio Management Process

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Abstract: Even though project portfolio management (PPM) has been the subject of research for decades, new studies continue to be published on the topic. When managing many projects at the same time, an effective PPM is necessary to keep all of them together under control and deliver the most value for the company. Managing the activities from a portfolio perspective is essential for companies that handle a large number of interrelated projects concurrently; it is insufficient for these organizations to concentrate only on the effective management of individual projects. An advanced organizational method that will ensure that the appropriate projects are selected, effectively allocating the organization's limited resources and coordinating and synchronizing the organization's initiatives, is to manage a portfolio of related projects with similar goals and limitations. This will be done by managing a portfolio of related projects with similar goals and constraints. The capacity to properly manage project portfolios is becoming increasingly critical in determining a company's level of success since the manner in which project portfolios are handled may have a substantial impact on the efficacy of the strategy implementation. An increasing number of companies are utilizing projects to structure their operations. Literature reviews assist in piecing together what we already know, expanding our comprehension scope, and locating our ideas' origins. This article addresses various topics regarding establishing the project portfolio, including definitions, techniques, and selection procedures.

Keywords: project portfolio management, PPM process, criteria, PPM challenges.

1. INTRODUCTION

Businesses nowadays are adapting to the challenges they face in the modern world and adjusting to difficulties that will arise in the present and the future. The state of the global economy is changing rapidly. Due to the lightning-fast rate at which the global marketplace is evolving, businesses must implement dynamic and adaptable strategies (Ika & Munro, 2022; Sebestyen, 2017; Sebestyen & Toth, 2015). Many businesses opt for project-based solutions when faced with several possibilities for achieving the same overarching strategic goals. In the context of dealing with these dynamic and adaptable strategies and their associated issues, project portfolio management has emerged (Cooper et al., 2000, 2001; Sebestyen & Toth, 2015).

Managing projects within a portfolio play a crucial part in companies' success or failure (N. P. Archer & Ghasemzadeh, 1996; Markowitz, 1952; Mohagheghi et al., 2019; Sebestyen & Toth, 2015). The successful company's strategy implementation and execution have accounted for the growing relevance of project portfolio management research (Kaiser et al., 2015; Martinsuo, 2013; Meskendahl, 2010; Unger et al., 2012a). Ongoing research demonstrates that companies with a well-defined, established methodology for managing their project portfolios have a significant competitive advantage in their respective marketplaces (Cooper et al., 2000). The topic of project portfolio management has been the focus of several conducting studies for the better part of the past two decades due to the substantial impact it has had on companies' overall performance (Hansen & Svejvig, 2022; Mohagheghi et al., 2019; Unger et al., 2012a).

The research on project portfolio management started from the financial theory developed in the 1950s, often linked to the work of the Nobel Prize in economics winner Harry Markowitz (Hansen & Svejvig, 2022). Markowitz (1952) employed a single criterion model for financial objectives to create an efficient project and investment portfolio; hence the genesis of this issue still needs to be discovered. The word "management of projects in a portfolio" first appears in the examined Scopus database in a 1969 paper by Williams and Radnor titled "In-House Research on the Management of R&D in Government Agencies," notwithstanding Markowitz's creation of the idea while dealing with investment projects. Since then, the topic has been periodically presented. Since the 1990s, there has been a gradual but consistent increase in the number of PPM investigations. Although there was a little increase in the number of studies that focused on PPM throughout the next decade, the topic as a whole continued to witness very few inquiries on an overall basis, and this pattern persisted until the beginning of the twenty-first century (Cooper et al., 2000; Hansen & Svejvig, 2022; Martinsuo et al., 2014; Mohagheghi et al., 2019).

While it may seem that PPM would be an easily accomplished task for any company, there are several ways in which it might be troublesome to day-to-day operations and cancel whatever benefits the company could have had otherwise (Blichfeldt & Eskerod, 2008; Ghasemzadeh & Archer, 2000; Teller et al., 2012; Unger et al., 2012a). When deciding whether or not to use project portfolio management, it is essential to consider the possible financial and time commitments involved in the procedure since portfolio management might be both expensive and time-consuming (Anbari et al., 2008; Cooper, 1998; Mohagheghi et al., 2019; Zhao & Ying, 2019).

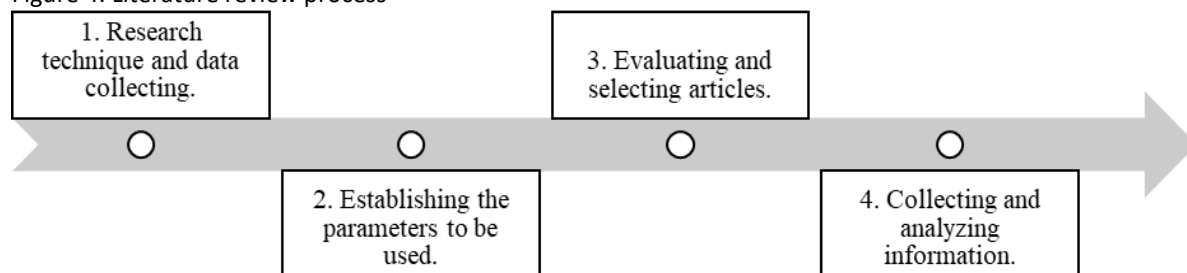
2. RESEARCH AND REVIEW PROCESS

Reviewing the relevant literature is a helpful process for piecing together the topic understanding, completing the knowledge gaps, expanding the understanding horizons, and pinpointing the comprehension sources. This article discusses various topics about the construction and establishment of the project portfolio, such as definitions, methodologies, and selection procedures.

This research aims to summarize the existing research on project portfolio management (PPM) and the challenges that come along with it. As a result, this paper provides a comprehensive and thorough evaluation of the available literature on project portfolio management (PPM) and the challenges it confronts. The research was conducted by evaluating well-known work previously published, relying on the contributions from acknowledged experts on the subject.

Figure 4 provides a visual representation of the methodology followed for conducting this comprehensive review of the relevant literature. The initial steps included figuring out the database source and developing a strategy for how the study would be carried out. The second stage addressed the selection of parameters, such as databases and keywords, through which the study should be conducted. The third process consisted of selecting the articles that will be used, extracting the most vital data, and synthesizing the information gathered from those articles.

Figure 4: Literature review process



2.1. Research technique and data collecting

The searches were made using the publisher's search tool and database Scopus. This study did not concentrate on any particular journals; instead, it searched through all the readily available papers on the database.

Table 11: Journal and conference sources of the researched papers

Source title	Articles
International Journal of Project Management	113
Proceedings SPE Annual Technical Conference And Exhibition	46
Research Technology Management	45
Lecture Notes in Computer Science Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics	40
ASEE Annual Conference and Exposition Conference Proceedings	39
Lecture Notes in Business Information Processing	35
Project Management Journal	34
IEEE Transactions on Engineering Management	32
ASEE Annual Conference Proceedings	30
CEUR Workshop Proceedings	30

Most of the papers used for this investigation were articles discovered in journals and conferences; the locations of these publications are illustrated in Table 1.

2.2. Establishing the parameters to be used

Following the procedure referred to in Figure 4, the search for materials required the combination of at least two keywords; as the subject of the study was challenges of project portfolio management process, the terms ‘challenge’ and ‘process’ were added to the research by default. Based on the keywords’ logical connections, the keywords have been organized into sets, making it much simpler to locate related articles inside databases. The connection among these keywords was “project portfolio management”, “project portfolio management process”, and “project portfolio management challenges”.

Among the scientific databases used for literature research in this field, it is possible to identify those that contain relevant sources to the research. The database chosen for the article’s research in the project portfolio management field to determine whether or not these keywords correspond with the research topic was Scopus, the worldwide online database with access to abstracts and citations for scholarly works like books, journals, and conference papers. It is used by more than 3,000 educational, governmental, and commercial institutions, providing a global perspective on research in various fields. It also includes helpful tools for keeping tabs on, analyzing, and visualizing this information.

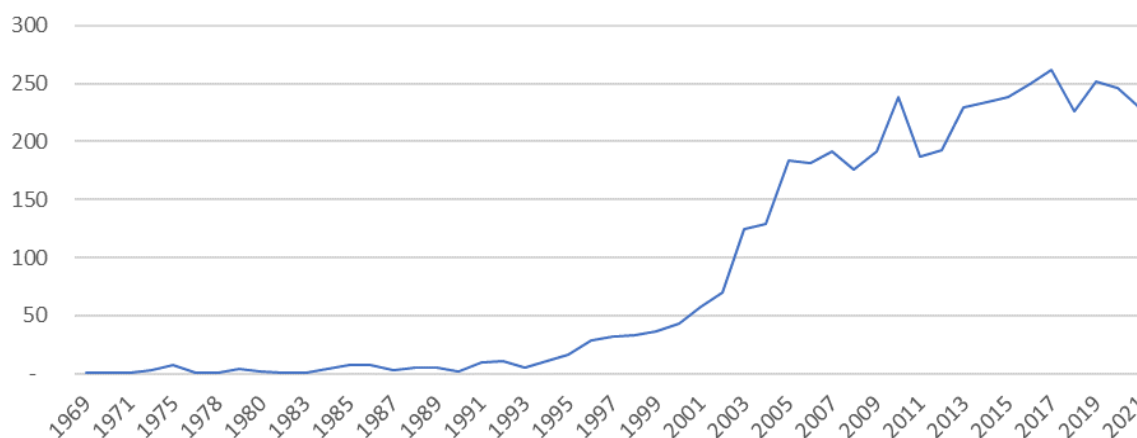
2.3. Evaluating and selecting articles

The first phase in the research process involved reading the titles and abstracts considered by Scopus as the ten papers most related to the topic to test the keywords’ suitability for study’ focus and their relevance to the issue under investigation. According to the information gathered, the papers chosen were suitable for the current research, and, as a further step, the entire articles were read.

2.4. Collecting and analyzing information

After selecting the most influential papers about the area under investigation and compiling the articles related to the challenges of the project portfolio management process, a bibliographic portfolio on the subject was developed. The interest in project portfolio management research has been rising, as evidenced by a search for “project portfolio management” in Scopus on October 31st, 2022. The breakdown of the total number of papers by year is presented in Figure 5, representing the general growing trend of PPM research.

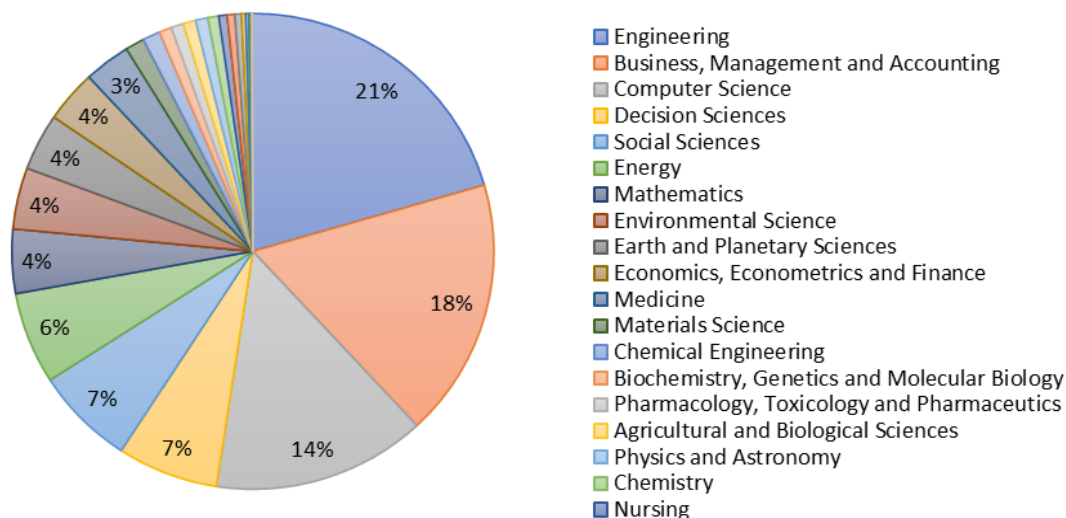
Figure 5: The general growing trend of PPM research between 1969 and 2022



Based on the results, a total of 4529 papers were discovered. A handful of the most significant discoveries that emerged from this SCOPUS search are the published year, subject area, document type, publishing country, source type, and published language. A pie chart representing the distribution of project portfolio management research according to the subject can be found in

Figure 6.

Figure 6: Subject areas of PPM research between 1969 and 2022



The results of a SCOPUS search for project portfolio management are presented in a pie chart, with the results categorized by topic. After analyzing the data, it is clear that engineering, business, management and accounting, computer science, decision sciences, and social sciences are the most popular study subject. 14% of the articles discovered came from the area of computer science, 18% came from the domains of business, management, and accounting, 21% came from the field of engineering, 7% came from the fields of decision sciences and social sciences, and 7% came from other fields of study. Research is focused almost entirely on only five topics, accounting for 67 percent of the total.

Figure 7: PPM paper languages (1969 – 2022)

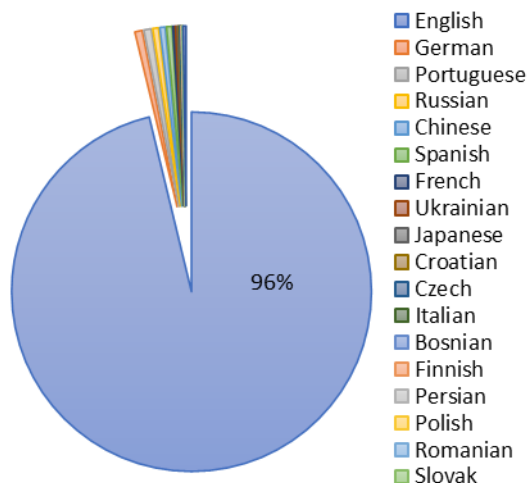
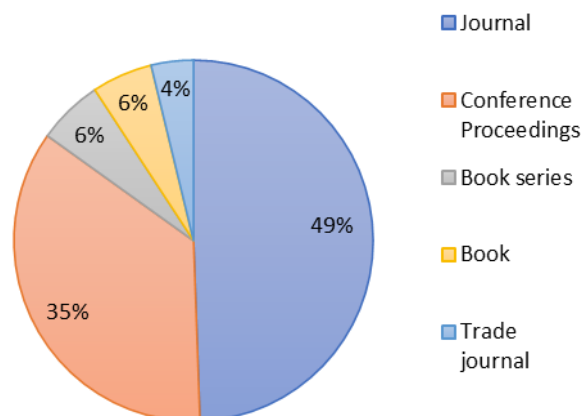


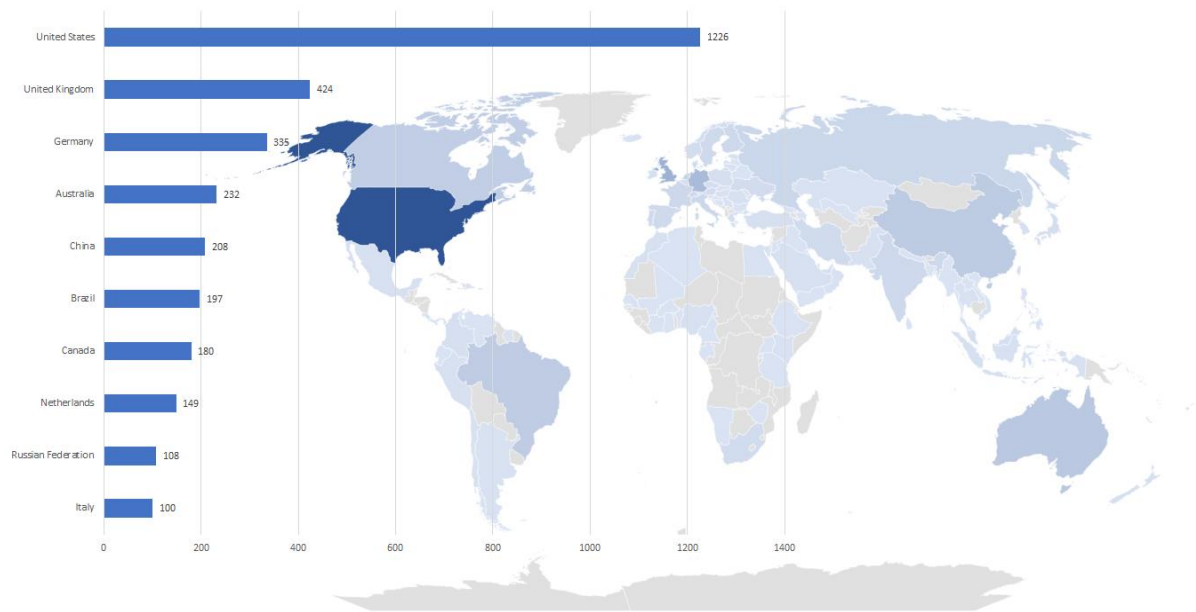
Figure 8: PPM paper types (1969 – 2022)



According to , most sources belong to journal articles and conference papers. The journal articles represent 49% of the published material. In comparison, the conference papers are responsible for 35%, representing that they are responsible for 84% of the published research sources on project portfolio management. demonstrates that the English language predominates in 96.2% of the published papers, followed by German and Portuguese with 0.7% each. While Russian, Chinese, and Spanish represent 0.5% of each language, the remaining 0.9% are divided among French, Ukrainian, Japanese, Croatian, Czech, Italian, Bosnian, Finnish, Persian, Polish, Romanian, and Slovak.

Figure 9 represents the number of papers per country.

Figure 9: World map of published papers per country



Analyzing

Figure 9, which demonstrates the number of papers per country, it is possible to see that the top 10 publishing countries are The United States, United Kingdom, Germany, Australia, China, Brazil, Canada, Netherlands, Russian Federation, and Italy. The leading country is The United States, representing 27% of all papers.

3. ANALYSIS OF THE PROJECT PORTFOLIO MANAGEMENT IN THE LITERATURE BACKGROUND

According to the Project Management Institute (2017), a portfolio is *“a collection of projects, programs, subsidiary portfolios, and operations managed as a group to achieve strategic objectives. The portfolio components, such as programs and projects within the portfolio, are quantifiable (e.g., identified, categorized, evaluated, prioritized, authorized)”*. It also defines portfolio management as *“a dynamic activity through which an organization invests its resources to achieve its strategic objectives by identifying, categorizing, monitoring, evaluating, integrating, selecting, prioritizing, optimizing, balancing, authorizing, transitioning, controlling, and terminating portfolio components.”*

In a nutshell, portfolios are collections of projects, programs, subsidiary portfolios, and activities that are managed collectively to meet strategic objectives, being possible to conduct an evaluation of portfolio components such as initiatives and programs. Portfolio management involves finding, categorizing, monitoring, analyzing, integrating, choosing, prioritizing, optimizing, balancing, authorizing, transitioning, managing, and ending portfolio components to meet strategic goals (PMI, 2017, 2021).

Project Portfolio Management is a term used to describe how project managers and management offices determine potential projects' relative strengths. This subject has been the focus of scholarly study since the industrial businesses in the 1970s identified the application of Markowitz's financial PPM concepts in other fields of study besides the financial one (Elton et al., 1977; Markowitz, 1952, 1959). It provides optimal advantages across several projects simultaneously, in contrast to the traditional technique of managing each project independently (Archer & Ghasemzadeh, 1999, 2007; Martinsuo, 2013; Szilágyi et al., 2020). Even though PPM helps assist organizations in managing many projects, many of those organizations perceive this process as a significant barrier to progress (Olsson, 2008; Teller & Kock, 2013).

The primary responsibility of a project portfolio manager is to select the right mix of balanced combinations among new and current projects. Consequently, the resulting portfolio will maximize the value of the company's resources, improving its ability to compete in the standing industry (Bitman & Sharif, 2008).

Even though it is unattainable to place an accurate value on the tremendous number of potential advantages that may result from having effective project portfolio management, it is not always simple to determine if PPM is the best choice for an organization. When determining whether or not PPM is the most advantageous option for a company's operations, a few things need to be taken into consideration, such as the advantages and challenges mentioned in the next section.

3.1. Advantages

Active project portfolio management has many benefits that should not be overlooked (Archer & Ghasemzadeh, 2007; Meskendahl, 2010; Unger et al., 2012). The argument for this being the best option is made by several points that will be discussed in more detail below.

3.1.1. An improved system for selecting the projects on which to work.

The essence of project portfolio management is selecting the optimal mix of projects to work on in light of corporate goals, tolerance for risk, resource availability, and other relevant variables. The first five phases of project portfolio management (PPM) are devoted to evaluating potential projects and deciding which ones should be prioritized for further development. PPM uses a combination of qualitative and quantitative methodologies, such as ranking algorithms, scoring models, and other heuristic methods, to ensure that judgments on what to do and what not to do are based on clear and meaningful criteria rather than on unclear ones. This approach helps to ensure that decisions regarding what to do and what not to do are accurate and reliable (Archer & Ghasemzadeh, 1999, 2007; McNally et al., 2009; Patanakul, 2015; Patanakul & Milosevic, 2009).

3.1.2. A clearer understanding of a more distinct point of view.

It is easy for companies to lose track of their long-term goals when they are bogged down in the day-to-day operations of fixing problems and completing projects with tight deadlines. For example, completing significant

infrastructure projects can take a very long period. Within that time frame, many things are possible to occur. The presumptions established at the beginning of the project may no longer be accurate, the resources have been depleted, and so on. It is simple to let oneself become concerned with such insignificant details to the point where one loses sight of the bigger picture. With the aid of PPM, strategic choices may be taken since it offers context and enables the consideration of the organization's long-term goals (Archer & Ghasemzadeh, 1999; Mohagheghi et al., 2019; Patanakul, 2015).

3.1.3. Establish the company's goals in as much detail as possible, focusing on measurable goals.

A lack of well-defined goals and objectives, together with the related benchmarks and indicators, are the primary cause of organizations' failure. Suppose attention is distracted from more severe issues to a pet project or the enthusiasm surrounding an attractive but ultimately worthless industry trend. In that case, it might damage the company's finances and strategic clarity. Organizations can cultivate an atmosphere where managers are comfortable asking in-depth inquiries with the assistance of project portfolio management. A firm can implement project portfolio management (PPM) if it has clearly outlined goals and a plan for accomplishing them, ensuring all allowed projects contribute to the company's success (Beringer et al., 2013; Gutiérrez & Magnusson, 2014; Patanakul, 2015; Patanakul & Milosevic, 2009; Unger et al., 2012a).

3.1.4. The importance of successful teamwork endeavors over individual achievement.

In major businesses, different project groups with different goals can end up as competing units that try to get the same amount of money and people. For example, one group might research while the other works on making projects happen. PPM solves this problem by ensuring that projects align with the overall strategy and by evaluating requests from different functions carefully and systematically. It also eliminates duplicate work on projects and encourages project managers to use teams from other projects to make the workplace more collaborative (Bakar & Yusof, 2016; Heising, 2012; Killen et al., 2012; Patanakul & Milosevic, 2009).

3.1.5. Effective utilization of the available resources

Planning for resources and keeping up with demand entails significant time and work. The utilization of a project portfolio makes it straightforward to evaluate work from a variety of vantage points. Some companies have to decide whether they should prioritize projects according to the available resources or adjust resource allocation to the aims of specific efforts. Keeping an eye on enterprise resources and considering them at an early stage in the project selection process enables clear visibility into how those business resources may be used most effectively across all projects (Archer & Ghasemzadeh, 1999; Kaiser et al., 2015; Meskendahl, 2010; Patanakul, 2015; Patanakul & Milosevic, 2009; Sebestyen, 2017; Sebestyen & Toth, 2015; Teller & Kock, 2013; Wu et al., 2012).

3.1.6. Enhanced project performance statistics for measuring project success

Implementing tight procedures for ongoing monitoring and control is a crucial component of efficient portfolio management, and it is also one of the pillars of effective portfolio management.

PPM tools, which bring together high-level portfolio data with project indicators, may be used to evaluate a portfolio's performance. This evaluation can be done through the use of the tools. The utilization of performance criteria and tolerance levels significantly improves one's capability of recognizing patterns that have the potential to be detrimental to the portfolio and make it challenging to achieve one's objectives. When collecting metrics in real-time, it is possible to develop the ability to adjust quickly to new techniques or environments (Kaiser et al., 2015; Killen et al., 2012; Martinsuo, 2013; Meskendahl, 2010; Milosevic & Patanakul, 2005; Teller et al., 2012; Unger et al., 2012a).

3.1.7. Improvements in the timeliness of project deliveries, increasing the percentage of on-time project completions

Projects rarely get completed on schedule, even when meticulously planned and estimated. Unanticipated events have a way of shifting the boundaries of a project. In comparison to the 32% on-time completion rate of underachievers, champion organizations complete an average of 88% of their projects in the allotted time frame in the 2017 PMI report. It is intriguing to observe the correlation between project duration and budget. Ninety percent of successful companies complete their projects on time and within budget, compared to only twenty-five percent of average performers. According to the study, these indicators exist due to the effective businesses working to close the gap between strategy development and implementation (Kaiser et al., 2015; Martinsuo & Lehtonen, 2007; PMI, 2017; Teller et al., 2012).

3.1.8. Decreased potential likelihood of organization's risk

PPM offers a broader picture than traditional project management by considering the risk vs. reward profile of the entire portfolio rather than simply the risk vs. reward profile of the individual projects included. This ensures that firms have plans to deal with unforeseen circumstances, preparing the way for a risk management strategy more sophisticated in its approach (Archer & Ghasemzadeh, 1999; Ghasemzadeh & Archer, 2000; Martinsuo, 2013; Martinsuo et al., 2014; Teller & Kock, 2013).

3.1.9. Better thought-out, informed decisions based on more careful consideration and information.

Those in positions of leadership are responsible for making a large number of decisions daily. Since these choices can potentially be turning points in the company's history, it is critical to make the most of this opportunity and do everything to succeed. One point of view is considering how the substantial investment will impact both the firm and the share price in the years to come. Formulating original decisions is only possible when solid, objective knowledge is utilized as a resource. The most effective portfolio managers question the status quo regularly. In addition to this, it encourages the usage of data-centric technologies, which are of assistance to top-level management in the process of decision-making (Archer & Ghasemzadeh, 1999; Ghasemzadeh & Archer, 2000; Kaiser et al., 2015; Unger et al., 2012).

3.1.10. The achievement of a rise in the amount of return on investment, growing companies' revenues.

Financial capital is the organizations' lifeline; therefore, increasing their wealth should be the fundamental objective of any corporation. Typically, this concerns monetary objectives, although it may also be related to service levels or regulatory compliance. The return on investment (ROI), projects success rate, the ability to predict outcomes, and the speed with which the decisions can be made, saving time and money, may all be enhanced by investing in project portfolio management (Beringer et al., 2013; Kaiser et al., 2015; Teller et al., 2012; Teller & Kock, 2013; Unger et al., 2012a).

3.2. PPM process challenges

While it may seem that PPM would be an easily accomplished task for any company, there are several ways in which it might be troublesome to day-to-day operations and cancel whatever benefits the company could have had otherwise. When deciding whether or not to use project portfolio management, it is essential to consider the possible financial and time commitments involved in the procedure since portfolio management might be both expensive and time-consuming. The following are summaries of some of the most common corporate challenges that could prevent implementing effective project portfolio management.

3.2.1. Difficulty viewing the collected data due to a lack of availability to obtain the data.

One of the most common and frustrating challenges that project portfolio managers have to deal with in today's world is a lack of access to business and project data. This lack of information can make it challenging to identify some data, such as the type of endeavors the companies are performing, the number of projects already ongoing or underway, the issues faced in the process, and the capital already spent on each project. Keeping up-to-date on the development of all active projects could be challenging for a project portfolio manager. If the company has a proper way to manage the project portfolios, this could be a breaking challenge for the goals achievement of the business since it is pretty hard to control what is not seen. On the one hand, only a few companies have the resources to manage their project portfolios well, so they try to put everything together by hand using inadequate systems or a mountain of spreadsheets. On the other hand, some companies have trouble with having too much software available, which leads to gaps in knowledge and blind spots. Considering all project data can be housed in a single location that can do detailed analysis, these blind spots can be avoided (Archer & Ghasemzadeh, 1999; Beringer et al., 2013; Kaiser et al., 2015; Martinsuo, 2013; Martinsuo et al., 2014; Martinsuo & Lehtonen, 2007; Unger et al., 2012).

3.2.2. Decrease in the productivity

When project managers spend precious time seeking information and attempting to make sense of unconsolidated data, they are forced to spend more time on the job, leading to a lower than average job productivity. In addition, businesses that manage their projects and portfolios of projects without the assistance of specialized tools frequently discover that their project teams are bogged down in time-consuming administrative tasks, such as creating and sharing reports or manually managing time sheets. On average,

around 80 percent of a project's time may be spent on activities that contribute little or no value. Furthermore, the accuracy of reports compiled manually raises red flags about performance discrepancies (Beringer et al., 2013; Martinsuo, 2013; Martinsuo & Lehtonen, 2007; Teller et al., 2012; Unger et al., 2012a).

3.2.3. Failure to properly allocate resources

Regardless of the size of a business, time and money resources are always two of its most valuable assets. In this perspective, investments are more profitable if they contribute to the business's growth. Depending on the company's size, portfolio project management may or may not be the best solution. PPM may not be required if an organization has less than five people or does not handle many significant projects. Obtaining a broader management perspective is worthwhile as an investment if it leads to increased revenue and company expansion (Beringer et al., 2013; Gutiérrez & Magnusson, 2014; Kaiser et al., 2015; Martinsuo et al., 2014; Teller & Kock, 2013; Unger et al., 2012b).

3.2.4. Expenditures tend to increase the likelihood of making mistakes:

It is not often the case that the assets in a diversified portfolio are dispersed most advantageously. If an excessive amount of effort is devoted to finding the best portfolio, there is the risk of ending up with one that could be more well-balanced and generate higher returns (Archer & Ghasemzadeh, 1999; Ghasemzadeh & Archer, 2000; Kaiser et al., 2015; Martinsuo, 2013; Martinsuo et al., 2014; Martinsuo & Lehtonen, 2007; Meskendahl, 2010).

3.2.5. The time investment required to carry out administrative responsibilities might be substantial.

A large amount of work is required to manage a portfolio of projects effectively, which is on top of the time required to monitor individual undertakings. The primary activities that make up a portfolio manager's day are reviewing the current priorities, scheduling new ones, ensuring that everything is still on track, and creating and distributing reports, emails, and meeting minutes. When a single project has scope creep and needs to be examined often, the portfolio manager's time is also lost (Archer & Ghasemzadeh, 1999; Ghasemzadeh & Archer, 2000; Kaiser et al., 2015; Martinsuo, 2013; Petro & Gardiner, 2015; Unger et al., 2012a).

3.2.6. Expenditures

Everything from project portfolio management (PPM) software to human resources requires financial investment. The increased quantity of commodities, teams, and supervisors causes the monthly expenditures to be more significant. Each type of asset incurs a different range of prices and fees. It is essential to keep this fact in mind when determining how to diversify the portfolio because fees may quickly add up and lower the value of the assets over time (Kaiser et al., 2015; Meskendahl, 2010; Unger et al., 2012b).

3.2.7. The distinct regulations applied to each type of investment asset

Structures and operating methods for the various asset types might vary significantly from one to another. Suppose the money is spread too thinly over too many various possibilities. In that case, the company runs the danger of investing in something that is not entirely related to the organization's strategies, resulting in issues as well as unwise choices about finances (Archer & Ghasemzadeh, 1999; Gutiérrez & Magnusson, 2014; Kaiser et al., 2015).

3.2.8. Important decisions that need to be made.

Putting things in the proper order of importance can be difficult and require making uncomfortable choices. When the portfolio management team cannot make these judgments or has the power to do so, it is possible that this will negatively impact the company's overall productivity (Teller et al., 2012; Unger et al., 2012b; Walls, 2004).

3.2.9. Making decisions without accurate information about the projects.

The project managers chosen are highly knowledgeable about the organization's procedures and the projects they handle. By implementing a plan for portfolio management and cutting them out of the communication loop entirely, the decision-making process that is straightforward, quick, and standardized is taken,

disregarding the experience of the leaders of the team, which may be aware of tiny technical nuances that the portfolio manager is not aware of (Beringer et al., 2013; Martinsuo et al., 2014; Teller et al., 2012; Teller & Kock, 2013; Unger et al., 2012a, 2012b).

4. CONCLUSION

The literature assessment undertaken as part of the project portfolio management process challenges demonstrates that increased attention has been paid to this search area in recent years, especially in the last decade. The topic has exponentially grown after an intensive and long-lasting effort (Figure 5). One of the main reasons for this is that previous studies and case studies have demonstrated that businesses with a well-outlined and well-established strategy for managing their project portfolios have been shown to enjoy a significant competitive edge in the marketplace, driving them to acknowledge that PPM research is highly applicable in finding solutions to issues that arise in the real world. The areas of engineering, business, management and accounting, and computer science are the ones that make the most use of PPM research (

Figure 6). Only 12% of the PPM-related literature is found in books, as shown in . The great majority of PPM-related literature consists of papers and proceedings, with only 12% appearing in books. Most published papers (96% of them) are written in English. The other 4% are written in various languages, like German, Portuguese, Russian, Chinese, and Spanish. Even though most of the papers come from English-speaking countries, there are countries among the leading countries, Germany, China, and Brazil, that do not speak English.

Deciding whether PPM is the best option for a company's needs is not a straightforward task. Among the advantages of this approach, there is a complete comprehension of a more defined viewpoint; determining the company's long-term objectives in as much detail as feasible; with an emphasis on quantitative measures; the priority of collaboration above individual effort in achieving a common goal; making good use of what is available; statistics for gauging the project's success have been upgraded; there have been enhancements made to the timeliness of project deliverables, increasing the proportion of on-time project completions; lowers the probability that harms will come to the organization; the decisions are more thought out and well-informed since more time and effort was put into them; the revenue growth for businesses increasing their ROI. While this has its advantages, it also has several drawbacks, such as the following: limited access to data, which hinders analysis and reduces output; inefficient use of available resources; rising costs associated with inefficiency; substantial financial resources invested in carrying out administrative responsibilities; varying regulations for various investment asset types; and the process of actually making investment decisions.

Despite the myriad potential benefits of having excellent project portfolio management, evaluating if PPM is the best decision for a corporation can be challenging.

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Azerbaycan İşçi Piyasasının Mevcut Durumu ve İstihdam Üzerine Etkisi

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Özet: Makale, işgücü piyasasının mevcut durumunu, istihdam ve gelir üzerindeki etkisini ele almaktadır. Modern zamanlarda Azerbaycan Cumhuriyeti'nde devletin sosyo-ekonomik politikasının ana yönlerinden biri, işgücü piyasasının düzenlenmesi, tam ve elverişli olmasını sağlamaktır. İstihdam programları, petrol dışı sektörü geliştirmeye yönelik tedbirler, bölgelerdeki büyük ölçekli yatırımlar, bölgelerde yeni işlerin yaratılması, işletmeler, altyapı tesisleri vb. ülkede istihdamın sağlanmasında önemli rol oynamıştır. Ancak, bazı nedenlerden dolayı, ülkede iş talebi hala yüksek. Yani yapılan çalışmalara rağmen Azerbaycan'ın işgücü piyasasında hala sorunlar var. Bu sorunlar temel olarak kalıcı işlerin olmaması, yüksek işsizlik oranları ve gençler arasında göç, işgücü kalitesinin işgücü piyasasının gereksinimlerini karşılamaması, kayıt dışı istihdam düzeyinin hala yüksek olması, işgücünün eşit olmayan dağılımı ile kendini göstermektedir. uzmanlıklar, işlerin mevsimlik doğası, birçok uzmanlıkta ücretlerin düşük seviyesinde kendini gösterir. Bu, istihdam politikasının sürekli iyileştirilmesini gerektirir. Bunun için istihdam alanında bir takım alanlarda sistemik tedbirlerin uygulanmasına ihtiyaç vardır. Önemli konulardan biri istihdam programlarının işgücü piyasası üzerindeki etkisinin analizidir. Ekonomik aktiviteyi artırmak, güçlendirmek için uygun koşulların yaratılması iş arayanların ve işsizlerin sosyal korunması, yüksek uluslararası standartlara uygun bir iş ortamının yaratılması, işgücü piyasasında arz ve talep arasındaki dinamik dengenin güçlendirilmesine yönelik kurumsal ortamın iyileştirilmesi, işgücü piyasasındaki mevcut sorunlar ve genç istihdam faktörleri ve diğer konular araştırıldı.

Anahtar Kelimeler: işgücü piyasası, istihdam, işgücü kaynakları, insan sermayesi.

The Current Status Of Azerbaijan Labor Market and Its Impact On Employment

Abstract: The article considers the current state of the labor market, its impact on employment and income. One of the main directions of the state's socio-economic policy in the Republic of Azerbaijan in modern times is the regulation of the labor market, ensuring its full and favorable. Employment programs, measures to develop the non-oil sector, large-scale investments in the regions, creation of new jobs in the regions, enterprises, infrastructure facilities, etc. played an important role in creating employment in the country. However, for some reason, the demand for jobs in the country is still high. In other words, despite the efforts, there are still problems in the labor market of Azerbaijan. These problems are mainly manifested by the lack of permanent jobs, high unemployment rates and migration among young people, the quality of the labor force not meeting the requirements of the labor market, the still high level of unregistered employment, and the unequal distribution of the labor force. specialties, the seasonal nature of work is manifested in the low level of wages in many specialties. This requires continuous improvement of employment policy. For this, there is a need for the implementation of systemic measures in a number of areas in the field of employment. One of the important issues is the analysis of the impact of employment programs on the labor market. Creating favorable conditions to increase and strengthen economic activity, social protection of job seekers and the unemployed, creation of a business environment in line with high international standards, labor force improvement of the institutional environment to strengthen the dynamic balance between supply and demand in the market, current problems in the labor market and youth employment factors and other issues were investigated.

Keywords: labor market, employment, labor resources, human capital.

Giriş

Modern zamanlarda, işgücü piyasasının sistematik olarak incelenmesi ve düzenlenmesi, insan kaynakları ve istihdam yönetiminde önemlidir. İşgücü piyasasının mekanizması, işverenlerin güçlü kuvvetli nüfusun çeşitli çıkarlarıyla ortak bağlantısı ve anlaşmasıdır. Ekonominin ihtiyaçlarını karşılayan mal ve hizmetlerin üretiminde işverenlerin işgücü piyasasındaki işgücü talebi gerekli personel ihtiyacı yaratır. Emek arzı, ücretli emeğe katılmaya hazır olan işsizlerden oluşur. Arz ve talep arasındaki ilişkinin bir sonucu olarak, işgücü piyasası aşağıdaki işlevleri yerine getirir: 1) düzenleyici işlev - işgücünü üretim araçlarıyla (yani sabit sermaye) birleştirmek için emeğin alıcısı ve satıcısı arasındaki toplantıların ve ilişkilerin düzenlenmesini düzenler; 2) rekabet işlevi - işler için çalışanlar arasında ve insan gücü için işverenler arasında rekabeti sağlar; 3) değerlendirme işlevi - işgücünün denge (baskın) değerini doğrular; 4) aktivasyon işlevi - tam ve ekonomik olarak verimli istihdam için koşullar yaratır.

İstihdam Sorununu Çözmek İçin Uygulanan Programların Emeği Piyasa Durumu Üzerindeki Etkisi

Azerbaycan Cumhuriyeti'nde devletin sosyo-ekonomik politikasının ana yönlerinden biri, ülke nüfusunun tam ve uygun istihdamını sağlayan işgücü piyasasının düzenlenmesidir. Modern zamanlarda herhangi bir devletin ekonomik ve sosyal politikasının en önemli hedeflerinden biri tam istihdamı sağlamaktır. Çünkü insan kaynaklarının verimli kullanımı ülkenin ekonomik kalkınmasında kilit rol oynamaktadır. Aynı zamanda istihdam, ülke nüfusunun yaşamının ve maddi refahının temelidir. Bu nedenle her devlet tam istihdamın sağlanmasına büyük önem vermektedir. Azerbaycan Cumhuriyeti "İstihdam Hakkındaki" Kanununun "İstihdam alanında devlet politikası" başlıklı 5. Maddesi şöyle der: "Devlet, vatandaşlarının tam, üretken ve özgürce çalışma hakkını kullanmalarına yardımcı olacak bir politikanın uygulanmasını sağlar. seçilmiş istihdam" . Bilindiği gibi Azerbaycan'ın bağımsızlığından sonra mevcut ekonomik ilişkilerin ve ekonomik tabanın çökmesi, büyük işletmelerin çoğunun faaliyetlerinin tamamen veya kısmen durması istihdam alanında ciddi sorunlara neden olmuştur. 1990'lı yıllarda ülkede derinleşen ekonomik kriz de işsizliğin artmasına neden oldu. Bu nedenle 2000'li yıllardan itibaren Azerbaycan devleti istihdam sorununu çözmek için kapsamlı programlar geliştirmeye ve uygulamaya başlamıştır. Böylece, Haziran 2001'de Azerbaycan Cumhuriyeti'nin "İstihdam Hakkındaki" Kanunun kabulü onlar için geçerli değildi. "2006-2015 Yılı Azerbaycan Cumhuriyeti İstihdam Stratejisi", 2007-2010 yılı için "Azerbaycan Cumhuriyeti İstihdam Politikasının Uygulanmasına İlişkin Devlet Avantajları Üzerine Dİl bilgisi Dışı" ve "2011-Azerbaycan Cumhuriyeti İstihdam Stratejisi" 2015 "Yıllarca Devlet Programı" kabul edildi. Aynı zamanda yoksulluk Bölgelerin sosyo-ekonomik kalkınmasına ilişkin Devlet Programları, Azerbaycan Gençlik Kalkınma Stratejisi, istihdam, iş arayanların işgücü piyasasında işsizliğin ortadan kaldırılmasına yönelik rekabet güçlerinin artırılması gibi belge ve kavramlar, yeni işler yarattı.6 Aralık 2016 tarihinde Cumhurbaşkanlığı Kararnamesi ile onaylanan "Ülke ekonomisi ve ekonominin kilit sektörleri için Stratejik Yol Haritaları"nın ana hedeflerinden biri de ekonominin çeşitli sektörlerinde çalışan istihdamının sağlanmasıdır. Bu programların ana hedeflerinden biri, işgücü ile ekonomiyle uğraşanlar arasındaki niceliksel farkı azaltmaktır. Resmi istatistiklere göre, son 15 yılda ülkede 2 milyon yeni iş yaratıldı ve bunların 1.600.000'i kalıcı işler, bunların yüzde 80'i kalıcı işler. Ancak uzun yıllardır ülkede istihdam sorunlarının varlığı ve nüfusun artması, iş talebinin yüksek kalmasına neden olmuştur. Cumhurbaşkanı İlham Aliyev'in de yeni işler yaratmak için sürekli çalışmanın önemini vurgulaması tesadüf değil: "Son 15 yılda 2 milyon yeni iş yaratıldı. Nüfus 1,6 milyon arttı. Bu çok iyi bir göstergedir. Nüfus ne kadar büyük olursa, ülkemiz o kadar hızlı gelişecektir. Ama tabii ki ekonomik kalkınma, istihdam yaratma nüfus artışından daha hızlı ilerleyecek, artan nüfusa istihdam sağlanacak şekilde çalışmaya devam etmeliyiz.

1990'larda istihdam edilenlerin sayısı işgücünün yaklaşık yüzde 92'si iken 2005'te yüzde 75'e ve 2013'te yüzde 70'e düştü. İstihdam programları sonucunda bu oran geçen yıl yeniden yüzde 76'ya yükseldi. 1990'larda Azerbaycan'da işsizlik oranı yaklaşık %20, 2003'te %10,6 ve 2014'te %5,8 idi. Resmi istatistiklere göre 2018 yılında Azerbaycan'da işsizlik oranı yüzde 5'e düşürüldü. Kadınlar arasında - yüzde 5,9; 15-24 yaş arası gençler arasında yüzde 12,9; 15-29 yaş arası gençlerde ise yüzde 9,2 oldu. Azerbaycan'daki işsizlik oranının 2030 yılına kadar kadın ve genç işsizliği de dahil olmak üzere %4'e düşürülmesi planlanıyor. Bu, Cumhurbaşkanı İlham Aliyev tarafından onaylanan "Azerbaycan Cumhuriyeti'nin 2019-2030 İstihdam Stratejisi"nde yansıtılmaktadır. Azerbaycan'da tarım dışı çalışanların ekonomideki oranının 2030 yılına kadar %80'e çıkarılması planlanmaktadır . Karşılaştırma için, 2017'de Euro bölgesindeki işsizlik oranı %10,3 idi. Böylece işsizlik oranı İspanya'da yüzde 19,6, Fransa'da yüzde 9,9, Finlandiya ve Hırvatistan'da yüzde 8,8'dir. Yüzde 12,8, Belçika'da yüzde 8 vb. oluşturulan. BDT ülkelerinde bu rakam ortalama %17'nin üzerindedir [13]. 1 Mart 2019 itibarıyla Azerbaycan'da ekonomik olarak aktif nüfus 5.130.000 olup, bunun 4.876.000'i istihdam edilmektedir. Resmi istatistiklere göre, ülkedeki 4.876.000 çalışanın 1.523.800'ü sözleşmeli, 3.352.200'ü bağımsız çalışıyor. Cari yıl 1 Şubat itibarıyla 1 milyon 523,8 bin çalışanın 862,8 bini kamuda, 661 bini özel sektördedir. Ekonominin petrol sektöründe 34,3 bin kişi, petrol dışı sektörde ise 1 milyon 489,5 bin kişi çalıştı. Çalışanların yüzde 21,9'u eğitimde, yüzde 18,9'u ticarete; araç tamiri, %13,1 sanayi, %8,6 sağlık ve sosyal hizmetler, %7,1 kamu yönetimi ve savunma; sosyal güvenlik, yüzde 6,6 inşaat, yüzde 4,6 nakliye ve depolama, yüzde 3,5 mesleki, bilimsel ve teknik faaliyetler, yüzde 3,2 tarım, ormancılık ve balıkçılık, yüzde 1,7 finans ve sigortacılık faaliyetleri, yüzde 10,8 ekonominin diğer sektörlerinde yer aldı. Resmi istatistiklere göre ülkedeki işsiz sayısı 254.000. Ancak 1 Mart 2019 itibarıyla istihdam servislerine kayıtlı işsiz sayısı 24,7 bin olup, bunun yüzde 36,2'si kadındır. İşsizlik sigortası ödemelerinin ortalama miktarı 219.2 manat . Çalışan sayısının, istihdam edilen insan sayısından 3 kat daha az olması dikkat çekicidir. Bu durum, ülkede iş sözleşmesi olmayan ve istikrarlı işlerde çalışan çalışan sayısının yüksek olduğunu göstermektedir. Petrol dışı sektörü geliştirmeye, bölgelere büyük yatırımları çekmeye, bölgelerde yeni istihdam yaratmaya, işletmelere, altyapı tesislerine vb. yönelik tedbirler istihdamın sağlanmasında özel bir rol oynamıştır. Bu durum istihdam yapısında kamudan özel sektöre emek akışının koşullarını oluşturmuştur. Ekonomide çalışanlar içinde 2000 yılında yüzde 33,2 olan kamu sektörü çalışanlarının payı 2005 yılında yüzde 30,3'e, 2013

yılında yüzde 25,9'a ve 2016 yılında yüzde 24,6'ya düştü. 2018 yılında bu rakam yüzde 24'e düşerken, özel sektörde istihdam edilen kişi sayısı bu dönemde 1,5 kat arttı. Son 15 yılda devlet istihdam programlarının etkin bir şekilde uygulanması sonucunda bir takım sorunların çözüldüğü belirtilmelidir. Burada:

- etkili bir istihdam politikasının uygulanması için elverişli koşulların yaratılması;
- işgücü kaynaklarının kalitesini iyileştirmek ve ekonomik faaliyeti artırmak için uygun koşulların yaratılması;
- iş arayanların ve işsizlerin sosyal korumasının güçlendirilmesi;
- yüksek uluslararası standartlara uygun bir iş ortamının oluşturulması;
- işgücü piyasasındaki arz ve talep arasındaki dinamik eşleşmeyi ve diğer konuları güçlendirmeyi amaçlayan kurumsal ortamın iyileştirilmesi .

Azerbaycan'da istihdam artışı BDT ülkelerinin ortalamasını birkaç kez bile aştı. İstihdam artışının ağırlıklı olarak hizmet sektöründe gerçekleştiğini belirtmek gerekir. Ancak bu rakam gelişmiş ülkelerdeki kadar yüksek değil. Ancak borç verme, finans, sigorta ve s. Çalışan sayısında da artış var (danışmanlar, yöneticiler, krizle mücadele yönetimi, stratejik yönetim uzmanları, acil durum yönetimi, pazarlamacılar, denetim hizmetleri, güvenlik hizmetleri, özel adli yardım hizmetleri vb.).

Azerbaycan Cumhuriyeti İşgücü Piyasasındaki Güncel Sorunlar

Çalışma, Azerbaycan Cumhuriyeti'nin işgücü piyasasındaki birçok sorunu çözmek için koşullar yaratmış olsa da, istihdam alanında ciddi sorunlar devam etmektedir. Bu sorunlar temel olarak kalıcı işlerin olmaması, gençler arasında yüksek düzeyde göç ve işgücünün kalitesine yansımaktadır. İstihdamla ilgili sorunlar esas olarak gençlerin istihdamına yansımaktadır. Sonuç olarak, gençler arasındaki işsizlik her yıl artıyor, çoğu yoksulluk sınırına yakın kazanıyor ve ülkeyi terk eden gençlerin sayısı artıyor. Böylece 2018 yılına göre Azerbaycan'da genel işsizlik oranı yüzde 5 olurken, 15-29 yaş arası gençler arasındaki işsizlik oranı yüzde 9,2, 15-24 - 13,8 yaş arası gençler arasında yüzde 13,8 oldu. Bu durum genç işgücü piyasası alanındaki sorunların daha ciddi olduğunu göstermektedir. Genel olarak, son ILO raporları, her yıl yaklaşık 1.5-2 milyon gencin yeni bir işgücü haline gelen işsizler ordusuna katıldığını göstermektedir. Son istatistiklere göre dünyada Yaklaşık 650 milyon gencin yaklaşık 75 milyonu işsizdi. Genç işsizliği 2017'de dünya ortalamasının iki katından fazla artarak %13,1'e yükseldi. Unutulmamalıdır ki, ConEC'e göre gençlerin ülke nüfusunun yüzde 25,1'ini oluşturduğu dünya ortalamasının üzerindedir. 2020 başındaki istatistiklere göre Azerbaycan'da 14-29 yaş arası gençlerin sayısı 2.445.300'dü. Bu, ülkedeki 6.478.000 kişinin yaklaşık %38'inin genç olduğu anlamına geliyor. Bu nedenle genç istihdam sorunlarının çözümü, ülkemizde ekonomik kalkınmanın sürdürülebilirliğinin sağlanması açısından acil sorunlardan biridir . 2018 yılı resmi rakamlarına göre ülkedeki işsiz sayısı 253,8 bin kişi olarak gerçekleşti. Bunların yaklaşık 123.800'ü 15-29 yaş arası gençlerden oluşuyor. Görüldüğü gibi, toplam işsizlerin yaklaşık %50'sini genç insanlar oluşturmaktadır. Ancak bu rakam çok daha yüksek. Ancak son 7 yılda alınan tedbirler sonucunda ülkede 15-29 yaş arası gençler arasındaki işsizlik oranı %11,8 ile %9,2 arasında, 15-24 yaş aralığında ise %14,9 ile %13,8 arasında değişiyordu. azaldı. Bu başarılarından dolayı Azerbaycan Cumhuriyeti, genç istihdamı sorunlarının çözümünde ILO tarafından dünyanın önde gelen 10 ülkesi listesine dahil edilmiştir. Ancak, ülkede gençlerin etkin istihdamının önünde hala engeller bulunmaktadır. Bunlar şunları içerir:

- bölgesel ve sosyal çeviklik ve hareketlilik;
- arz ve talep istikrarı; - diğer gruplara kıyasla gençlerin düşük rekabet gücü;
- iş piyasasının gerekliliklerini dikkate almadan tüm olası mesleklerde genç uzmanların eğitimi; -İlköğretim mesleki eğitimin prestijinin azalması, gençlerin çağın gereklerine uygun mesleki eğitim alamamaları ve mesleki eğitim düzeyinin çok düşük olması.
- Eğitim kurumları ile işgücü piyasası arasında etkileşim oluşturabilecek bir mekanizmanın olmaması; - Mezunların çoğunun işgücü piyasasında kendilerini gerçekleştirme yeteneğinin olmaması;
- Genç mezunlar arasında işverenlerin ihtiyaç duyduğu deneyim ve profesyonellik eksikliği. Bu sorunları çözmek için gençlerin işgücü piyasasını düzenli olarak incelemek ve işverenlerin gereksinimlerini belirlemek önemlidir. Her yıl 100.000'den fazla genç Azerbaycan işgücü piyasasına giriyor. Ancak çoğunun eğitim düzeyi, işgücü piyasasının modern gereksinimlerini karşılamamaktadır. Dünya Ekonomik Forumu tarafından hazırlanan İnsan Sermayesi Endeksi'ne (2015) göre Azerbaycan 124 ülke arasında 63. sırada yer almaktadır. Azerbaycan'da farklı yaş grupları için en düşük kalite göstergesi (eğitim ve istihdam) 15-24 yaş grubuna, en yüksek gösterge ise 55-64

yaş grubuna aittir. Bu o Bu, ülkenin en nitelikli insan kaynağının yaşlılar arasında, en zayıfları ise gençler arasında olduğu anlamına gelir [16]. Ülkemiz, 25-54 yaş grubunda kalifiye eleman mevcudiyeti açısından dünyada 85. sırada yer almaktadır. Devlet İstatistik Komitesi'ne göre, 2014 yılında ülkedeki istihdamın yüzde 36,7'si tarıma düşmesine rağmen, yüksek ve ortaöğretim özel eğitim kurumlarında okuyan 218.690 öğrenciden sadece 2.658'i tarımsal uzmanlık alanında okuyor. Bu alanda kalifiye uzmanların eksikliği, tarımdaki düşük verimliliğin ana nedenlerinden biridir .

İstihdam Sağlamada Eğitimle İlgili Sorunlar

Dünya Ekonomik Forumu'nun (2020) Küresel Rekabet Edebilirlik Raporuna göre, Azerbaycan 141 ülke arasında 58. sırada yer alıyor. Azerbaycan "emek piyasası" (2018'de 21. / 40.), "iş dinamikleri" (23/31), "gıda piyasası" (23/37), "altyapı" (38/46) , "beceriler" (48/ 54), "kamu kurumları" (49/58), "piyasa ölçeği" (67/65), "yenilikçi potansiyel" (68/71). Azerbaycan, "BİT potansiyeli" (73/69), "finansal sistem" (96/96), "sağlık" (98/91), "makroekonomik istikrar" gibi rekabet edebilirlik göstergeleri açısından listenin ikinci yarısında yer almaktadır. 103/126) .Bu bağlamda, üretkenliğe dayalı bir kalkınma modeline geçişin zorlukları bağlamında iyileştirilmesi gereken en önemli alanlardan biri, beşeri sermaye geliştirme sürecinin kalitesini daha da iyileştirmektir. Nüfusun eğitim düzeyinin yaş gruplarına göre analizi, ortaöğretimin tüm yaş gruplarında geçerli olduğunu göstermektedir. Dolayısıyla hesaplamalar, istihdam edilen nüfusun sadece %16,7'sinin yükseköğrenim, %11'inin orta özel eğitim, %5,5'inin mesleki eğitim ve %66,8'inin orta ve yükseköğretim mezunu olduğunu göstermektedir. İstihdam edilen nüfusun %20,3'ü yükseköğrenim, %10,9'u ortaöğretim özel eğitim, %3,8'i mesleki eğitim ve %65'i orta ve ilköğretime sahiptir. Azerbaycan'da işgücü piyasasının en ciddi sorunu budur. Çünkü araştırmalar, ülkedeki mevcut işsizlik sorununun sadece iş yokluğundan değil, aynı zamanda işsizlerin ve iş arayan vatandaşların mesleki eğitim ve becerilerinin modern çağın gereksinimlerini karşılamamasından da kaynaklandığını açıkça göstermektedir. işgücü piyasası. Örneğin, ülkedeki piyasa yapılarının (ve hatta devlet kurumlarının) iş tecrübesi ve piyasa ekonomisinin ilkeleri hakkında bilgi sahibi uzmanlar aradığı bir gerçektir. Ülkede eğitim. Bu nedenle işsiz ve iş arayan vatandaşların ülkede istihdamını sağlamak, işgücü piyasasında rekabetçi ve çağdaş hale getirmek. gereksinimleri karşılayan ilgili meslek ve uzmanlıklara hakim olmayı gerekli kılar. Ancak istatistikler, mesleki eğitim alan insan sayısının son beş yılda biraz artmasına rağmen, mesleki eğitim alan gençlerin yüzdesinin düştüğünü göstermektedir. Yükseköğretim sorunu, işgücü piyasasının gereksinimlerini karşılayan uzmanların yetiştirilmesi sorununda kendini göstermektedir. Böylece ülke ekonomisinin dinamik gelişimi, işgücü piyasasının yüksek nitelikli personel ihtiyacını artırmıştır. Ne yazık ki, ülkedeki pek çok üniversite, modern gereksinimleri tam olarak karşılayabilecek personel yetiştirememektedir. Bunun temel nedenlerinden biri, birçok üniversitenin halen modern gereksinimler düzeyinde yükseköğretime sahip olmaması, ikinci temel neden ise planı tamamlamak için eğitim düzeyi düşük gençlerin üniversitelere kabul edilmesidir. Çalışma ve Sosyal Koruma Bakanlığı'nın birkaç yıl önce yaptığı bir araştırmaya göre, bugün ülkede yüksek öğrenim gören gençlerin %40'ının işgücü piyasasında yerinin olmaması tesadüf değil. Gençlerin edindiği uzmanlıklar ve bilgi düzeyi bazen mevcut işgücü piyasasının gereksinimlerini karşılamamaktadır. Sorunun tam anlamıyla çözülebilmesi için, yükseköğretim kurumlarının ülkenin sosyo-ekonomik kalkınmasının gereklerine uygun bilgi ve beceriye sahip uzmanlarla gelişimini ve eğitim, araştırma ve inovasyona dönüşümünü destekleyecek standartlar geliştirilmeli ve uygulanmalıdır. merkezler. Bunun için gelişmiş ülke deneyimlerinin incelenmesi, yurtdışında eğitim görmüş gençlerin yükseköğretim kurumlarına çekilmesi, üniversitelerin araştırma merkezleri haline getirilmesi önemlidir. Avrupa'da her yıl gençlerin en az yüzde 20-25'i mesleki eğitime giderken, Azerbaycan'da bu oran yüzde 10'un altındadır. Çoğu okuldan atılıyor ve sertifika almak için meslek okullarına gitmeye zorlanıyor. Araştırmalar, önümüzdeki 10 yıl içinde dünyadaki işlerin yarısından fazlasının yüksek eğitimli profesyoneller yerine orta düzey profesyoneller tarafından doldurulacağını gösteriyor. Bu profesyoneller mesleki eğitim yoluyla yetiştirilecektir. Azerbaycan gibi gelişmekte olan ülkeler için mesleki eğitim daha da önemlidir. Bu nedenle, Avrupa'da mesleki eğitimin karşı karşıya olduğu görev, basitçe ifade etmek gerekirse, vatandaşın bilgisidir.

İstihdam Sağlamada Yeni Bir Aşama

Son 10-15 yılda ülkede istihdamın sağlanması ve işsizliğin ortadan kaldırılması için büyük çalışmalar yapıldı. 2016 yılından bu yana ülkede uygulanan reformlar yeni bir niteliksel aşamaya girmiş olup, ana hedefler ülke ekonomisi ve ekonominin kilit sektörleri için Stratejik Yol Haritalarına yansıtılmıştır. İstihdamın sağlanması, ekonomiye rekabetçi bir işgücünün sağlanması, esnek işgücü piyasası politikaları sağlayan kurumlar aracılığıyla sosyal diyalogun geliştirilmesi ve kapsayıcı istihdamın artırılması temel stratejik hedef ve öncelikler olarak belirlenmiştir. Stratejik Yol Haritası, 2025 yılına kadar GSYİH'nın %3'ünden fazla yıllık ortalama reel büyüme ve

450.000'den fazla yeni iş yaratılmasını öngörüyor. Bu istihdamların yaratılması 3 faktörün etkisiyle mümkün olacaktır: I) Stratejik Yol Haritası çerçevesinde alınan tedbirler; II) diğer ek önlemler ve III) genel ekonomik ortamın iyileştirilmesi sonucunda ekonomik büyüme oranındaki artış. Ekonominin sektörlerine göre planlanan tedbirlerin uygulanması sonucunda kayıt dışı istihdamın payı azalacaktır. Yeni işler yaratmak, yani yeni üretim tesisleri oluşturmak ve bunların devreye alınmasını organize etmek, istihdamın sağlanmasında önemli rol oynamaktadır. Bu amaçla, hükümetin karşı karşıya olduğu en önemli konular, modern standartları karşılayabilecek büyük üretim tesislerinin oluşturulması, iş geliştirme için kapsamlı koşulların oluşturulması, girişimcilere devlet düzeyinde yardım edilmesidir. Yeni işler yaratmak, işgücü değişimleri, mesleki eğitim, yeniden eğitim ve ileri eğitim kursları aracılığıyla gençlerin iş bulmalarına yardımcı olmak, istihdam alanındaki devlet politikasının ana yönleridir. Genel olarak, bu alandaki analiz, Cumhuriyet işgücü piyasasındaki durumun çok karmaşık olduğunu göstermektedir. Bu, istihdam politikasının sürekli iyileştirilmesini gerektirir. Bu amaçla istihdam programları çerçevesinde aşağıdaki alanlarda sistematik tedbirler alınmaktadır:

- Mesleki eğitim ve ek eğitim ağı dahil olmak üzere personel eğitim sisteminin dinamik olarak gelişen işgücü piyasasının gereksinimlerine uyulanması;
- Yapısal reformların derinleştirilmesi, yatırım faaliyetlerinin artırılması;
- Yüksek düzeyde insan sermayesi gelişiminin sağlanması;
- İşsizlerin işgücü piyasasında rekabet gücünü artırmak, yeni meslekler edinmelerine yönelik kurslar düzenlemek;
- İşçilerin çalışma haklarının korunmasının güçlendirilmesi, üretim ve inşaat iş güvenliğini sağlamaya yönelik tedbirlerin etkinliğinin artırılması;
- İşgücü piyasasında gençlerin ve kadınların rekabet gücünü artırmak;
- Gençler ve kadınlar arasında girişimciliğin geliştirilmesi, yeni meslekler edinmeye yönelik kursların düzenlenmesi;
- Çocuk işçiliğine ilişkin ilgili uluslararası sözleşmelerden ve Uluslararası Çalışma Örgütü belgelerinden doğan yükümlülüklerin uygulanmasına yönelik tedbirlerin güçlendirilmesi
- Yüksek uluslararası standartlara uygun iş ortamının oluşturulması, yatırım faaliyetlerinin artırılması;

Sonuç

- Ülke işgücü piyasasındaki mevcut durum ve istihdamın sağlanmasındaki sorunlar, gençler de dahil olmak üzere nüfus analizimizi özetleyerek, İstihdamı artırmak için aşağıdaki önerilerin uygulanması gerekmektedir:
- Ulusal ve uluslararası işgücü piyasasının gereksinimlerini karşılayan rekabetçi personelin yetiştirilmesi, eğitim düzeyinin ve mesleki öğrenci sayısının artırılması;
- Yükseköğretim kurumlarında “eğitim-araştırma-yenilikçilik” formatında gelişimin teşvik edilmesi, ilk mesleki ve ortaöğretim özel eğitimin işgücü piyasasının gereksinimlerine uyulanması
- Gençler arasında mesleki eğilimlerin tespit edilmesi ve bu eğilimlerin işgücü piyasasının gereksinimlerine uygunluk derecelerinin belirlenmesi için düzenli izleme yapılması;
- Gençleri ilk meslek okullarına çekmek, ortaokullarda ilk meslek okullarının faaliyetlerine yönelik propaganda çalışmalarını güçlendirmek, meslek okullarından mezun olanlara belirli avantajları tanımak;
- İlköğretim meslek okullarından mezun olan gençler için işgücü piyasasındaki istihdam olanaklarını artırmak için mesleki eğitim sisteminin iyileştirilmesi;
- Yükseköğretim kurumlarının mezunlarını ve öğrencilerini ilk mesleki ve orta mesleki eğitim kurumlarının mezunları için uzmanlık alanlarındaki işlere çekmek için aktif önlemlerin uygulanması (örneğin, işverenlerin katılımıyla fuarlar düzenlenmesi);
- Gençleri işgücü sıkıntısı çeken bölgelere gitmeye teşvik etmek için gerekli yaşam ve istihdam altyapısının oluşturulması;

- Girişimciliğin geliştirilmesi, gençlerin kendi kendini yönetmesinin ve ekonomik olarak kendi kendine yeterlilik becerilerinin geliştirilmesi;
- İşverenler ile eğitim kurumları arasında bir sosyal ortaklık sisteminin kurulması, eğitim sonuçlarının işgücü piyasasının gereksinimlerine uyarlanması ve okul terklerinin staj ve istihdamı için bir mekanizmanın geliştirilmesi, işverenlere pratik olmayan gençleri işe almaları için belirli faydaların öngörülmesi tecrübe etmek;
- Yenilikçi fikirlerin ve yaratıcı girişimlerin uygulanması, pratikte uygulanması için bir temel oluşturulması, bilim ve teknoloji alanında çalışan gençlerin sayısının artırılması vb.
- İşgücü piyasasındaki personel talebi ve eğitimi konusunda bir bilgi sisteminin kurulması, istihdam alanında Ulusal Bilgi Sisteminin kurulmasının hızlandırılması;

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Ecological Sustainability Indicators of Banks

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Abstract: The increased interest in measuring sustainable development stems from studies that highlight the difficulties in measuring non-financial information and offer guidelines for developing common evaluation frameworks. The reporting of environmental information is currently often underestimated and lags behind the information on financial, economic and social indicators due to the indirect impact of the banking sector on climate change. After the detailed analysis of the literature review, it is found that banks have an interest in measuring environmental sustainability to meet the expectations of stakeholders rather than financial gain. The paper focuses on the importance of mandatory regulations for environmental sustainability in the European context, and more specifically on those that have been introduced in recent years and for which there are many questions. The specific indicators proposed by the various working groups and initiatives for measuring environmental sustainability, their pros and cons and the corresponding future recommendations were also examined.

Keywords: sustainability, ecological indicators, EU banks, regulations

INTRODUCTION

The sustainable finance market is growing, supporting real economic change. Despite the challenging macroeconomic environment due to the COVID pandemic, European ESG bond and loan issuance has increased 58.8%, just in 2020, amounting to €398 billion.¹ While a lot has been achieved, the scale of what will be needed to meet the objectives of the Paris Agreement and the Sustainable Development Goals cannot be understated. According to a recent report by the Global Financial Markets Association and Boston Consulting Group, investment needs will amount to \$100-\$150 trillion over the next three decades, to fund the transition to a low-carbon economy. This translates to at least \$3-\$5 trillion of investment per year – an increase of five to eight times from current levels. The United Nations has estimated that for the complementary ambition of reaching the Sustainable Development Goals, the annual funding gap is \$2.5 trillion per year. It is evident that the challenge is staggering – and the financial sector will be crucial in meeting it.²

Banks are subject to a plethora of sustainability requirements. Some of these are mandatory, imposed by regulatory authorities, whereas others are voluntary. The main problem in the implementation of voluntary codes is their focus primarily on the business side of sustainability. Or in other words, they can be accepted by any financial institution without completely changes the business and towards sustainable development.

Financial institutions are both impacted by and capable of contributing to climate risks in a number of ways. This is why many global regulators are prioritising appropriate climate risk disclosures as part of ensuring the broader transition of the financial services industry to more sustainable, and positively impactful, business models. To do this it is essential that financial institutions develop a framework that both identifies the required disclosure standards and their materiality triggers, alongside a comprehensive understanding of precisely which activities of the institution influence their entity level disclosures.

1. GOVERNMENT ENVIRONMENTAL MEASURES AND INITIATIVES

Climate change and environmental protection are among the most significant challenges of our time to achieve sustainable development. The global importance of sustainability is reflected in changing consumer expectations, as well as in national and international regulations (Appendix A).

The ESG disclosure requirements applicable to banks are contained in a number of different regulatory reform initiatives, which address multiple aspects of the transition to sustainable finance. Banks accordingly need to map the obligations that they (and their divisions – e.g. lending, corporate finance, wholesale markets, asset management and private banking) are subject to across the ESG framework in order to:

¹ <https://www.afme.eu/Publications/Data-Research/Details/AFME-European-ESG-Finance-Quarterly-Data-Report-Q4-2020>

² <https://www.un.org/press/en/2019/dsgsm1340.doc.htm>

- Manage the risk of conflicting or inconsistent information being disclosed
- Ensure consistency and/or alignment of disclosures
- Identify the overlaps in the reporting pillars where common reporting metrics can be leveraged.

The identification of common or overlapping disclosures allows for the mapping of disclosure requirements by disclosure category or “pillar” (for example, governance, risk, monitoring, etc.), in order to facilitate a central framework based on common terminology where possible. Accordingly, the aim is to identify the overlaps and alignments between the different ESG regulatory reform initiatives from which it has been identified the following common reporting pillars:

- Governance
- Business Strategy
- Risk Management
- KPIs

A central component to unlocking change at the scale needed is for the regulatory framework to enable the procurement and disclosure of high-quality, comparable ESG data. The European Commission’s Non-Binding Guidelines on Non-Financial Reporting (June 2017) contain 6 key principles for good non-financial reporting, namely that disclosed information should be:

1. Material;
2. Fair, balanced and understandable;
3. Comprehensive but concise;
4. Strategic and forward-looking;
5. Stakeholder oriented; and
6. Consistent and coherent.

The global financial sector has the potential to support the transition to a sustainable economy by linking financing needs to global sources of funding. Scaling up sustainable finance worldwide is a challenging task, for which coherent definitions of sustainability across jurisdictions and a higher degree of standardisation and transparency on data are necessary. Europe is one of the most advanced jurisdictions in this area, with both regulators and financial institutions demonstrating an unparalleled level of ambition on sustainability and showcasing credible commitments and consistent rules to reach the global goals. The EU needs to keep the level of its ambition, without losing sight of the global developments should it wish to become a beacon for international action, paving the way for other jurisdictions to follow suite.

European Union (EU) legislation requires large companies to disclose information on social and environmental challenges. Since 1973, the EU has adopted six Environmental Action Programs (EAPs). In 2001, the EU launched its Sustainable Development Strategy, which complements the Lisbon Strategy for Promoting Growth and Jobs with an Environmental Dimension. In line with these strands, the Europe 2020 strategy³ aims to deliver “smart, inclusive and sustainable growth”. The “Resource Efficient Flagship Initiative in Europe”⁴ identifies the path to sustainable growth and supports the transition to a resource-efficient, low-carbon economy. The EU’s ambition to maintain its leadership in environmental protection is reflected in its long-term vision for 2050. Europe to be the first climate-neutral continent. The Community is introducing new key climate and energy measures to stimulate the “contribution” of clean energy to zero net greenhouse gas emissions in Europe by 2050 (Gercheva, 2020).

³ In 2013, the Council and the Parliament of Europe adopted the Seventh Environment Action Program for 2020, entitled “Living well within our planet”. Based on the Program, it also emphasizes the need for better implementation of EU legislation in the field of environment, state-of-the-art science, investment and the integration of environmental aspects into other policies. The Europe 2020 strategy is the EU’s agenda for growth and jobs for the current decade. It emphasizes smart, sustainable and inclusive growth as a way to address structural weaknesses in the European economy, increase its competitiveness and productivity, and maintain a sustainable social market economy (Europe 2020 strategy).

⁴ Europe’s resource efficiency strategy is part of the Europe 2020 strategy - the EU’s growth strategy for a smart, inclusive and sustainable economy. It supports the transition to sustainable growth through resource efficiency and a low-carbon economy.

1.1. Link between environmental reporting and financial performance of banks

ESG factors became the hallmark of sustainable finance, and their integration in the DNA of banks and financial institution encompasses strategy to investment and credit decisions to risk management all the way to external reporting. Between 2015 and 2020, only about 40% of studies focused on the banking sector, and most of them showed conflicting results. They support the current thinking that adopting a strategic focus on ESG issues can lead to financial outperformance (Kotsantonis, 2019).

Previous researches (up to 2019) globally in the field of sustainability reporting in the banking sector has been grouped into (Osman, 2020): 1) researches analyzing the development of disclosure of information about sustainability and its environmental aspect (Appendix D); 2) studies analyzing the impact (negative and positive) of sustainability information on banks' financial performance (Appendixes E,F); 3) studies analyzing the impact of sustainability reporting (CSR) initiatives/ frameworks on banks (Appendix G)

From the first group of studies to 2019 it has been clear that no special attention is paid to the environmental aspect of sustainability. It is considered alongside the social factor or as part of sustainability. Therefore, banks should further develop in the area of sustainability reporting by focusing on its environmental aspect as well. From the second group of previous studies it can be argued that there is a relationship between sustainability and financial indicators of banks, although indirect at first glance. The most frequently used financial indicators in the scientific literature are ROA and ROE, which can also be used in other studies, especially for European countries. Recently focusing on the importance of financial performance, Dhar (2021) aims to show how environmental accounting reporting practices influence financial performance. The research of Felita (2021) shows that sustainability reporting positively influence the banking company performance. The study for 220 Sub-Saharan African banks for the period 2007-2018 finds that sustainable banking initiatives improve the financial performance of these banks. Positive impacts of environmental reporting on banks' FP were identified in Vietnam banks by Chi (2022). The study for African banks (2022) concludes that increased sustainability reporting enhances bank performance in the long term. Among others, the study of Attah-Botchwey (2022) recommends that policymakers must develop a sustainability framework specific to the banking industry's needs.

However, the empirical results of Fijałkowska (2018) reveal that in case of banks in the Central and Eastern Europe (CEE) region being socially responsible is not reflected in the bottom line. The results of De Silva (2019) conclude that there's no significant difference in sustainability disclosures between listed banks and financial institutes and the number of disclosures has no significant influence on institutes' financial performance.

In EU, despite the presence of a common market, the analysis reveals that the orientation toward the SDGs is different between the Member States (Cosma,2020). The "scope" of contribution to SDGs from the European banks is narrow. It is higher in emerging countries such as Estonia, Croatia, and Poland with significant differences in comparing banks operating in the same country.

Study of Buallay (2021) which investigates the relationship between the level of sustainability reporting and banks and financial services sectors' operational, financial and market performance using data from 4458 observations in 60 different countries for 10 years (2008– 2017) pinpoint a negative relationship between ESG on one hand and operational performance (ROA), financial performance (ROE) and market performance (TQ) on the other hand. The results of Bătae (2021) show a positive relationship between emission reductions and financial performance but market investors do not value a bank's involvement in social responsibility initiatives and do not endorse the adoption of best governance practices that could reduce the riskiness of a bank's portfolio. Companies are using ESG disclosure to demonstrate that their corporate activities do not damage the environment and society, and the board of directors are engaging in an open dialogue with stakeholders (Tariq, 2021).

According to the study of Dogan (2021) whether the banks' sustainability score is high or low does not cause any change in their financial performance. Results of Koundouri (2022) showed that such a connection seems to exist at least for some specific parameters, while for others, such a claim cannot be supported.

In summary, it can be concluded that the reporting of environmental information by banks has a positive impact on financial performance in developing countries, while in the EU such a correlation is not found in most (almost all) of the studies reviewed.

In that case, the question is why do banks strive to adhere to certain requirements and report according to certain frameworks, regulations, etc. Next, the report examines the purpose of adoption and compliance of

known sustainable development initiatives, frameworks and regulations and how stakeholders are responding to them.

1.2. Link between environmental reporting and stakeholder theory

Banks and financial institutions endeavored to reinvent their business, realign capital flows toward sustainable investments and integrate sustainability in risk management to restore trust, transparency and longevity. This leverages the growing attention of stakeholders to the new socially responsible practices and the application of proper governance. The attention on ESG issues in the bank decisionmaking processes (particularly for lending decisions) is driven by heightened pressure from shareholders and different stakeholders (Kotsantonis, 2019)

This is in accordance with the studies of stakeholder theory. Freeman described two definitions of Stakeholders: generally as a “group of people or individual, who have an im-pact, or is impacted by the organizations objectives’ achievements”, and specifically, as the “group of people or individual, who play an essential role in the survival and success ofthe company”. Zeitlberger believed that the pressure of environmental concerns is leading to the environmental responsibility taken by businesses around the world. Thus, after 15 years of massive investment into US economy, the European banking system is shifting towards domestic markets primarily due to social responsibility aspects.

Following the stakeholder theory, some authors such as Post, Preston, and Sachs argue that companies should apply those social, environmental, and corporate governance aspects that are necessary, regardless of the costs incurred or the income they produce.

Many of the decisions of these interested parties could be based on the environmental aspects of the services offered. Therefore, there is an increasing pressure that forces banks to change their management systems to meet these growing demands. Meanwhile, although it is true that the banking industry cannot generate serious problems of environmental pollution, it is also true that great savings can be achieved in the billing of electricity, water, fuel, and the use of paper, among others, if corrective measures for environmental improvement are adopted (Jeucken, 2010). In this sense, it is necessary to highlight the works of Jo et al.(2015), Finger et al. (2018), and Laguir et al.(2018), who strictly analyzed the creation of value through the environmental activities carried out by banks. Specifically, Jo et al. examined whether corporate environmental responsibility plays a role in improving operational performance in the financial services sector of 29 countries. Their results show that the reduction of environmental costs requires at least one to two years before improving financial performance, being the fastest process in developed markets and slowest in the developing markets. Finger et al., who also distinguished between banks from developed and emerging countries, analyzed the effect of the adoption of the Equator Principles on banks’ financial performance. Their results show that in developed (emerging) countries, the adoption of the Equator Principles is associated with an increase (decrease) in financing activity and the participation of interest income. They also indicate that these results show that the adoption of the Equator Principles is a strategic decision for banks in emerging countries and a form of greenwashing in developed countries. Meanwhile, Laguir et al. focused on the French banking sector, and document that the environmental and financial performance of banks is mutually reinforcing, suggesting that there is a complex bidirectional relationship between both magnitudes. The results of Quirós (2019) reveal that there is great pressure from financial stakeholders to adapt banks’ management systems and incorporate environmental aspects.

Therefore, banks are more likely to adopt sustainable and environmental reporting requirements to meet stakeholder expectations and be ethical than financial benefits. But there is definitely a need for transparent disclosure of environmental sustainability, given the scale of environmental issues and the banking sector's potential for change.

1.3. Voluntary or mandatory environmental reporting?

Again from studies up to 2019 (Appendix G) it is clear that there are conflicting opinions about initiatives and voluntary codes of conduct in the field of sustainable development reporting, including and environmental sustainability as the trend is towards standardization of reported information. (Osman, 2020) The main problem with them is in their implementation itself, since they are voluntary. But even they help to integrate sustainability into the core business of banks and create certain pressures on those who do not accept such codes of conduct (Weber, 2015).

Facing sustainability issues and criticism by non-governmental organizations (NGOs), the financial sector has adopted various voluntary codes of conduct to manage sustainability risks, such as environmental and social risks in lending, project finance and investment. These codes of conduct do not enable an adequate climate change performance to be observed for three general reasons. First, codes of conduct are voluntary, and it is unknown what changes in processes, financial risks and socio-ecological impacts they are associated with.

Furthermore, differences in reporting quality are mainly caused by the size of members. It seems that environmental reporting is a function of the size of the reporting entity and depends on financial resources. Reporting about complex interactions needs expertise that is usually only available at bigger financial institutions.

Other voluntary codes of conduct⁵ have guidelines about how financial institutions should address social and environmental issues, including climate change, but they do not have guidelines about how to report on them. Moreover, even if the codes of conduct do include guidance on disclosing compliance, empirical studies find that only positive aspects are reported.

For instance, Weber (2018) found that the disclosure behaviour of banks is relatively similar and follows an isomorphism trend. Without any external pressure and regulations, members of codes of conduct agree on certain practices that work for all members. This means that there is no incentive to become the most transparent reporting institution, but there is, rather, the trend to mimic the relatively low reporting standards. These weaknesses of the voluntary codes of conduct led to the argument that they are more for reputational purposes as opposed to substantive climate change management integration.

Empirically, banks and the financial sector have received limited attention in the environmental accounting literature. The financial sector has not been regulated with regards to its environmental impacts, and, therefore, research has been focused on determining what is reported in voluntary disclosures. According to Esposito et al. (2019), extant literature lacks studies that focus on the role of regulatory changes in determining actors' attitude and actions toward sustainable finance (Bengo, 2020). This concern is shared by other scholars such as for example Nicholls (2010) and Brest and Born (2013).

The poor quality in disclosure is also influenced by institutional and methodological accounting aspects. Institutionally, it appears that the voluntary nature of reporting incentivizes the use of voluntary reporting largely as a reputational tool.

Climate-related reporting in the financial industry is still in its infancy, not very transparent and fragmentary. The indirect relation between banking and climate change is one of the reasons why banks struggle with climate-related reporting. Missing standards and institutional pressure from regulators or by sectoral peers could be reasons for the current state of climate-related reporting

There is a need for stronger participation of financial regulators with regard to climate-related financial risks and risk reporting. It is evident that the financial sector's connection to climate change is twofold and includes both risks and opportunities. Finally, the role of financial regulators and central banks should be addressed (Folger, 2018).

Cerrone (2022) describes the change of banking regulation toward governance and environmental sustainability challenges. It shows that it has not been fully understood how these new types of environmental risks affect differently banking activity. As risks are global and systemic, it is necessary regulatory coordination.

Regulators are now aware that there are linkages between natural disasters and financial market instability. For this reason the European regulatory framework for sustainable finance has greatly developed. European leadership in sustainable finance has given rise to several regulations. In particular, banks will consider the CRR Pillar 3 and EU taxonomy disclosures, also because EBA is also aligning its position to this view.

The structural shift toward the green transition and the climate crisis is exposing banks to physical and transition risks, which they need to be ready to manage. Banks will need to strengthen their risk management frameworks and reassess their business strategies. A recent ECB assessment shows that banks have made some progress in adapting their practices to manage these risks, but none are close to meeting the supervisory

⁵ such as the Impact Investing and Reporting Standards (IRIS), the GABV, the United Nations Environment Programme Finance Initiative (UNEPFI) and the United Nations Principles for Responsible Investment (UNPRI)

expectations (ECB, 2021).⁶ For this reason, supervisors have already planned a number of specific measures for next years and beyond, including a thematic review of banks' environmental risk management practices and a stress test on climate-related risks. Many of the proposed regulatory changes actually stem from research conducted by the European Banking Authority and the ECB and are focused on issues identified in the use of internal models by European banks. Regulators and supervisors are running in giving guidelines and new frameworks to induce banks to pay more and more attention to these risks.

The whole supervisory process is reshaping by introducing the measurement of ESG risks and climate-related risks but the greatest problem is due to the huge relevance of these risks and the overlapping of rules, regulations, and guidelines that are still at an early stage but are renewing the banking activity whose main role to bring the economy to put in practice a real new green deal (Cerrone, 2022). Swift action by governments to steer the transition towards a greener economy could fruitfully interact with financial stability-focused prudential regulation to ensure that the financial sector contributes effectively to the economic transformation. Through a combination of carbon taxes and subsidies as well as guarantees, public authorities should seek to meet emissions reductions targets and, also, to facilitate an orderly transition to a more sustainable economy. At the same time, this policy mix would help to reduce the overall exposure of the financial system to both physical and transition risks. Combined with a well-designed climate-related microprudential framework, this could help the banking system to manage these risks and, thus, to contribute effectively to the economic transformation (Coelho, 2022).

Report of Financial Stability Board (2022), based on a review of current practices, provides recommendations to assist supervisory and regulatory authorities in developing their responses to monitor, manage and mitigate risks arising from climate change and to promote consistent approaches across sectors and jurisdictions. The recommendations encourage authorities to accelerate in the identification of their data needs for supervisory and regulatory objectives, identify relevant types of data and metrics that they may require from financial institutions and provides key policy considerations to assist authorities in their future work, where appropriate, towards expanding regular standardised regulatory reporting requirements.

Therefore, it has become important for banks to start to incorporate climate change into their risk management frameworks and strategic planning, by assessing their current loan portfolios and banking operations for any physical and transition impacts. Therefore, banks should start to improve the accuracy of information available on climate risks and developing internal systems to manage and monitor climate risk. In recent years, there is also an expectation from banks to adapt a responsible and sustainable banking model to make societies resilient to environmental shocks. This introduces another layer of challenge and complexity to banks' strategies and risk management (Feridun, 2020).

As climate-related financial risks continue to receive increasing attention, regulatory authorities are expected to set regulations with respect to banks' public disclosure, capital planning, and governance processes.

Next, in this article is showed the progress of regulations and supervisory approaches with respect to the management of financial risks from climate change. Although the development of regulations is still in progress across the world, this does not mean that banks can be complacent. For instance, the EBA explicitly expects banks to act on climate-related risks as soon as possible, rather than waiting for the related rules to be finalized. This paper reviews, from a technical point of view, the challenges that authorities would face in seeking to adjust the prudential framework to cope with climate-related financial risks, and discusses different policy options.

PROPOSED KPIS FROM EUROPEAN REGULATORS THE CONS OF PROPOSED KPIS

2. UNDERSTANDING THE RECENT RELEVANT FRAMEWORKS IN EU

The regulatory framework for sustainable finance has developed at a rapid pace over the past few years in the EU. A mandatory disclosures regime for financial and non-financial companies was already developed back in 2018 and constituted the second block in the EU action plan on financing sustainable growth. In 2021 the

⁶ ECB. The State of Climate and Environmental Risk Management in the Banking Sector. 2021. Available from: <https://www.bankingsupervision.europa.eu/ecb/pub/pdf> [Accessed: 2021-12-10]

European Commission's revised Strategy for Financing the Transition to a Sustainable Economy proposed a series of ambitious actions to strengthen sustainability disclosures standards in the EU, for example by improving science-based target-setting, as well as disclosure and monitoring of the financial sector's commitments.

Corporate transparency on sustainability issues is a prerequisite to enable financial market actors to properly assess the long-term value creation of companies and their management of sustainability risks. Environmental reporting is ineffective when longer-term risks are not fully transparent or are not reported in a uniform, comparable way and thus cannot be taken into account or used for comparability purposes. Corporate transparency on sustainability will not only inform market participants, but also help to steer companies in a more sustainable and long-term direction.

The sustainability initiatives considered by AFME (Association for Financial Markets in Europe)⁷ include: The Non-Financial Reporting Directive ("NFRD"); the guidelines of the Task Force on Climate-related Financial Disclosures ("TCFD"); the Taxonomy Regulation ("Taxonomy"); the Sustainable Finance Disclosure Regulation ("SFDR"); the Low Carbon Benchmark Regulation ("LCBMR"); the ECB Guidelines on climate-related environmental risks and the European Commission guidelines on non-financial reporting and climate risk; and the changes proposed to Pillar 3 disclosures under the Capital Requirements Directive ("CRD"), Capital Requirements Regulation ("CRR"), Investment Firms Directive ("IFD") and Investment Firms Regulation ("IFR").

It is nonetheless important to flag certain other initiatives relevant to the European ESG disclosures landscape. These are the:

- IFRS Foundation's Consultation on Sustainability Reporting that is believed to establish a foundation for the development of comparable and consistent global sustainability reporting standards;
- Global Reporting Initiative (GRI) Sustainability Reporting Standards which set out best practice for reporting publicly on a range of economic, environmental and social impacts (including positive and negative contributions to sustainable development); and
- Sustainability Accounting Standards Board (SASB) Standards which are industry-specific standards that set out a minimal set of sustainability topics and associated accounting metrics.

This article will focus on the NFRD, SFDR, Taxonomy Regulation and changes proposed to Pillar 3 which are mandatory and challenging to them.

2.1. Non-financial Reporting Directive

To foster transparency and long-termism, the EU Commission has adopted the NFRD (2014/95/EU). It requires large public interest entities with over 500 employees (including banks and insurance companies) to disclose non-financial information. Further, they should include in public reports material issues and policies implemented in relation to:

- environmental protection
- social responsibility and treatment of employees
- respect for human rights
- anti-corruption and bribery
- diversity on company boards (in terms of age, gender, and educational and professional background).

Within this framework, in June 2019, the EU Commission published Non-Binding Guidelines on Reporting Climate-Related Information in order to foster accurate climate reporting. These guidelines integrate the recommendations of the Financial Stability Board's Taskforce on Climate-related Financial Disclosures (TCFD) and take account of the EU Taxonomy on sustainable activities. The most commonly referenced framework in the case of climate disclosures is the TCFD framework. In recognition of this, regulators in the EU have referenced the TCFD framework throughout the development of legislation and supporting guidance on

⁷ AFME (2021) ESG Disclosure Landscape for Banks and Capital Markets in Europe, https://www.afme.eu/Portals/0/DispatchFeaturedImages/FINAL_%20AFME%20White%20Paper_%20ESG%20Disclosure-2.pdf

climate related disclosures. A number of financial institutions throughout the EU already make TCFD-aligned disclosures since they have global applicability and recognition and are a useful starting point when considering which standards a global financial group should adhere to. While not currently binding, the guidelines contain reporting requirements for companies under the scope of NFRD and include a separate annex for banks and insurance companies, whereby they are recommended to report (Supplement on reporting climate-related information, 2019)⁸

The EU Commission is also assessing responses to the public consultation on the need to revise NFRD provisions. It is expected that the scope of the Directive will be enlarged in respect to the reporting entities as well as its content, in particular on aspects related to climate change. Respondents called for consistency between the EU legislation, and more specifically, for an alignment of the NFRD with EU Taxonomy regulation requirements. It is also expected that common European Non-Financial Reporting Standards will be developed, as per the recent mandate given to the European Financial Reporting Advisory Group (EFRAG) to start preparatory technical work, though the final decision on the need for such standards is still pending.

2.2. Sustainable Finance Disclosure Regulation (SFDR)

The new policy of the EU Sustainable Finance Disclosure Regulation (SFDR) 2019/2088 came into force on March 10th, 2021. The SFDR stresses social and environmental compliance disclosure and reporting obligations for financial services participants such as asset managers and investment funds, which are now required to define their strategic positioning with respect to sustainability.

Sustainability is becoming the main character of the financial industry in Europe, especially after the SFDR. Such regulation defines a new institutional context in which sustainability issues can become a game changer for the functioning of the financial sector. However, despite the various types of obligations and top-down indications for disclosing and reporting sustainability practices provided by this new policy, financial actors still lack a comprehensive framework on how to track and measure their social and environmental contributions within the perimeter of this novel institutional context. In particular, one of the main limitations is that it hardly reconnects to the practices of social impact measurement that are currently available for financial actors to assess their environmental, social and governance contributions (from now on ESG).

The SFDR was introduced by the European Commission alongside the Taxonomy Regulation and the Low Carbon Benchmarks Regulation as part of a package of legislative measures arising from the European Commission's Action Plan on Sustainable Finance. Is SFDR different to the taxonomy regulation?

Yes – but they interrelate. The Taxonomy Regulation is the EU Commission's principal mechanism to address "greenwashing" as it sets out criteria for determining if an activity is environmentally sustainable, including whether the activity contributes to, or does not significantly harm, one or more specified environmental objectives. The Taxonomy Regulation requires further disclosures which need to be made in addition to those set out in the SFDR. The taxonomy regulation is effective from 01 January 2022.⁹

The European Commission adopted on 6 April 2022 a technical standards to be used by financial market participants when disclosing sustainability-related information under the Sustainable Finance Disclosures Regulation (SFDR). Today's Delegated Regulation specifies the exact content, methodology and presentation of

⁸ For example:

- Volume of financial assets funding sustainable economic activities that contribute substantially to climate Mitigation and/or Adaptation, according to the EU Taxonomy (in absolute figures and compared with total exposures, i.e. green asset ratios).
- Volume of collaterals related to assets or activities in climate change mitigating sectors. This information provides relevant information on, for example, retail mortgage portfolios.
- Total amount of fixed income portfolios invested in Green Bonds.

COMMUNICATION FROM THE COMMISSION (2019) Guidelines on non-financial reporting: Supplement on reporting climate-related information, https://ec.europa.eu/finance/docs/policy/190618-climate-related-information-reporting-guidelines_en.pdf

⁹ KPMG (2022) SFDR- Snapshot, <https://assets.kpmg/content/dam/kpmg/ie/pdf/2021/03/ie-sustainable-finance-disclosure-reg-sfdr.pdf>

the information to be disclosed, thereby improving its quality and comparability. Under these rules, financial market participants will provide detailed information about how they tackle and reduce any possible negative impacts that their investments may have on the environment and society in general. Moreover, these new requirements will help to assess the sustainability performances of financial products. Compliance with sustainability-related disclosures will contribute to strengthening investor protection and reduce greenwashing. This will ultimately support the financial system's transition towards a more sustainable economy. The requirements will now be subject to scrutiny by the European Parliament and the Council. They are scheduled to apply from 1 January 2023 (KPMG,2022).¹⁰

2.3. Corporate Sustainability Reporting Directive

On 21 April 2021 the European Commission adopted a proposal for a Corporate Sustainability Reporting Directive (CSRD) to amend the existing reporting requirements of the Non-Financial Reporting Directive (NFRD). The NFRD had proven insufficiently reliable and comparable, and investors were still finding it difficult to access data. Companies were also unsure which information to disclose and how to disclose it. The Commission, the European Parliament, and the Member States in the EU Council, are currently negotiating a final legislative text on the basis of the proposal.

While banks will be affected by several layers of regulation applicable to all corporates, some financial sector-specific guidelines and standards are also being developed at both international and EU level.

In addition to the specific elements included in sustainable finance regulations, European banks will be required to disclose as part of the Pillar 3 disclosure requirements of Capital Requirements Regulation 2 (CRR II). In October 2021 the European Commission published a proposal to amend the CRR, under which the requirement to disclose information on ESG risks would be applied to all institutions, (i.e. beyond large, listed banks to which the existing requirement applies from 2022). However, the proposal also suggests that the future standards be tailored in terms of periodicity and detail to the size and complexity of the institutions, thus respecting the proportionality principle. The Basel Committee is currently exploring using Pillar 3 of the Basel framework to promote a common disclosure baseline for climate-related financial risks across internationally active banks. This work will consider the availability and reliability of sufficiently granular data for banks and their counterparties, and of defined risk metrics. The Pillar 3 work is part of the Committee's holistic approach to addressing the range of climate-related financial risks to the banking system, spanning regulatory, supervisory and disclosure-related elements. This Pillar 3 work will be performed in cooperation with the ISSB.¹¹

Large financial institutions with publicly listed issuances will be required to disclose information on ESG risks, including physical and transition risks. The European Banking Authority (EBA) is drafting implementing technical standards (ITS), specifying uniform disclosure formats and associated instructions for Pillar 3 disclosure of prudential information on ESG risks. The ITS will initially focus on climate change related risks, aligned with the EU Taxonomy regulation, including both quantitative and qualitative information and metrics, as well as qualitative information on other environmental, social and governance risks. These uniform disclosure formats aim to collect sufficiently comprehensive and comparable information to allow users to assess institutions' risk profiles.

The ITS include: 1) tables for qualitative disclosures on ESG risks, 2) templates for quantitative disclosures on climate change transitional risk, 3) a template for quantitative disclosures on climate change physical risk, 4) templates for quantitative information and key performance indicators (KPIs) on climate change mitigating measures, including the green asset ratio (GAR). The ITS are applicable to large institutions with traded securities and provide for disclosure of an ambitious range of metrics, for instance in relation to financed emissions, alignment metrics and physical risk. Institutions must disclose this information from June 2022. The first disclosure will take place on an annual basis, and thereafter disclosures will take place twice-yearly. This means that the first disclosure will take place in 2023 for a disclosure reference date of end-December 2022.

10 https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/sustainability-related-disclosure-financial-services-sector_en

11 ECB (2022) Supervisory assessment of institutions' climate-related and environmental risks disclosures , ECB report on banks' progress towards transparent disclosure of their climate-related and environmental risk profiles

The EBA's work on Pillar 3 ESG disclosures will leverage other disclosure initiatives, such as the EU Taxonomy and the Commission's non-binding guidelines on climate change reporting and TCFD recommendations. In the development of ITS, the EBA will follow a sequential approach. The ITS will initially focus on climate change related risks, aligned with the EU Taxonomy regulation, including both quantitative and qualitative information and metrics, as well as qualitative information on other environmental, social and governance risks (Raux, 2021). In future, the ITS will require institutions to disclose relevant alignment metrics by sector and estimate the distance between their financing and the 2030 milestones defined by the IEA scenario.¹²

2.4. The EU Taxonomy Regulation

The EU Taxonomy Regulation is an ambitious effort by the European Union to classify what is “environmentally sustainable” and, among other things, require in-scope entities to report on the extent to which their activities and/or financial products qualify as “environmentally sustainable.” The Taxonomy Regulation seeks to standardize the growing universe of sustainable finance products and environmental-related disclosures, aiming to promote investments in environmentally sustainable activities and reduce “greenwashing.” There was no mandatory obligation for banks to report the Taxonomy alignment of their exposures to non-NFRD companies, although EBA is proposing mandatory KPIs on such exposures in their final draft ITS on Pillar 3 ESG disclosures, that are still subject of adoption process of the European Commission (UNEP FI, EBF, 2022). Tackling the “greenwashing” risk, the EU Taxonomy provides a clear, science-based classification of economic activities

On February 26, 2021, the three European Supervisory Authorities (the European Securities and Markets Authority (ESMA), the European Insurance and Occupational Pensions Authority (EIOPA) and the European Banking Authority (EBA), collectively the “ESAs”) responded to the Commission's call for advice on implementing Article 8, and published sector-specific proposals for KPIs to be published by financial and non-financial undertaking (Sullivan & Cromwell LLP, 2021). Through the provisions of Article 8 of the EU Taxonomy Regulation—complemented by the Article 8 Disclosures Delegated Act—banks are expected to report the extent to which their balance sheets support economic activities that contribute substantially to achieving the EU net-zero target in 2050. Moreover, the bulk of the data that banks need to meet these reporting obligations will be provided through the EU Taxonomy disclosures of their clients, as specified under the on Article 8 Disclosures Delegated Act.

In summary, the Non-Financial Reporting Directive (NFRD) requires large EU “public interest” corporates to publish data on the impact their activities have on ESG factors. The Taxonomy Regulation introduces a sustainability classification system through which these corporates must classify investments based on NFRD data (and other datasets). The SFDR (as supplemented by the Taxonomy) requires banks and investment firms to disclose:

- The environmental sustainability of an investment and the provenance of any ESG claims made;
- The risks investments present to ESG factors;
- The risks ESG factors present to investments.

Banks feed the analysis into the SFDR disclosures by way of Articles 5 and 6 of the Taxonomy Regulation, which is the principal mechanism through which the regulation makes its presence felt in the world: In many respects, the Taxonomy can be regarded as a very elaborate set of marketing rules. Articles 5 of the Taxonomy Regulation interfaces with Article 9 of the SFDR and adds taxonomy-specific pre-contractual and periodic reporting disclosures. Articles 6 of the Taxonomy Regulation does the same for Article 8 of the SFDR. Meanwhile, Article 7 of the Taxonomy Regulation applies the following boilerplate pre-contractual and periodic reporting disclosure to all otherwise in-scope financial products that are not “sustainable investments” and that do not promote their ESG characteristics (in accordance with Articles 8 and 9 of the SFDR, respectively): “The investments underlying this financial product do not take into account the EU criteria for environmentally sustainable economic activities.”

The Taxonomy Regulation also introduces new disclosures for corporates subject to the NFRD. Specifically, Article 8 requires entities subject to the NFRD to disclose in their non-financial statements “information on how

¹² EBA/ITS/2022/01, final report implementing technical standards on prudential disclosures on ESG risks in accordance with Article 449a CRR.

and to what extent their activities are associated with environmentally sustainable economic activities under Articles 3 and 9 of the Taxonomy Regulation”¹³

This lack of synchronisation and synergy between different EU legislative initiatives associated with sustainability disclosures creates a significant challenge for companies and banks in both identifying and understanding the co-dependencies (or conflicts) between the differing disclosure expectations that will impact them institution wide.

*“The synergy between different pieces of legislation (in particular the Non-Financial Reporting Directive (NFRD), the Taxonomy Regulation, and the Sustainable Finance Disclosure Regulation (SFDR) can contribute significantly to enhancing sustainability in the economy. However, neither the timings nor the concepts of these different pieces of legislation are fully synchronized or aligned with one another.”(ESMA, 2020)*¹⁴

3. PROPOSED KPIS FROM EUROPEAN REGULATORS

As climate-related data will increasingly serve as important informational inputs into supervisory reporting and risk assessments of financial institutions exposures to climate-related risks, financial institutions need strong governance, processes and controls around risk data aggregation and reporting (internally and externally) of climate-related data. As stated in the report of the Task Force on Climate-Related Financial Disclosures (TCFD, 2020), each organization must clearly disclose how to measure climate risks and opportunities. Access to the indicators and objectives used by the banks allows investors and other stakeholders to better assess the organization's risk-adjusted return, ability to meet financial obligations, overall exposure to climate risks, and progress in management or adapting to these risks. Therefore, they should consider the use of climate indicators in their disclosures, such as GHG emissions from 1, 2 and 3, as well as other key performance indicators (Annex C). In general, the most appropriate choice of indicator is a function of the purpose of the analysis (Thomä and Dupré, 2018). The advantages and disadvantages of the different groups are presented in Annex B. This article also summarizes the proposed KPIs by the main European regulatory authorities (Table 1).

In its Guide on climate-related and environmental risks, ECB Banking Supervision published a set of expectations related to disclosures. The expectations cover not only the content of the disclosures, but also the policies, processes, methodologies, definitions and criteria associated with them. In terms of content, institutions are expected to disclose climate-related risks that are material, with due regard to the Commission's Supplement on reporting climate-related information. They are expected to disclose their GHG emissions for the whole group, including downstream emissions, as well as the KPIs and key risk indicators they use for strategy-setting and risk management.¹⁵

Data is the lifeblood of financial markets. Without a clear regulatory framework to ensure financial institutions and investors have access to comparable ESG data from borrowers and issuers, allocating capital to supporting real economy transition plans will remain challenging. For example, in its recent report¹⁶ EFRAG

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¹³ <https://insight.factset.com/eu-taxonomy-regulation>

¹⁴ ESMA 22-106-2858 14 September 2020

¹⁵ ECB (2022) Supervisory assessment of institutions' climate-related and environmental risks disclosures , ECB report on banks' progress towards transparent disclosure of their climate-related and environmental risk profiles

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Table 1. Proposed KPIs by EU regulators

Regulation	Category	Proposed KPIs
TCFD	GHG emissions (Absolute Scope 1, Scope 2, and Scope 3; emissions intensity)	• Absolute Scope 1, Scope 2, and Scope 3 GHG emissions • Financed emissions by asset class • Weighted average carbon intensity • GHG emissions per MWh of electricity produced • Gross global Scope 1 GHG emissions covered under emissions-limiting regulations
	Transition risks (Amount and extent of assets or business activities vulnerable to transition risks)	Volume of real estate collaterals highly exposed to transition risk • Concentration of credit exposure to carbon-related assets • Percent of revenue from coal mining • Percent of revenue passenger kilometers not covered by Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)
	Physical risks (Amount and extent of assets or business activities vulnerable to physical risks)	• Number and value of mortgage loans in 100-year flood zones • Wastewater treatment capacity located in 100-year flood zones • Revenue associated with water withdrawn and consumed in regions of high or extremely high baseline water stress • Proportion of property, infrastructure, or other alternative asset portfolios in an area subject to flooding, heat stress, or water stress • Proportion of real assets exposed to 1:100 or 1:200 climate-related hazards
	Climate-Related Opportunities (Proportion of revenue, assets, or other business activities aligned with climate-related opportunities)	Net premiums written related to energy efficiency and low-carbon technology • Number of (1) zero-emissions vehicles (ZEV), (2) hybrid vehicles, and (3) plug-in hybrid vehicles sold • Revenues from products or services that support the transition to a low-carbon economy • Proportion of homes delivered certified to a thirdparty, multi-attribute green building standard
NFRD	Capital Deployment (Amount of capital expenditure, financing, or investment deployed toward climate-related risks and opportunities)	• Percentage of annual revenue invested in R&D of low-carbon products/services • Investment in climate adaptation measures
	Internal Carbon Prices (Price on each ton of GHG emissions used internally by an organization)	• Internal carbon price • Shadow carbon price, by geography
NFRD	GHG emission	Direct GHG emissions; Indirect GHG emissions from the generation of

¹⁷ ECB (2022) Supervisory assessment of institutions' climate-related and environmental risks disclosures, ECB report on banks' progress towards transparent disclosure of their climate-related and environmental risk profiles

¹⁸ https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FsiteAssets%2FEFRAG%2520PTFNFRS_A5_FINAL.pdf

¹⁹ AFME (2021) ESG Disclosure Landscape for Banks and Capital Markets in Europe, https://www.afme.eu/Portals/0/DispatchFeaturedImages/FINAL_%20AFME%20White%20Paper_%20ESG%20Disclosure-2.pdf

	acquired and consumed electricity, steam, heat, or cooling; All other indirect GHG emissions that occur in the value chain of the reporting company; GHG absolute emissions target
Energy	Total energy consumption and/or production from renewable and non-renewable sources; Energy efficiency target; Renewable energy consumption and/or production target
	Assets committed in regions likely to become more exposed to acute or chronic physical climate risks; Percent turnover in the reporting year from products or services associated with activities that meet the criteria for substantially contributing to mitigation of or adaptation to climate change as set out in the Regulation on the establishment of a framework to facilitate sustainable investment; Percent capital expenditure (CapEx) and/or operational expenditures (OpEx) in the reporting year for assets or processes associated with activities that meet the criteria for substantially contributing to mitigation of or adaptation to climate change as set out in the Regulation on the establishment of a framework to facilitate sustainable investment.
Physical risk	
	Climate-related Green Bond Ratio: Total amount of green bonds outstanding (at year-end) divided by (a 5-year rolling average of) total amount of bonds outstanding
Green Finance	Climate-related Green Debt Ratio: Total amount of all green debt instruments outstanding (at year-end) divided by (a 5-year rolling average of) total amount of all debt outstanding.
Bank specific KPIs	
	In disclosing indicators related to GHG emissions, banks and insurance companies should focus on their Scope 3 GHG emissions, despite the well-known challenges. Scope 1 and Scope 2 GHG emissions (direct emissions and indirect emissions from the generation of purchased energy) are likely to be small when compared to other indirect emissions (Scope 3).
GHG emissions	Amount or percentage of carbon-related assets in each portfolio in MEUR or as a percentage of the current portfolio value; Weighted average carbon intensity of each portfolio, where data are available or can be reasonably estimated Volume of exposures by sector of counterparty Credit risk exposures and volumes of collateral by geography/country of location of the activity or collateral, with an indication of those countries/geographies highly exposed to physical risk.; Volume of collaterals related to assets or activities in climate change mitigating sectors; Volume of financial assets funding sustainable economic activities contributing substantially to climate mitigation and/or adaptation (absolute figures and compared to total exposures).
Lending and investment activities	Total amount of the fixed income portfolios invested in green bond certified according to a potential EU Green Bond Standard if and when such a standard is approved, or according to any other broadly recognised green bond framework (at year-end) divided by (a 5-year rolling average of) total amount of holdings in fixed income portfolios.
	Breakdown of underwriting exposure by lines of business to economic sectors (life / non-life / reinsurance); Percentage of products incorporating climate-related risks into the underwriting process for individual contracts (life / non-life / reinsurance); Number and value of climate-related underwriting products offered (Non-life / reinsurance); Maximum Expected Loss from natural catastrophes caused by climate change (life / nonlife / reinsurance); Total losses
Insurance underwriting activities	

Asset-management activities	attributable to insurance payouts from (1) expected natural catastrophes and (2) non-expected natural catastrophes, by type of event and geographic segment (net and gross of reinsurance); Breakdown of assets under management by business sector across asset classes (equity / bonds / infrastructure / real estate / structured products / MBS / derivatives)
SFDR	List of PAI indicators: 1. GHG emissions (Scope 1, 2, 3 and total) 2. Carbon footprint 3. GHG intensity of investee companies 4. Exposure to companies active in the fossil fuel sector 5. Share of non-renewable energy consumption and production 6. Energy consumption intensity per high impact climate sector 7. Activities negatively affecting biodiversity sensitive areas 8. Emissions to water 9. Hazardous waste ratio 10. Violations of UN Global Compact principles and Organisation for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises 11. Lack of processes and compliance mechanisms to monitor compliance with UN Global Compact principles and OECD Guidelines for Multinational Enterprises 12. Unadjusted gender pay gap 13. Board gender diversity 14. Exposure to controversial weapons (antipersonnel mines, cluster munitions, chemical weapons and biological weapons) 15. GHG Intensity 16. Investee countries subject to social violations 17. Deforestation 18. Supplier Codes of Conduct
Taxonomy Regulation with proposal of EBA	PAIs applicable for real estate investments 1. Exposure to fossil fuels through real estate assets 2. Exposure to energy-inefficient real estate assets 3. GHG emission generated by real estate assets 4. Energy consumption intensity Waste Production (Share of real estate assets not equipped with facilities for waste sorting and not covered by a waste recovery or recycling contract) Taxonomy-eligible and Taxonomy non-eligible economic activities in their: • total turnover, • capital expenditures, and • operational expenditures. Green Asset Ratio: the proportion of assets linked to Taxonomy-compliant economic activities as a share of total eligible assets. Additional off-balance sheet KPIs: • Green ratio for financial guarantees (of corporates subject to NFRD disclosure obligations) • Green ratio for assets under management (AuM) • Green ratio for fees and commissions
EBA	EBA advice to the Commission 1. Green asset ratio (GAR) 1.1. Green asset ratio for lending activities and equity holdings with

	non-financial corporates (NFC) subject to NFRD disclosure obligations
	• Green asset ratio: methodology for loans and advances – Non-financial corporates subject to NFRD disclosure obligations • Green asset ratio for debt securities – Non-financial corporates subject to NFRD disclosure obligations • Green asset ratio for equity holdings – Non-financial corporates subject to NFRD disclosure obligations • GAR on total financing to NFC subject to NFRD disclosure obligations (lending plus equity holdings)
	1.2. Green asset ratio for lending activities, equity holdings of financial corporates
	1.3. Green asset ratio for retail exposures
	• Residential real estate lending • Retail - Credits for consumption • Retail – other considerations
	1.4. GAR for exposures to NFC not subject to NFRD disclosure obligations (including small- and medium-sized enterprises – SMEs)
	1.5. GAR for loans and advances financing public housing
	1.6. Other on-balance-sheet exposures – Repossessed real estate collateral
	1.7. TOTAL GAR
Off-balance-sheet exposures	2. Green ratio for financial guarantees of corporates subject to NFRD disclosure obligations (FinGuar KPI)
	3. Green ratio for assets under management (AuM KPI)
Services other than lending – Fees and commissions (F&C KPI)	4. F&C KPI - Proportion of the institution's fee and commission income from corporates subject to NFRD disclosure obligations, derived from products or services other than lending associated with taxonomy-aligned economic activities that contribute to the environmental objective of climate change mitigation, climate change adaptation or other environmental objectives, compared to total fees and commissions from corporates subject to NFRD disclosure obligations from products or services other than lending.
Other disclosures: trading portfolio	• Total trading during the disclosure period in taxonomy-aligned instruments, including absolute purchases plus absolute sales of taxonomy-aligned securities. • Total trading during the disclosure period of eligible securities, including total absolute purchases plus total absolute sales of eligible securities. • Trading KPI: Ratio of absolute purchases plus absolute sales of taxonomy-aligned securities compared to total absolute purchases plus total absolute sales of eligible securities.

The ECB's Guide on climate-related and environmental risks sets out expectations as regards disclosure of Scope 3 financed emissions. Scopes 1, 2 and 3 are categories that can be used by organisations as a conceptual tool to formalise their GHG emission accounting while avoiding double counting. The Greenhouse Gas Protocol is a common reference in that regard. Scope 3 covers all indirect GHG emissions that occur in the value chain of the reporting company, including both upstream and downstream emissions. In the case of a credit institution, this includes the emissions of counterparties linked to lending portfolios, or in other terms "financed emissions", and which are expected to represent the large majority of emissions. Although the ECB does not prescribe the use of a specific measurement and/or attribution methodology, institutions are encouraged to adopt a granular approach to measuring carbon emissions, while remaining consistent with the GHG Protocol, as set out in the European Commission's Supplement on reporting climate-related information. Furthermore,

the EBA ITS on Pillar 3 disclosures on ESG risks will also require large banks with traded securities to disclose Scope 3 financed emissions for selected portfolios.

The transition to a low-carbon and more sustainable economy requires a structural transformation of economic activities, and in particular the production, transportation and consumption of energy. Financial institutions (FI) have endeavoured to assess and disclose the alignment of their financing activities in these key transition sectors against science-based pathways. As pointed out by the NGFS²⁰, such context-based metrics are critical to gaining a better understanding of how exposures will evolve over time and comparing these against trendlines. While the ECB encourages banks to disclose results from pilot exercises that have been conducted, it points out that institutions are required to comprehensively disclose their risk profile.²¹ Because financial institution disclosure is linked to their products and services, financial institutions are users of information disclosed by third parties (clients, investee companies, etc.). Therefore, it is key to find coherence between a reporting of direct impacts of FIs' clients and investees companies and a reporting of indirect impacts of FIs.

The European Supervisory Authorities (ESAs) have developed draft Regulatory Technical Standards (RTS) with regard to the content, methodologies and presentation of sustainability-related disclosures under empowerment Articles 2a, 4(6) and (7), 8(3), 9(5), 10(2) and 11(4) of "SFDR". The 32 core indicators put forward by the ESAs will add up to the indicators laid down in the Taxonomy Regulation (sustainable proportion of turnover, capital expenditure and operating expenditure) and to the KPIs that will come out of the review of the NFRD.²²

Large companies required to provide a non-financial statement under the Non-Financial Reporting Directive (NFRD), covering financial (including banks) and non-financial corporations (Article 8 of the EU Taxonomy Regulation).

- The proportion of turnover aligned with the EU Taxonomy
- Capital Expenditures (CapEx) and Operational Expenditures (OpEx) aligned with the EU Taxonomy
- Other KPIs for financial institutions, including specific KPIs for credit institutions(banks)—defined in the Article 8 Disclosures Delegated Act published on 6 July 2021.

In its recent report, EFRAG highlighted that KPI mentioned in different guidelines, framework and standards are numerous and are not granular enough to provide key information to FIs:

- Climate-related KPIs are the most mature ones in terms of definitions, scopes and methodologies. However, when it comes to social, governance or other environmental topics, KPIs are few, with sometimes unclear definitions and methodologies.
- But even on climate-related issues, the definitions and calculation methodologies are not yet mature: many climate indicators coexist, with different calculation methodologies. In addition, the lack of transparency, frequent changes in methodologies and their complexity are a challenging issue for FIs.
- ESG KPIs used by the three main EU regulations shows that there is no convergence

In conclusion, data methodologies are not standardised and not transparent, information is not frequently audited, hence not comparable: nevertheless, high quality, comparable and verifiable disclosure is a prerequisite to enable FIs to correctly assess the risks and opportunities in their investment decision-making process and to respond correctly to current and upcoming EU regulations.²³

The three key performance indicators for non-financial undertakings laid down in Article 8(2) of the Taxonomy Regulation (turnover, capital expenditure and operating expenditure) were considered by the European Banking Authority (EBA) irrelevant for assessing the environmental sustainability of financial activities (including lending, investment and insurance) and, therefore, not appropriate to demonstrate to what extent

20 Progress report on bridging data gaps", Network for Greening the Financial System, May 2021.

21 ECB (2022) Supervisory assessment of institutions' climate-related and environmental risks disclosures , ECB report on banks' progress towards transparent disclosure of their climate-related and environmental risk profiles

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https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Draft%20Technical%20Standard%2021/962778/JC%202021%2003%20-%20Joint%20ESAs%20Final%20Report%20on%20RTS%20under%20SFDR.pdf

23 https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSiteAssets%2FEFRAG%2520PTF-NFRS_A5_FINAL.pdf&AspxAutoDetectCookieSupport=1

the economic activities of financial undertakings are taxonomy-aligned (EBA in its March 2021 response to the European Commission's call for advice from September 2020).

EBA instead suggested using the green asset ratio (GAR), which measures the share of a credit institution's taxonomy-aligned balance sheet exposures versus its total eligible exposures.

The comprehensive list of KPIs for banks has been specified also in Annex V of the Article 8 Disclosures Delegated Act.²⁴ For banks, the benefits of having their clients' Article 8 disclosures are two-fold: 1) it helps them understand their client's degree of EU Taxonomy alignment; and 2) it helps them fulfil their obligations under Article 8.

Given that Article 8 of the Taxonomy Regulation does not specify any KPIs to be used by financial undertakings (that is credit institutions, asset managers, investment firms and insurance and reinsurance undertakings). The key performance indicators for financial undertakings are specified by delegated act - Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation

The Commission Delegated Regulation provides therefore specific key performance indicators and calculation methodologies for financial undertakings. Under this Regulation of 6 July 2021 the main KPIs for financial undertakings relate to the proportion of environmentally sustainable economic activities in their financial activities, such as lending, investment and insurance (see for example: Taxonomy KPIs - investment firms' disclosures).

According to Article 4 of the Delegated Act of 6 July 2021 credit institutions are required to disclose the information as specified in respective Annexes V and XI. Specifically, as regards credit institutions the Delegated Act of 6 July 2021 defines three KPIs:

- a main KPI for on-balance-sheet assets related to financing activities,
- KPIs for off-balance-sheet assets and
- a KPI for commissions and fees related to other activities than financing.

The Recital 5 of the Delegated Act of 6 July 2021 designates the GAR (showing the proportion of exposures related to taxonomy-aligned activities compared to the total assets of those credit institutions) as the main key performance indicator for credit institutions that are subject to the disclosure obligations laid down in Articles 19a and 29a of Directive 2013/34/EU. The GAR should relate to the credit institutions' main lending and investment business, including loans, advances and debt securities, and to their equity holdings to reflect the extent to which those institutions finance taxonomy-aligned activities.

In addition to disclosures concerning their banking book, credit institutions should also disclose separately the overall composition of their total assets, including their trading book, and any trends and limits in terms of climate and environmental risks. Financial undertakings are required to provide for a breakdown in the numerator where applicable (See Article 7 of the Delegated Act of 6 July 2021)

All undertakings will have to start disclosing how their business activities align with:

- the climate objectives (adaptation and mitigation) under the EU Taxonomy Regulation in the course of 2022 (covering financial year 2021) and
- all six environmental objectives in the course of 2023 (covering financial year 2022).

"In view of the entry into force and application of Climate Delegated Act by the end of 2021 and material difficulties for assessing compliance of economic activities in 2022 with technical screening criteria laid down in that Delegated Regulation for the previous reporting year, the application of this Regulation in 2022 should be limited to certain elements and qualitative reporting, with the remaining provisions starting to apply from 1 January 2023 for non-financial undertakings and from 1 January 2024 for financial undertakings. Moreover, the key performance indicators of credit institutions related to their trading book and commission and fees for

²⁴ It is important to note, as per Point 1.1.1 of Annex V of the Article 8 Disclosures Delegated Act: "Credit institutions shall disclose relevant KPIs on the basis of the scope of their prudential consolidation determined in accordance with Regulation (EU) No 575/2013, Title II, Chapter 2, Section 2." The regulation also lists other KPIs for banks, but the GAR (main KPI) is the focus for this section of the paper. The disclosure templates for banks are available in Annex VI of Article 8 Disclosures Delegated Act here.

other commercial services and activities than the provision of financing should apply from 1 January 2026" (Recital 12 of Regulation of 6 July 2021)²⁵

After revising the main KPIs proposed by the most important guidelines and regulation (Table 1) the main KPI for banks remains the Green Asset Ratio (GAR)—which shows the proportion of exposures related to Taxonomy-aligned activities compared with the total covered assets of those banks.

The EBA also proposed requiring complementary, qualitative information disclosures, including, for example: contextual information to aid the understanding of quantitative indicators; details and justifications of variations in institutions' levels of Taxonomy-alignment; and a description of the use of the Taxonomy in an institution's business strategy (Sullivan & Cromwell LLP, 2021).

The EBA's KPI proposals include:

- Green Asset Ratio: the proportion of assets linked to Taxonomy-compliant economic activities as a share of total eligible assets.
- Additional off-balance sheet KPIs:
- Green ratio for financial guarantees (of corporates subject to NFRD disclosure obligations)
- Green ratio for assets under management (AuM)
- Green ratio for fees and commissions

According to the EBA advice to the Commission – Relevant KPIs for credit institutions (EBA Report, 2021) the main KPI showing the overall alignment of credit institutions' balance sheets with the Taxonomy should be the green asset ratio (GAR), which relates to their lending business, including loans and advances and debt securities, and to their equity holdings. Credit institutions should provide information on the green asset ratio that shows the proportion of taxonomy-aligned exposures (green assets) compared to total eligible exposures.

Credit institutions should disclose their green asset ratio (GAR) to show the extent to which the financing activities in their banking book (including loans and advances, debt securities and equity instruments in the banking book) are associated with economic activities aligned with the EU Taxonomy and are therefore Paris Agreement- and SDG-aligned (EBA, 2021):

- The GAR should cover all exposures in the banking book to financial and non-financial corporates (NFC) including SMEs, households (residential real estate, house renovation loans and motor vehicle loans only) and local governments/municipalities (house financing), including loans and advances, debt securities, equity instruments and repossessed real estate collaterals.
- Exposures to general governments other than municipalities and to central banks should not be considered at this stage in either the numerator or the denominator, due to the lack of an applicable taxonomy or of standard disclosure obligations for these counterparties. The Commission should consider the eligibility of sovereign bonds and/or central bank exposures for the KPI when reliable disclosures or a methodology for deriving the extent of their taxonomy alignment are available.
- Credit institutions with subsidiaries outside the EU: the EBA acknowledges the additional challenges of collecting relevant information for exposures to non-EU counterparties, as the EU Taxonomy and the NFRD apply only at EU level, and a proportionate approach is being proposed. The EBA recommends that these institutions should disclose their GAR at EU level, for exposures to EU counterparties. In addition, given the relevance of their non-EU exposures, they should identify lending and equity exposures in the banking book to non-EU counterparties that pertain to sectors (NACE sectors 4 levels of detail) covered by the taxonomy. Then, proxies should be used to determine, on a best effort basis, estimates and ranges on the part of those exposures aligned with the Taxonomy, and this information should be disclosed separately from the EU GAR with appropriate caveats.

Information on the lending and equity portfolio should include point-in-time information on the stock of loans, to show the level of alignment of the institutions' activities with the Taxonomy; and on flows of new lending to show how they are transitioning towards sustainable economic activities, how they are adapting to new climate change circumstances, and how they are helping their counterparties in the transition and adaptation path.

For their commercial activities, including business and services to corporates that generate fee and commission income, other than lending, equity holdings or asset management, credit institutions should disclose

²⁵ <https://www.emissions-euets.com/taxonomy/1923-taxonomy/2185-taxonomy-key-performance-indicators-kpis>

information on the proportion of the institution's fee and commission income derived from those products or services that are associated with economic activities that qualify as environmentally sustainable.

For their off-balance-sheet exposures, credit institutions should disclose a ratio based on the level of alignment with the Taxonomy of the underlying assets of the relevant off-balance-sheet exposures, including financial guarantees and assets under management.

The EBA recommends that assets in the held for trading portfolio are excluded from the computation of the GAR, given their volatile and variable nature and that the purpose of this portfolio is different from that of the banking book. The EBA advises that, alternatively, credit institutions should disclose the following information, taking into account a proportionate approach. In addition, credit institutions should provide separate disclosures for their trading portfolio in terms of overall composition, trends, targets and limits. More granular disclosures are proposed for those institutions with a higher level of trading activity, and whose trading portfolio is above a certain threshold.

Credit institutions should disclose the information required in Article 8 of the Taxonomy Regulation using the KPIs specified in the Annex I- KPIs for credit institutions (Article 8 Taxonomy) and in the rest of this document and not the KPIs proposed under Article 8 of the Taxonomy Regulation for non-financial corporates in terms of turnover, capex and Opex, for the reasons explained in the paragraphs in this section.

In its recent report, EFRAG highlighted that KPI mentioned in different guidelines, framework and standards are numerous and are not granular enough to provide key information to FIs:

- Climate-related KPIs are the most mature ones in terms of definitions, scopes and methodologies. However, when it comes to social, governance or other environmental topics, KPIs are few, with sometimes unclear definitions and methodologies.
- But even on climate-related issues, the definitions and calculation methodologies are not yet mature: many climate indicators coexist, with different calculation methodologies. In addition, the lack of transparency, frequent changes in methodologies and their complexity are a challenging issue for FIs.
- ESG KPIs used by the three main EU regulations shows that there is no convergence

In conclusion, data methodologies are not standardised and not transparent, information is not frequently audited, hence not comparable: nevertheless, high quality, comparable and verifiable disclosure is a prerequisite to enable FIs to correctly assess the risks and opportunities in their investment decision-making process and to respond correctly to current and upcoming EU regulations.²⁶ *Whether or not, "investor needs cannot be satisfied only by consistent and comparable metrics."* (Adams, 2022) who critically examine the call for 'harmonisation' of sustainability reporting frameworks and standards that occurred alongside an increase in ESG investing during the COVID-19 pandemic and identify three myths that have been promulgated in calls for 'harmonisation' that seek to simplify sustainability reporting and ESG analysis

4. THE CONS OF PROPOSED KPIS

4.1. GHG scope 3 emissions

The Task Force's recommendations on climate-related financial disclosures are structured around four thematic areas that represent core elements of how companies operate: governance, strategy, risk management, and metrics and targets. But the Task Force survey on implementation found the Metrics and Targets recommendation "somewhat difficult" or "very difficult" to implement.

Since 2017, Scope 3 GHG emissions, including the Scope 3 investment category, have received increasing attention in both the public and private sectors. Scope 3 GHG emissions are becoming an essential component of climate-related risk analysis in commercial and financial markets. Scope 3 GHG emissions are an important component of overall GHG emissions for several reasons.

Despite increased demand and reporting, the disclosure of Scope 3 GHG emissions faces a number of challenges like methodology, data, boundaries and organizational challenges. Category 15 of the GHG Protocol's Scope 3 Standard relates to investments, which the GHG Protocol notes are a form of Scope 3 GHG

²⁶https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSiteAssets%2FEFRAG%2520PTF-NFRS_A5_FINAL.pdf&AspxAutoDetectCookieSupport=1

emissions “applicable to investors and companies that provide financial services. Investments are categorized as a downstream Scope 3 category because the provision of capital or financing is a service provided by the reporting company.” For financial organizations, Scope 3 GHG emissions, especially category 15, are by far the largest component of their total GHG emissions. However, assessing and pricing exposure to climate-related risks within the financial system depends on the effectiveness of the climate-related disclosures of the companies that are financed by banks, asset owners, and asset managers and underwritten by insurance companies. If the disclosures made by organizations with significant direct and indirect GHG emissions do not include sufficient information on Scope 1, Scope 2, and Scope 3 GHG emissions, then the banking and insurance industries’ understanding of the concentration of carbon-related assets on their balance sheets may be incomplete and asset owner and asset managers will have limited visibility into risk associated with carbon-intensive issuers. Since the TCFD published its final report in June 2017, a number of initiatives have emerged to improve the disclosure and reporting of financial organizations’ GHG emissions. Two of these developments are of particular relevance for the Task Force’s guidance on this topic: (1) the Partnership for Carbon Accounting Financials (PCAF) and (2) the Climate Risk Officer (CRO) Forum methodology on carbon footprinting for the insurance industry.²⁷

4.2. Turnover, capital expenses (CapEx) and operational expenses (OpEx)

EBA advice to the Commission on key performance indicators for credit institutions’ disclosures KPIs in terms of turnover, capital expenses (CapEx) and operational expenses (OpEx) proposed by Article 8 of the Taxonomy Regulation for non-financial undertakings are not considered appropriate for credit institutions:

- a KPI in terms of turnover is not relevant given the variety of counterparties and economic activities financed by banks, the different sources of income they rely upon and the structure of their profit and loss accounts;
- on the other hand, the main sources of credit institutions’ greenhouse gas emissions (GHG) are scope 3 emissions coming from their counterparties, and not scope 1 direct GHG emissions or scope 2 GHG emissions linked to their own consumption of purchased electricity, heat, or steam. Consequently, indicators defined in terms of OpEx or CapEx devoted to investments or maintenance of activities aimed at reducing scope 1 and 2 GHG emissions are not relevant for credit institutions either.

4.3. GAR

A number of challenges are identified by UNEP FI and EBF (2021) in case studies used to test the application of the EU Taxonomy to more than 40 transactions and clients (Raux, 2021). While some are generic, others relate to specific banking products. They overlap with some of the above mentioned and could be systematized as follows:

- **Unspecified uses of proceeds** - Loan proceeds means all amounts advanced as part of a loan, whether advanced directly to the borrower or otherwise. Companies often have general credit facilities in the form of general purpose loans or revolving credit facilities (RCFs). These are used by companies to cover diverse corporate expenditures and are not solely related to specific capital investments. This is therefore likely to be the most significant challenge faced by banks in the application of the EU Taxonomy to banking products.
- **Data-related challenges** - It is important to note that, at the time of writing this report, companies were not legally required to disclose information that is specifically aligned to EU Taxonomy requirements. Data available to banks at the time the case studies were conducted was typically data made available by companies on a voluntary basis, either publicly or directly, and data made available by larger companies that fell under the scope of the NFRD. Besides data availability, other challenges include: Quality, comparability, standardisation, relevance, verification, and time to achieve acquisition.²⁸

²⁷ https://assets.bbhub.io/company/sites/60/2021/07/2021-Metrics_Targets_Guidance-1.pdf

²⁸ Specific categories of data-related challenges are the following: Data and information pertaining to SMEs; Data and information pertaining to non-EU based assets; Data and information availability for DNSH, Minimum Social Safeguards and Segmentation by turnover or revenues are limited and patchy

- **Operational challenges** - Together with the challenge of finding relevant data, banks will also face operational challenges. The operational reality is often more complex than that captured by the EU Taxonomy. Linking the EU Taxonomy classification system to economic activities brings operational challenges for banks. For example, borrowers' activities may be connected to several EU Taxonomy economic activities. In such cases, banks need to perform and store several assessments for a single client, one for each of the economic activities in which they are involved.
- **Documentation, monitoring and time needed to complete transactions** - Another operational issue is the management of increased documentation requirements. Loan documentation records use of proceeds and any information deemed essential to the contract between the bank and the client, and will therefore become an important part of the process in the application of the EU Taxonomy. At this point, standard documentation is insufficient to assess and monitor alignment of client business
- **Testing the application of the EU Taxonomy to core banking products** - Despite the availability of documentation, tracking use of proceeds remains difficult, particularly in complex group structures. Loans may fund several business lines within the group entity that acts as the borrower, or funds may be used for multiple purposes, both equally difficult to track. Increased documentation requirements will impact the time needed to complete transactions, whatever their degree of complexity. In some cases, the EU Taxonomy assessment will take longer to complete – due to the time required to collect relevant information - than the time available to complete a transaction. This could become a competitive disadvantage for banks, especially when clients have the option to use non-EU based banks.
- **The burden on processes must be absorbed by banks' IT infrastructure** - Anticipating the implementation of the EU Taxonomy, most banks cite the challenge of adapting internal information processes and the cost of developing IT tools and support. Adapting new data flows into existing internal processes is very time consuming, and question the extent to which it will be possible to move away from manual handling. This in turn raises the question of associated costs, to both banks and customers. Some banks envisage these costs to be significant enough to affect product viability.
- **Increased complexity and risk of inconsistencies** - Overall, banks will have to cope with more extensive, demanding and complex assessment processes. The EU Taxonomy goes well beyond existing internal taxonomies and Environmental and Social Risk Management (ESRM)/ESG frameworks, particularly when it comes to the depth of criteria and systematic use of thresholds and metrics.
- **Traditional support tools and services are not well suited to support the application of the EU Taxonomy** - The extent to which external validation of compliance with the EU Taxonomy is a viable option remains unclear, as the reliability of data presented by clients cannot be guaranteed. A company's own assessment of its EU Taxonomy alignment would probably benefit from third party verification, though this may precipitate a further challenge, with banks facing differences in data quality that impact the comparability of portfolios. How these issues will eventually be resolved can significantly impact the level of consistency in the application of the EU Taxonomy to core banking products.
- **Segmentation and classification by economic activities may lead to inconsistencies across the industry** - Segmenting alignment with the EU Taxonomy makes it difficult for banks to match the EU Taxonomy classification of economic activities with turnover or revenue figures provided by companies, as these figures are often presented in aggregate. Conversely, where more granular data is available, the segmentation of turnover, revenues, capex and opex figures reflects the legal structure of a group as opposed to its classification by economic activity as per the EU Taxonomy. Where borrowers do provide more detailed data, it is important that the format is standardised and consistent across different sectors to facilitate comparability, and avoid inconsistencies in how banks' portfolios reflect their alignment with the EU Taxonomy.
- **Uncertainties** - Client preferences (for example for Green Bonds, Green Loans and Sustainability) may not be fully addressed through the EU Taxonomy. Banks see the Green Bond and Green Loan Principles as essential references, because they address international markets in which most of them operate, even when based in the EU. The lack of clarity over how these frameworks will conform to the EU Taxonomy creates some uncertainty as to how banks will be able to support and meet their clients' needs.

The implementation of the EU Taxonomy is likely to be driven by a reporting requirement such as the “green assets ratio” through NFRD and/or Article 8 of the EU Taxonomy Regulation. The implementation of the EU Taxonomy may need to be rolled out across the portion of the balance sheet corresponding to the final requirements. Corporate clients that integrate sustainability into their business strategies may drive application of the EU Taxonomy, because they increasingly demand sustainable financial products that provide preferential terms and/or reputational benefits. If cases such as these become more common, the implementation of the EU Taxonomy would likely be more focused on identifying top performers across a selection of industries, and less on addressing compliance across the eligible client base.

The biggest challenge is data availability according **EBA (2021)**. In particular, a lack of clarification and governance of data at the EU level as well as a lack of support for institutions on this matter was stated, creating concerns regarding data comparability, scalability and as to how far this is sustainable. The concern exists in particular for SMEs, the retail portfolio and non-EU exposures, counterparties not covered by the NFRD. Not only was the availability of data stressed, but also counterparties’ own ability to assess and disclose information in the first place.

Even in the case of larger corporate customers, one bank stated that third party assessments vary widely and that they would therefore need to approach customers on a bilateral basis. In this context, it was also mentioned that bilateral exchange between banks and counterparties was not efficient at the bank level, the counterparty level or at the level of the system as a whole, as multiple banks would be contacting the same counterparty. In the context of data availability, several respondents raised the need for a data hub organised centrally at EU level.

The timing issue arising from disclosures by counterparties being applicable only from January 2022 and the applicability to financial institutions of disclosing KPIs for the same date, creating further data challenges, and called for a phased-in approach.

Data concerns were followed by challenges relating to IT capacity and capabilities in terms of the average challenge score assigned. An example given for the challenges related to IT capacity was the fact that current systems tend to classify counterparties only by one economic activity, which will need to be changed in order to incorporate and apply the EU Taxonomy. Extensive developments and extensions to IT systems would be necessary, also including the collection and storage of data.

There are identified other challenges like staff availability, training challenges, the lack of a clear methodology as well as regulatory uncertainty. The Taxonomy’s complexity was stated, together with insufficient clarity on the taxonomy roadmap, resulting in a focus on the bank’s own internal ESG agenda and hence to date no investment in the taxonomy application, in turn implying greater challenges to kick start the taxonomy application (EBA Report, 2021). Uncertainties with regard to regulation and timing were also stated to have so far not shifted the priorities sufficiently towards the Taxonomy and the related investments needed (IT, staff training, timing, etc).

The green asset ratio comes with other limitations, too (**S&P, 2022**). A bank can be making significant progress in helping polluting clients reduce their environmental impact without it conforming to the taxonomy.

Substantial sums of banking assets will not be included in the scope of the upcoming green asset ratio, revealing the metric’s shortcomings in accurately comparing European lenders’ environmental efforts. But the ratio may be of limited use to compare the greenness of banks’ balance sheets across the board as large parts of assets are out of its scope, according to European banks’ latest sustainability reports. For example, assets held for trading and exposures to governments and central banks are excluded from the GAR calculation altogether, while financing to small and medium-sized enterprises or non-EU corporate counterparties can never qualify as green.

European banks have also disclosed the share of assets in the scope of the green asset ratio that are “taxonomy-eligible” and, as such, can qualify to be included in the numerator of the GAR. An activity is considered taxonomy-eligible if it is described in the taxonomy regulation, such as renewable energy or real estate, and therefore has the potential to contribute to one of the EU’s environmental objectives. Only in 2024 will EU banks have to assess whether these assets actually meet the performance criteria and can be labeled green and be used to calculate the GAR. At present, taxonomy-eligible assets are largely limited to banks’ financing of residential real estate as well as to EU corporates subject to disclosure obligations under the Non-Financial Reporting Directive, or NFRD, a piece of EU disclosure regulation that applies to certain large companies.

Meanwhile, financing to SMEs, non-EU counterparties and sectors not covered by the EU taxonomy will be excluded from the numerator but not the denominator of the GAR. In essence, this means such assets will be assumed to be 0% sustainable in the GAR calculation. This puts banks with large exposures to those segments at a structural disadvantage when seeking to boost their GAR. Even if every single asset in a bank's banking book is environmentally sustainable, its green asset ratio could never exceed the eligibility ratio.

In its proposed framework, the EBA asks banks to release information on everything from exposure to carbon-intensive companies to climate change physical risk. It also proposes a Banking Book Taxonomy Alignment Ratio, or BTAR, which attempts to make up for one of the GAR's shortcomings by extending the numerator to include counterparties not covered by the NFRD. This complementary metric is intended to help give a more complete picture of banks' taxonomy alignment and incentivize lenders to provide green finance to SMEs, even if institutions still face significant data availability challenges and may have to rely on estimates and proxies when calculating the BTAR. The EBA furthermore intends to introduce a measure that can capture ESG risks in banks' trading book at a later stage. This makes it more complex to measure a green asset ratio and raises the risk that banks "window dress" their holdings the day the ratio is calculated.

An EU-wide pilot exercise on climate risk, published by the EBA in May last year, estimated an average GAR of just 7.9% for a sample of 29 EU banks, although it emphasized limitations such as data gaps and variation in approaches used

According to SEB The EU Taxonomy is an excellent tool, but not broad enough in its current format to cover all relevant sectors and transition metrics. When looking at portfolio level, the EU Taxonomy provides good guidance to approximately 30% of the sector metrics the banks need.

Over time, the scope of the green asset ratio and availability of data will improve to some extent. European corporates are now required by the taxonomy regulation to disclose information on their own eligible activities, which a BNP Paribas spokesperson said will enhance the bank's disclosures from 2023. This year BNP Paribas used NACE codes, the European standard for classifying economic activity, to qualify taxonomy eligibility for corporate clients, which represents an estimate only.

Banks clearly see the opportunity for market practices to be aligned to increase comparability. Developing methodologies for the application of the EU Taxonomy to different products at industry level will be critical to avoid a lack of operational consistency.

However, aligning to the granularity and comprehensive nature of the EU Taxonomy will be a significant challenge from an operational point of view and will require significant efforts on the part of banks.

Pilar Gutierrez, head of unit reporting and transparency at the EBA, recognized that it will be more relevant to compare the green asset ratio of banks with similar business models, in particular those that have a predominantly traditional lending business. The GAR should be assessed together with the range of other disclosure requirements the EBA has introduced into the Pillar 3 framework, and not in isolation. Pillar 3 is part of the global Basel standard for bank prudential regulation that seeks to promote market discipline through regulatory disclosure requirements. (S&P, 2022).

Conclusion

The fact is that over the last decade, sustainability reporting has become increasingly important in the financial industry. There has been an increase in transparency, improvements in standards, reporting frameworks and regulations, and also increased stakeholder involvement in the decision-making process. The first question posed at the beginning was the main reasons why banks adhere to certain regulations and requirements and where to draw the line between voluntariness and obligation for the reporting of environmentally sustainable development.

After review of 70 researches in the field it could be concluded that:

- Banks banks strive for transparent environmental sustainability reporting to meet stakeholder expectations rather than financial benefits.
- Voluntary initiatives should not be voluntary and more regulation should be undertaken by national and regulatory bodies.

Then the aim was to analyze the recent efforts of regulatory authorities and their proposed methods and measures of environmental sustainability, as well as the problems that may arise in their implementation.

European Union (EU) legislation requires large companies to disclose information on social and environmental challenges since 1973. The EU's ambition to maintain its leadership in environmental protection is reflected in its long-term vision for 2050. The most recent regulations for the purpose are NFRD, SFDR, Taxonomy Regulation and changes proposed to Pillar 3 which are the main focus in the research. After their analysis and comparison it could be concluded that:

- The indicators proposed by individual regulations in recent years in the EU to measure environmental sustainability should be synchronized
- It should be carefully assessed whether the proposed environmental indicators are suitable for the relevant sector (banking in our case)

Finally, relevant recommendations for their better application in the future by European banks are considered. Over the last few years, various market and industrial initiatives have focused on the convergence of reporting standards covering climate issues, as well as on bringing and improving the comparability of climate indicators. The recently established working group on “Financial Statements Related to Nature” is expected to provide an evaluation framework by the end of 2022. The financial sector plays a leading role in the development of environmentally friendly financial solutions and investments. In a digital transformation, organizations cannot rely solely on financial and material resources to achieve their goals (Ovcharova, 2019). Environmental problems are undoubtedly a challenge, but they also open up new opportunities for development.

Environmental risk reports should be subject to appropriate internal management processes, such as those used for financial disclosures, and included in the list of key financial documents. Emphasis needs to be placed on quantitative indicators to take account of environmental risk, in particular the disclosure of indicators of the financial impact of risks related to climate change and environmental protection. Banks should provide the necessary data on climate change and the impact that the environment will have on activities such as pricing, credit risk and customer relationship management. Lack of data should not be an obstacle to action.

Regardless of the differences in the nuances of the implemented policies, the bank management should assess the growing importance of the ecological responsibility and the ways of adaptation to the changing environment. Incorporating environmental considerations into key banking activities can contribute to sustainable development.

Table 2. Appendix B. Advantages and disadvantages of environmental indicators

	Characteristic	Application	Advantages	Disadvantages
GHG accounting	Cross-sectoral assessment of greenhouse gas consumption by investors	• Linking the dots between portfolios and climate change • Screening of project financing • Real estate energy efficiency measures • Commitment to reducing corporate emissions in the short term • Building portfolios for issued shares ideally together with green / brown indicators • Public communication and reporting	• Wide awareness of the intensity of carbon emissions in individual sectors • Significance among corporate clients and experience • The standardization of corporate reporting in various sectors, which allows reporting at the portfolio level	• High uncertainty related to financial asset data • Incomplete coverage • Lack of an accounting standard • Data variability related to external factors
Green/Brown metrics	Sectoral indicators that distinguish between activities and technologies such as solutions (green) and climate problems (brown)	• Negative / positive screening for project funding • Negative screening and environmental targets for corporate bonds (eg green bonds) • Building portfolios for issued shares together with carbon indicators • Investments in various technologies	• Quantitative indicator with high data transparency • Relevant indicator for corporate governance	• Applicable only for key sectors • Problems in distinguishing climate friendliness into categories • There is no standardized format for summarizing data from individual sectors
ESG scores	Indicators	• Commitment to corporate	• Summarized	• Black box • Risk

based on quantitative and qualitative measures of climate, including carbon and green / brown exposure. strategies of companies • Engaging on climate issues along with non-climate issues indicators covering a number of factors • Well-established frameworks of greenwashing • Not directly related to a specific strategy

Table 3. Appendix C. Climate indicators examples by category

Category	Sample unit	Sample indicators
GHG emissions Range 1, 2 and 3; emission intensity	MT (metric tonnes)	• Absolute band 1, band 2 and band 3 GHG emissions • Funded issues by asset classes • Weighted average carbon intensity • Greenhouse gas emissions per MWh of electricity produced • Gross global greenhouse gas emissions from scope 1 covered by emission control regulations
Risks of transition Amount and degree of assets or business activities vulnerable to transition risks	Amount or percentage	• Volume of real estate collateral, highly exposed to the risk of transition • Concentration of credit exposure to carbon-related assets • Percentage of revenues from coal mining • Percentage of revenue in passenger-kilometers not covered by the Compensation and Reduction Scheme Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)
Physical risks Amount and degree of assets or business activities vulnerable to physical risks	Amount or percentage	• Number and value of mortgage loans in 100-year flood zones • Wastewater treatment capacity located in 100-year flood zones • Revenues related to abstracted and consumed water in regions with high or extremely high source water stress • Proportion of property, infrastructure or other alternative asset portfolios in an area subject to flooding, heat stress or water stress • Proportion of real assets exposed to climate hazards 1: 100 or 1: 200
Climate opportunities Share of revenue, assets or other business activities related to climate opportunities	Amount or percentage	• Written net premiums related to energy efficiency and low carbon technologies • Number of (1) zero-emission (ZEV) vehicles sold, (2) hybrid vehicles and (3) hybrid vehicles • Revenues from products or services that support the transition to a low-carbon economy • Share of delivered homes certified according to the green building standard
Capital expenditures Amount of capital expenditures, financing or investments to climate risks and opportunities	Reporting currency	• Percentage of annual revenues invested in research and development of low-carbon products / services • Investment in climate adaptation measures (eg soil health, irrigation, technology) • Internal price of carbon
Carbon prices Price per tonne of greenhouse gas emissions used by the organization itself	Price in reporting currency, for MT CO2e	• The price of carbon in the shadows, by geographical area • Part of the employee's annual discretionary bonus related to investments in climate-related products
Remuneration Share of executive management remuneration related to climate	Percentage, weight, description or amount in the reporting currency	• Integrate climate goals into long-term incentive cards for CEOs • Weighing the effectiveness against the objectives of the operational issues for the remuneration assessment card

Table 4. Appendix D. Studies on the evolution of sustainable reporting

Author	Period	Aim of the study	Conclusions
Sobhani (2011)	2000-2009	Sustainability reporting practices	The level of disclosure increased over the period under review, except for energy, environment and human rights issues
Harun, Rashid (2013)	2012	Determining the quality of sustainability reporting	Disclosure of some sustainability information in low-quality bank reports
Araya (2014)	2000-2013	Sustainability reporting	
Rogošić (2014)	2013	Determining the factors of corporate social reporting	Very few Croatian banks publish CSR reports
Pulejo и Rappazzo (2015)	2000-2014	Exploring the voluntary nature of reporting	Many ethical banks do not use standards and guidelines in their sustainability reports mainly due to the voluntary nature of reporting in Europe
Hummel и Festl-Pel (2015)	2013	Sustainability disclosure in the context of greenwashing	There is selective disclosure of information about sustainability issues Comparing environmental disclosure by systemically important banks Banks show wide variation in quality and quantity of disclosure
Carè (2017)	2011-2015	Comparing environmental disclosure by systemically important banks	Banks show wide variation in quality and quantity of disclosure
Masud, Bae и Kim (2017)	2010-2014	Environmental accounting	Environmental disclosures mostly concern the green banking and renewable energy categories and less the environment and waste management categories
Nwobu, Owolabi (2017)	2010-2014	Sustainability reporting	Emphasizes economic and social indicators more than environmental ones
Akter, Siddik (2018)	2014-2016	Environmental Finance Reporting Disclosures are not clear and classified.	Banks emphasize social and economic indicators more than environmental ones
Lundberg и Ek (2018)	2012-2016	Sustainability reporting trends	Environmental reporting is improving significantly
Korzeb и Medina (2019)	2015-2017	Analysis of reporting through multivariate assessment	During the period under review, sustainability support was not one of the priorities of the Polish banking sector

Table 5. Appendix E. Studies on the negative relationship between sustainability and financial performance of banks

Author	Period	Aim of the study	Conclusions
Soana (2011)	2004	An analysis of the relationship between CSR and CFP for 37 Italian banks.	There is no relationship between the variables in the short run
Abeyasinghe and Basnayake (2015)	2009-2013	Determining the relationship between CSR disclosures and financial performance of commercial banks	There is a negative relationship between CSR disclosures and financial performance of selected local commercial banks
Okoro and Omoro (2013)	2006-2010	To establish the relationship between CSR investment and sustainable growth of banks in Kenya.	CSR generates potential long-term benefits
Wu and Shen	2003-2009	They examine the relationship	CSR is negatively related to non-

(2013)		between CSR and financial performance and discuss banks' motivations for CSR	performing loans
Folajin et al. (2014)	2006-2012	To find out the impact of CSR on the profitability of the United African Bank	CSR expenditure has a negative effect on net profit in the short term, but in the long term it provides better returns
Taskin (2015)	2013	An Analysis of Turkish Banks' CSR Practices and Their Financial Performance	The results show that ROA and ROE have no relationship with CSR
Tijani and Adeoye (2017)	1992-2014	Analysis of the relationship between CSR and CFP of African banks Insignificant relationship between CSR and financial performance.	It is recommended that bank management consider CSR as a business opportunity that is beneficial in the long run
Mravlija (2017)	2002-2015	Analysis of the relationship between CSR and CFP in the banking sector in the short- and long-term perspective	The results show that the implementation of CSR activities has long-term financial effects
Nobanee and Ellili (2017)	2013	Investigating the effect of banks' economic, environmental and social disclosure on their financial performance	Sustainability disclosure does not have a significant impact on bank performance.
Bimha and Nhamo (2017)	2011-2014	Constructing an index to assess the effectiveness of environmental management and determining its relationship with operational efficiency indicators of banks	The results show a significant negative correlation between the constructed index and operational efficiency in most banks
Nguyen (2018)	201-2016	Examining the relationship between CSR disclosure and bank financial performance	There is a significant negative relationship between sustainability disclosure and financial performance of the banks studied
Fijałkowska and Garsztka (2018)	2012-2016	Analysis of CSR results and the financial performance of state-owned banks from Central and Eastern Europe	Corporate social and environmental results do not affect the financial performance of banks from Central and Eastern Europe
Mohamud (2018)	2010-2016	A Study on the Impact of CSR on Financial Performance in East African Banks	The result showed that there is a negative relationship between CSR and ROE
Deutsch and Pintér (2018)	2006-2013	To determine the relationship between CSR and financial performance of banks in the Hungarian banking sector	CSR activities lead to negative returns in short-term analysis, but they can provide returns in the long-term
Cuervo-Cazurra (2018)		The evolution of corporate social responsibility of business groups	Long-term analysis of CSR investments is required, not a survey of short-term reports
Sung Kim and Oh (2019).	2010-2015	An Analysis of the Relationship between CSR and CFP for Indian Companies	Empirical results show that improving CSR actions does not always lead to higher profitability

Table 5. Appendix F. Studies on the positive relationship between sustainability and financial performance of banks

Author	Period	Aim of the study	Conclusions
Carnevale and Mazzuca (2014)	To 2014	1) The direct effects of the sustainability report on the share price of European banks 2) Indirect effects on financial	Sustainability reports differ across European countries in line with the hypothesis of different institutional contexts

		indicators	
		3) The value of their sustainability reports in different countries	
Wangari (2014)	2008-2013	Examining the Impact of Voluntary Disclosure on Financial Performance	Correlation analysis results show a positive relationship between ROE and voluntary disclosure
Achoki, Kule and Shukla (2016)	2011-2015	Investigating the effect of voluntary disclosure on financial performance	There is a strong relationship between voluntary disclosure, size and financial performance of banks
Guan, Hu and Ren (2017)	2007-2014	Study the impact of carbon intensity of loans on non-performing loans	Carbon intensity of loans has a positive effect on the ratio of non-performing loans of banks
Matuszak and Rozanska (2017)	2008-2015	Exploring the relationship between CSR reporting and financial performance.	The results show a positive relationship between bank sustainability disclosures and their profitability as measured by ROA and ROE, but the relationship between disclosures and NIM is negative
Chowdhury (2018)	2012-2016	Investigating the correlation between sustainability and bank financial performance	The results show that the integration of sustainability in the banking sector has a significant impact on total assets, ROA and ROE
Oyewumi, Ogunmeru and Oboh (2018)	2010-2014	Examining the effects of CSR investment disclosure on corporate financial performance	Disclosure of commitment to environmental sustainability enhances reputation and has a positive impact on financial performance
Gitahi, Nasieku and Memba (2018)	2010-2015	Analysis of CSR disclosure in annual reports	Sustainability information has a significant positive relationship with average market price per share (MPS)
Buallay (2019)	2007–2016	Investigating the relationship between ESG and operational (return on assets), financial (return on equity) and market performance	Empirical results show that there is a significant positive impact of ESG on bank performance. Specifically, environmental reporting also positively affects ROA and TQ (Tobin's q coefficient)

Table 4. Appendix G. Researches on the impact of Voluntary Sustainability Reporting on Banks

Author	Period	Aim of the study	Conclusions
Weber (2015)		Risk assessment, sustainable finance, voluntary initiatives and regulations in the banking sector	Despite criticism of their low impact, they help to integrate sustainability into the core business of banks and put pressure on those who do not adopt these codes of conduct
Oyegunle (2016)	To 2015	A study of sustainability reporting regulations in the banking sector of developing countries	Voluntary initiatives focused on the financial sector and the environment have been successfully implemented in developed economies, but the same cannot be said for developing economies.
Adeyini (2016)	2016	Analysis of voluntary codes in the financial sector to determine the differences between their members and other banks	There is a significant difference between the two groups of banks
Novokmet and Rogošić (2016)	2014	Analysis of the sustainability report of UniCredit Group in accordance with the GRI-G4	The study report shows shortcomings in the reporting of environmental indicators by the bank

		framework	
Mahmud and Islam (2017)	2011-2015	Analysis of sustainability reports according to the GRI framework	Only 8 banks out of 30 published a sustainability report from 2011 to 2015 according to the GRI framework. In most cases, information on sustainability reporting does not meet the GRI guidelines
Islam, Jain and Thomson (2016)	2005-2012	A review of sustainability disclosures in the Asia-Pacific region under the GRI framework	Evidence of a significantly higher level of sustainability reporting by GRI members than non-members. There is also a significant difference in disclosure levels before and after GRI members join European stock markets value this type of information significantly positively.
Mar Miralles-Quiros (2018)	2001-2013	Analysis of GRI Sustainability Reports of 75 European Public Banks	The findings show that the financial crisis does not change investors' preferences for this type of information
Weber and Laronde (2018)	2013-2014	Environmental reporting by banks	Environmental reporting in the financial industry is still in its infancy
Basic (2016)	2013	Exploring the relationship between financial performance and EP compliance	Financial institutions that adopt the principles are larger and perform significantly better in terms of liquidity and total shareholder return
Finger and Gavius (2017)		Study of the effect of the adoption of EP on the performance of banks	In developed (developing) countries, the adoption of EP is associated with an increase (decrease) in financing activity, as well as the share of interest income
Chen (2018)	2003-2010	Research adoption of EP on bank liquidity	EPFIs generally have higher liquidity than non-EPFIs

"The impact of the COVID-19 on the online buying of the citizens of the North Macedonia: a case study Municipality of Tetovo"

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Abstract: The study of consumer behavior on the Internet implies a special importance also as a result of the spread of the COVID-19 pandemic throughout the world. The year 2020 will be remembered in history for the pandemic, the Corona Virus (Covid-19) disease that spread all over the world and that still continues. It has a major impact on various aspects of people's lives and behavior. It causes health and economic problems worldwide, by reducing the economic activity of companies, increasing unemployment and reducing consumption. Demand also depends on consumer behavior, which has undoubtedly undergone changes caused by the Covid-19 pandemic. Consumers are facing the crisis in different ways, some of whom are under constant stress, others are concerned about buying in panic, mainly necessary products and some of them remain indifferent as a result of the recommendations made by the government and health professionals. The retail sector is developing rapidly. Retailers are investing more effort and resources to provide a seamless experience across multiple channels. The retail sector needs to make a continuous online development according to the situation recently introduced which came without any prior notice. Now offline shopping becomes more difficult because people were accustomed before the pandemic to physically touching products not through the internet, online shopping. And it is very important to analyze how buyers will benefit from internet technology by making online purchases. Therefore, there is a need that the findings may contribute to predicting future consumer behavior here in North Macedonia especially the citizens of Tetovo, which is important for many businesses affected by the pandemic.

Key words: COVID-19, online buying, and consumer behavior

Introduction

The global economy in general and international trade in particular have suffered and continue to suffer massive losses from the corona virus pandemic. The uncertainty in which businesses and consumers found themselves is exacerbated by the fact that we are seeing an increase in the recession in the economy, an accelerated increase in the amount of money in circulation, a significant increase in inflation, declining revenues, restrictions on cross border travel. Changing consumer demand and changing the behavior of market actors depend on a large number of factors. Where we have global blockage, social distancing and other measures to prevent the spread of the disease have caused consumers to change their behavior, especially in buying products more in online markets. As a result, the economy underwent rapid transformations, with this pandemic accelerating the development of digital commerce. Featuring a digitally immersed consumer, a more selective consumer who also encounters financial hardship.

The objectives of this study will be to explore the promoters of e-shopping in the pandemic situation and to know the favorite products that customers want to buy more through the Internet focused mainly on Northern Macedonia with special emphasis on the citizens of Tetovo, who have been the most important factors that have influenced the activity of their buying behavior.

The purpose of this study was to form a methodological approach to assess the relationship and the level of influence of factors that activate the buying behavior of online consumers in the background of the pandemic. During the research we discovered which changes in purchasing behavior are typical of the Covid-19 pandemic.

One of the main questions is whether this behavior will return to normal after the pandemic period. As consumers adapt to limited mobility over a longer period of time, they will be able to embrace new technologies that facilitate work, study and consumption. The adoption of digital technology is likely to change existing habits and on the other hand public policy will impose new consumer habits.

Literature review

"In the first half of 2021, 6.54 million transactions were made, which is an increase of 50% compared to the number of transactions performed in the same period last year, which means that the value of the average

transaction has increased and is now 26 € versus 24 € in the same period last year. If in the first half of last year the average transaction of legal entities was higher (30.7 €) compared to natural persons (23.8 €) in 2021 it is almost equal between legal entities and natural persons”,-say from the Association E-Commerce.

“The pandemic significantly stimulated the growth of e-commerce, so we recorded a three-digit increase in the value of domestic card transactions for domestic e-commerce over the past year. In the conditions of travel bans and care for the protection of their health, more and more citizens have turned to the alternative of traditional shopping, through the Internet”,-declare the E-Commerce Association

“During 2021, online sales continued to increase in Northern Macedonia. According to the data, in the first half of this year, the citizens of Northern Macedonia have spent 123 million € through online payments, a figure that is 77.2 percent higher compared to 2020”-quoted by Radio Free Europe.

“The values of transactions through bank cards to electronic merchants in the country has increased by 77 percent, compared to 2020. This increase is encouraging given that last year we had strict restrictive measures in place,”-President of the Trade Association, Nina Angelovska.

“Preliminary data show a significant increase in the use of electronic payment cards. For example, in March alone we have a 30 percent increase compared to March last year. We have an increase in the use of ATMs, then payment via internet, via mobile and this is to be welcomed. Our appeals were in the direction of maintaining health. Citizens should do their best to qualify for electronic payments to avoid long queues in front of banks. With electronic payment they” not only do they maintain their health, but they also save time”, said National Bank Governor Bezhoska.

“The analysis of the Association for Electronic Commerce shows that the citizens of Northern Macedonia in the first three months of 2021 in e-commerce have spent a total of 28.9 million € and in March alone 10.1 million €. This represents an increase of 17.9 million € (61.5 percent) compared to the period of the first three months of 2019. Data show that e-commerce in March this year increased by 99 percent compared to March last year”.

Hypotheses

H1-Consumers are more interested in shopping online than before the pandemic period.

H2-The most demanded products during online shopping by consumers during the pandemic period are clothing, food products, electronic devices and cosmetics.

H3-Consumers have a more positive approach to the products of foreign companies compared to the products of domestic companies.

Research methodology

During the research we will focus on the defined hypotheses, where all the data that we research and use must be true.

The methodological approach for this paper is based on quantitative methodology, using a research survey to collect information from a large number of citizens of Tetovo and the surrounding area through their answers to our questions, placed in tables, various graphs to examine relationships within data to come to a conclusion as clear as possible.

We conducted a survey that includes questions about the behavior of consumers when buying them online because of the pandemic. The questionnaire consists of different questions, divided into several groups of questions, different types, related to demographic profile, education status, income and where they live. Questions are related to consumer behavior and awareness of changing their behavior affected by the pandemic crisis, what types of products they bought online during the pandemic, which services they used, which were the online sites that used the most and others. We distributed the questionnaire on the Internet through the Google Forms platform, to the citizens of Tetovo, reaching in a very short time 105 respondents.

Research procedure

Secondary methods such as the use of the Internet, the official website of the Ministry of Finance and the Statistical Office of the RMV were also used in the research procedure for data collection. Even including social media data that correspond to the most current news.

Analysis and interpretation of results

To identify changes in consumer behavior as a result of the pandemic and what impact it has had on their lives, we conducted an online survey on citizens of Tetovo, respectively individuals of different ages. The first group of questions is related to the demographic characteristics of the eight respondents such as gender, age, where they live and own their income varies using different graphs, tables, cross tabulations, histograms to come up with a work genuine.

From the respondents as we see on the figure 1 high percentage includes the age of 15 to 25 years. And a large number who live together with their families, two or more members in a house. Where we have a percentage of 91.2% compared to those who live alone without any other member. Their place of residence often affects how easy it is for them to buy products or simply to receive a service. Cities that are far the center has made them choose online services over it to go to buy physically in the store.

Figure no.1 What is your age group?

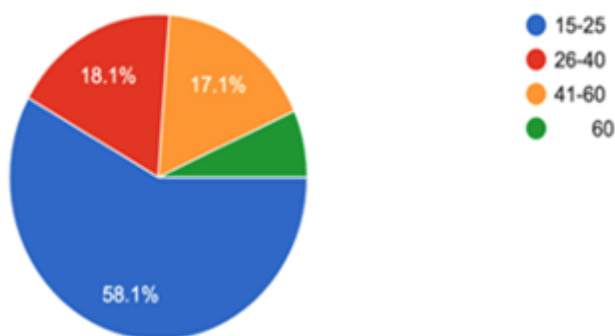
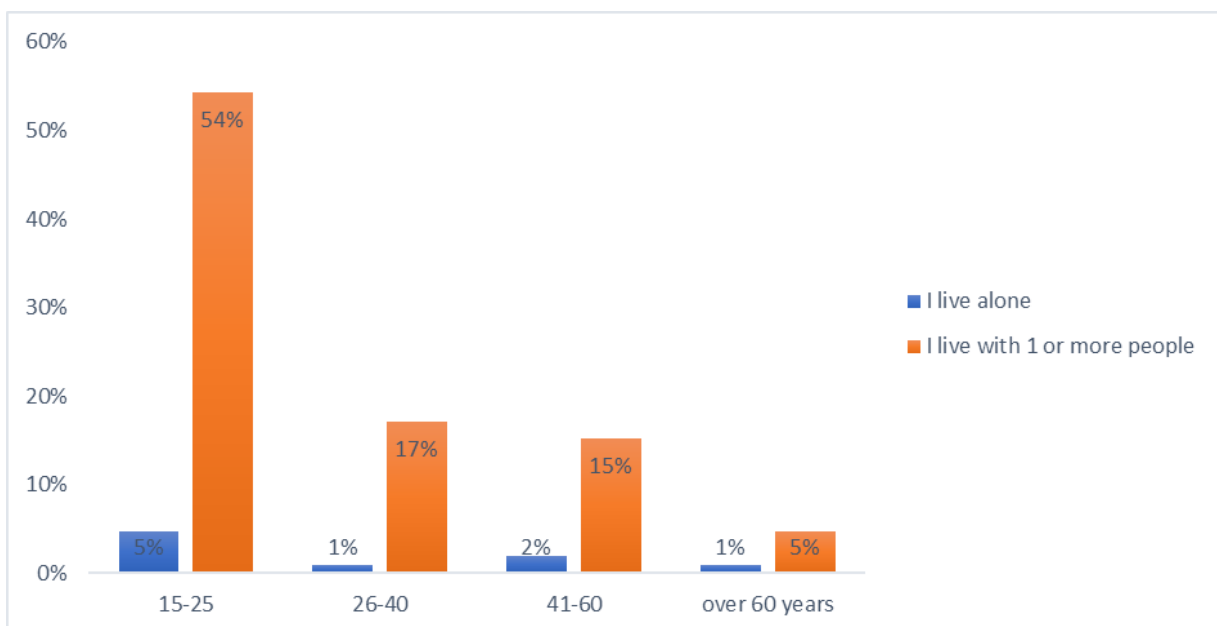
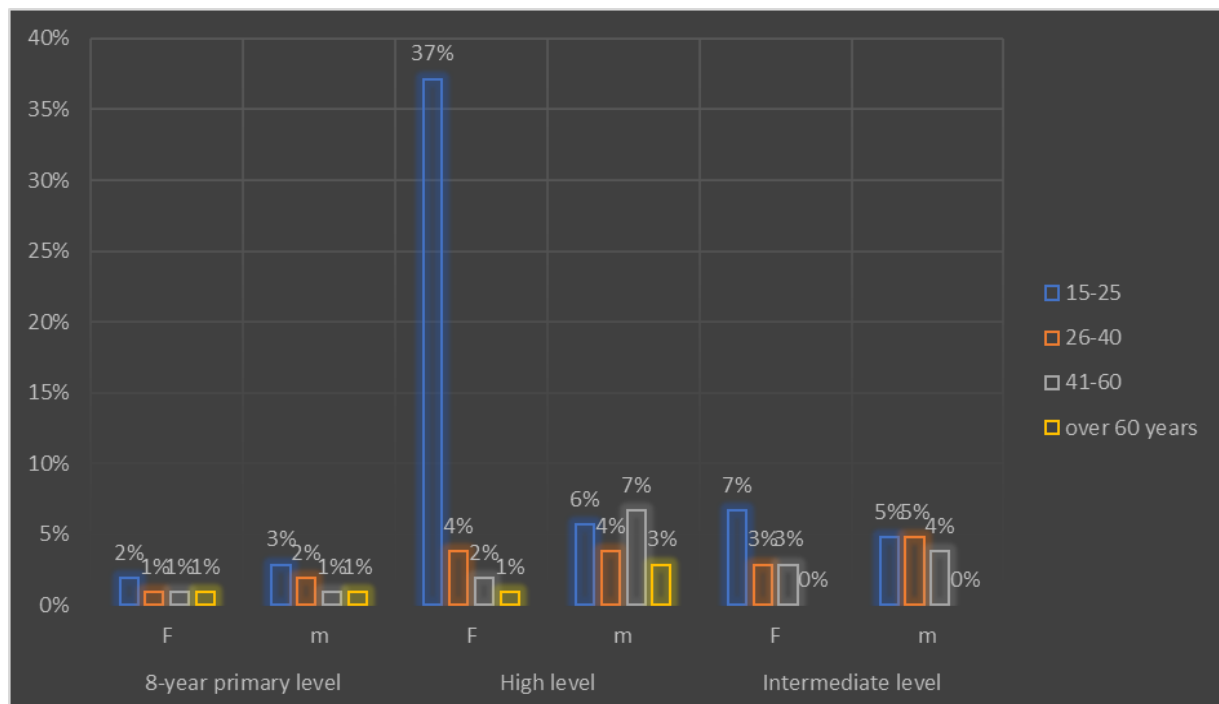


Table no.1 Age of respondents and with whom the respondents live



From the cross-tabulation we see that most of the responds have a high level of education where from the age 15-25 answered more women who have a high level of education, a higher percentage of 62.9% we have at age 41-60 and then we have a low percentage in wither they have 8-year primary and secondary education. This level of education also affects their awareness of how they will act when buying products or services; this will affect their consumer behavior as a result of the pandemic.

Table no.2 Level of education, age and gender



Monthly incomes are almost in a fair proportion that we cannot say that there is many respondents who have higher or lower monthly income. Where we see a small difference between them, we see a small difference between them, where less than 250 € have a percentage of 17.1%, of 250-400 € 28.6% and over 600 € (29.8%) almost the same percentage. From this we understand that we interviewed people who have a higher level of monthly income than those that are less than 250 €. From this level of monthly income we will have a greater impact on consumer behavior during the purchase. Because those people who have a lower level of income will not have much demand to buy more products compared to those that have a higher level.

In figure no.4 we have presented the level of income according to their level of education, where we conclude that those who have completed a high level of education also have a higher monthly income.

Table no.3 Level of income according to their level of education

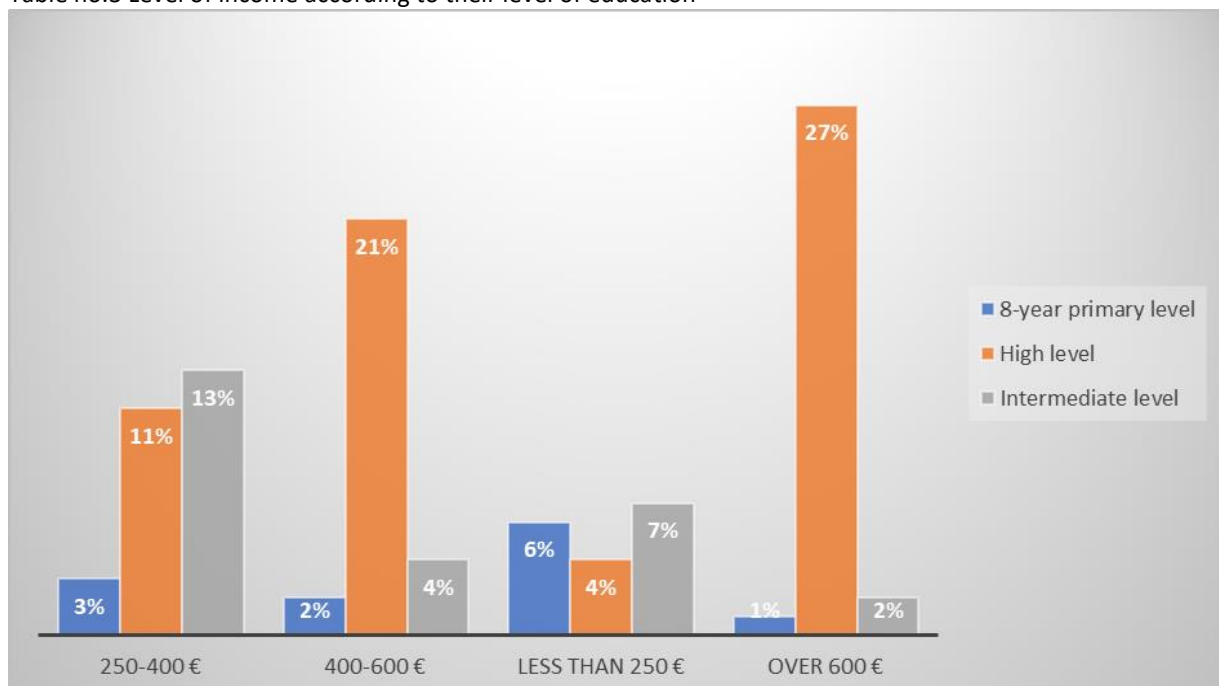
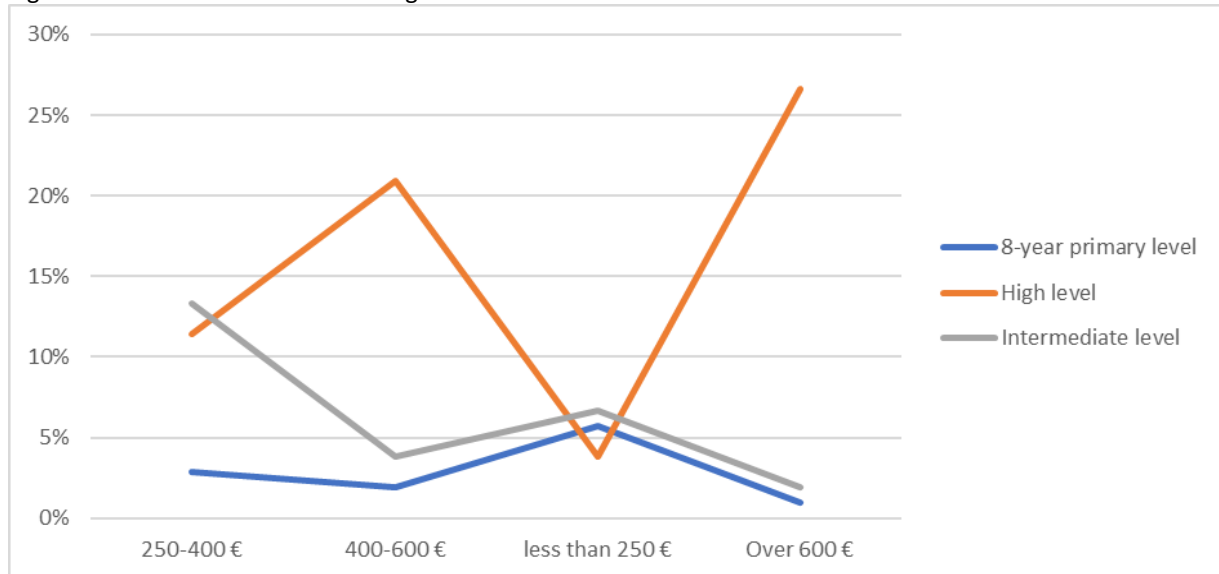
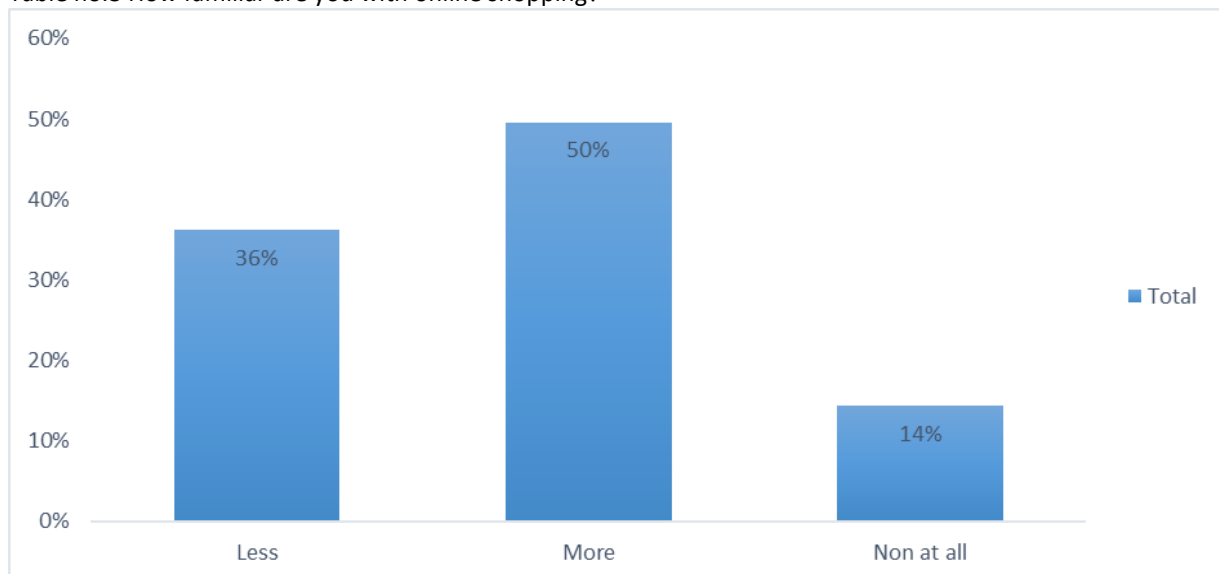


Figure no.2 Level of income according to their level of education



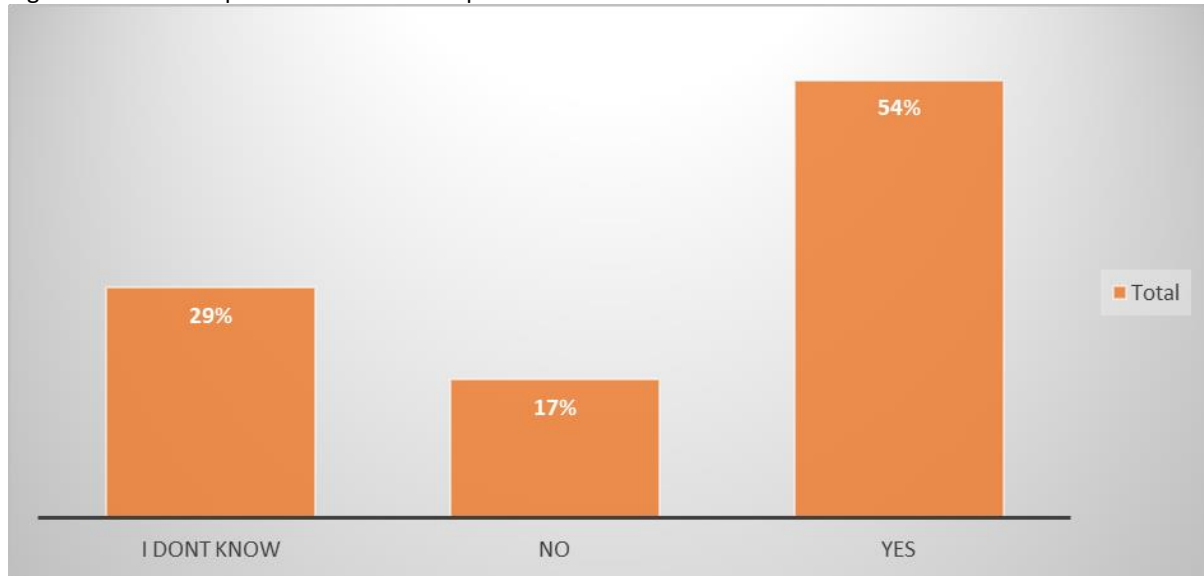
The second group of questions is related to consumer behavior and awareness of changing behaviors affected by the pandemic. Analysis of respondents' answers to the question "how familiar are they with online shopping" during the pandemic shows that they are very familiar with online shopping, where 50% of peoples are very familiar but we cannot say this before the pandemic, because before the pandemic they have not been familiar with online shopping. They have been but it has not been widespread as it is now. Also high is the percentage that are less familiar with online shopping, but this is a result of being older on not liking to buy products online without physically affected.

Table no.3 How familiar are you with online shopping?



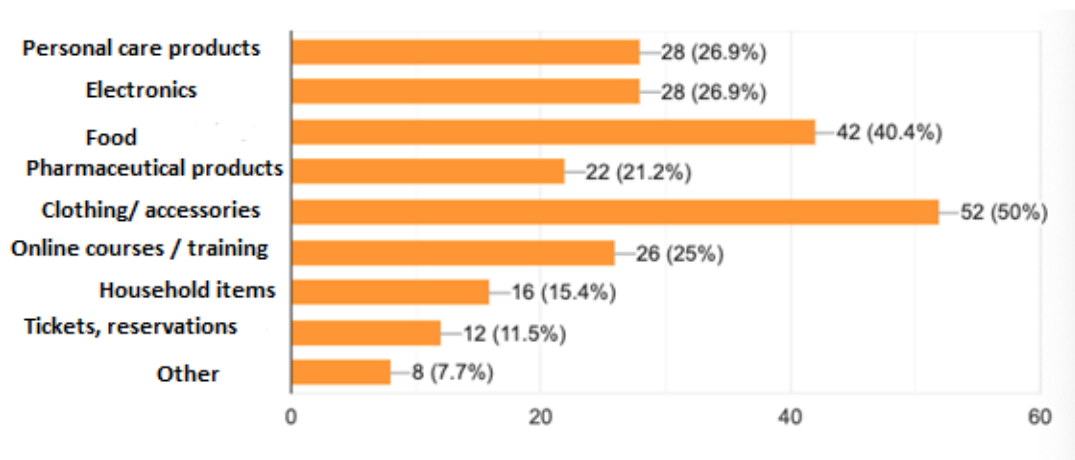
In correlation with the question about the opinion of the respondents on "Will the shopping behavior be the same even after the pandemic" most of the respondents have the impression that the Covid 19 pandemic has an impact on the habits and behavior of consumers that has been done in the citizens of Tetovo. Changes in consumer behavior are noticed in other cities in Northern Macedonia but to know that not only when the pandemic will end, but these changes in consumer behavior will affect the future of peoples. Even now they have adapted a new style of shopping but the behavior of consumers after the pandemic from the question we notice that a large percentage are in doubt as to whether it will change or not the situation with online shopping 35.3 % are of the opinion that the behavior will not change and 24.5 % think that it will be the same behavior which is more the reasonable because if consumers are taught to buy products online it is difficult to return to the previous physical purchase of products.

Figure no.3 Has the pandemic affected respondents' incomes?



Analysis of data about the products that consumers most often buy online

Figure no.4 Which product types have you bought online since the start of the outbreak?



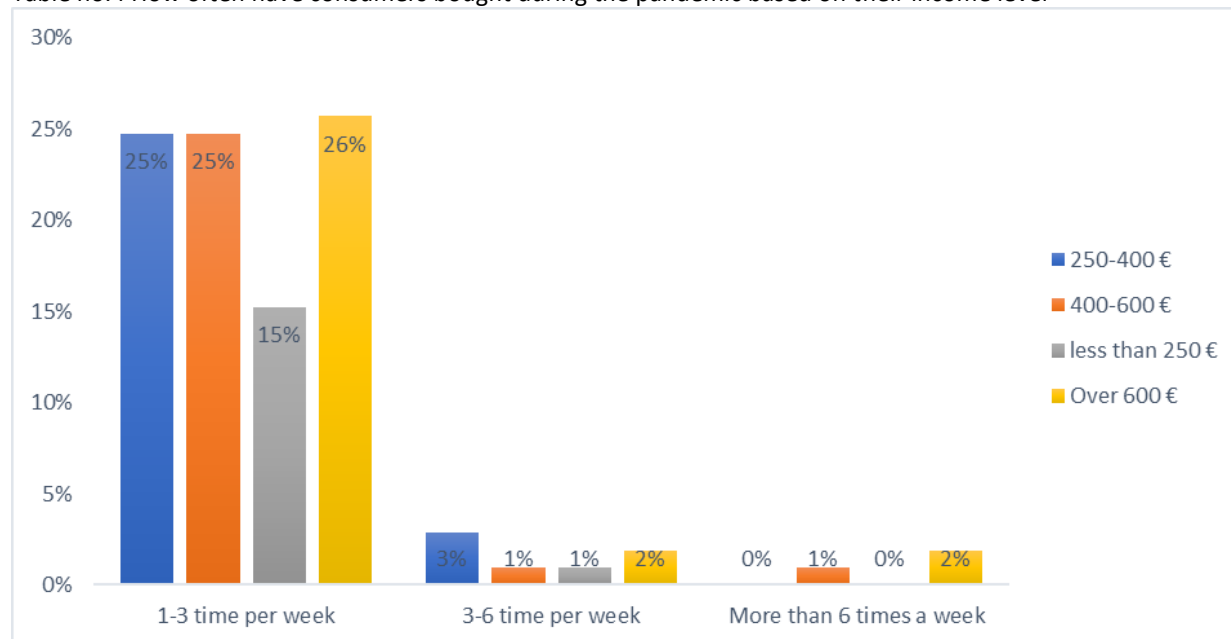
The four main categories of products and services that consumers buy during a pandemic are clothing, food, electronics and cosmetics. The option of buying clothes has a higher percentage of 50%. Given that respondents are committed to respecting government measures to combat the spread of the virus and refer to personal and household hygiene as one of the measures to protect against the pandemic.

As we see in figure no.4, in Tetovo there are not many stores that offer online, home products as well as pharmaceutical drugs where we see that they have a lower percentage than other categories. Tickets, reservations during the quarantine were all canceled, now that the economy is open people have started booking and want to go to other countries. The measures have almost been eased more, and people are expected to March be the end of pandemic.

Across-tabulated table of data will take this analysis one step further and enable you to better see how questions relate to each other. This qualitative analysis helps reveal a relationship between the change in consumer behavior during the pandemic and the concern of respondents, their monthly income, etc.

Where we have shown in the figure the relationship between the question of how many times they have bought online and their monthly income.

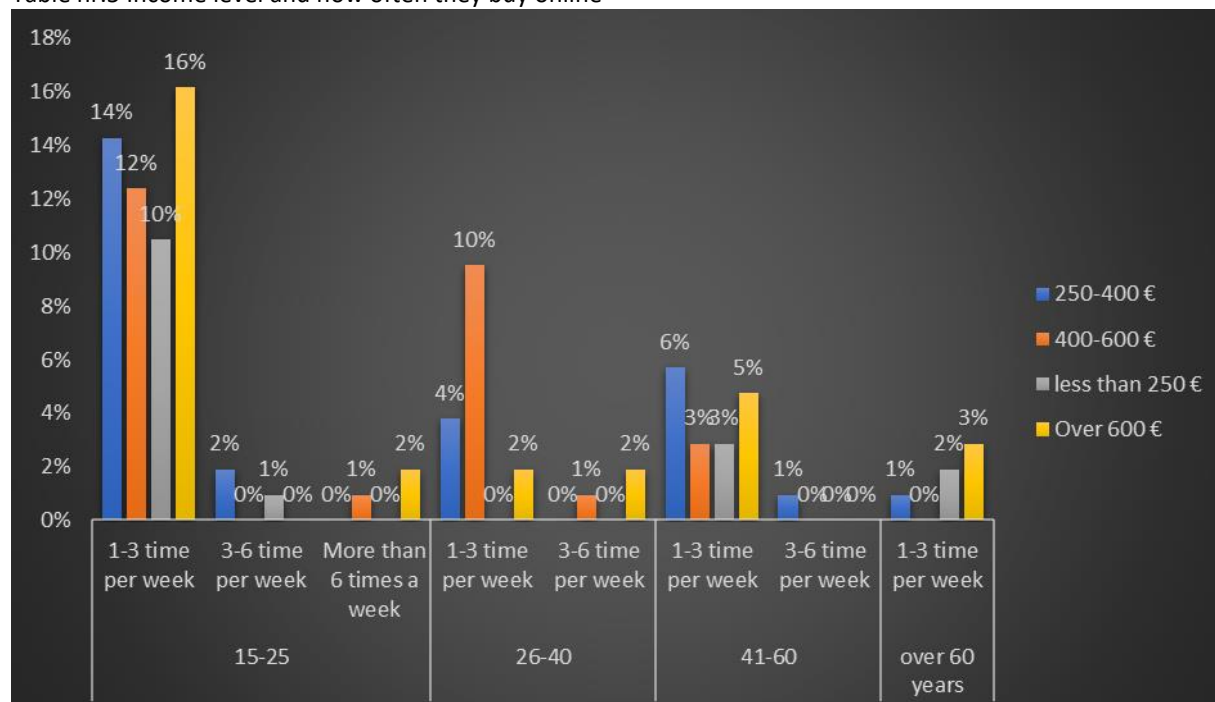
Table no.4 How often have consumers bought during the pandemic based on their income level



Out of a total of 105 respondents we notice that even though they have higher level of incomes they have not bought products more than once during the week, the same is to buy 1 to 3 times a week even though they have lower incomes.

Consumers who have an income of less than 250 € have bought 1 to 3 times a week, even though they have a lower income than others, their personal needs must be met. From the table we see that we have the highest number of respondents with a monthly income of 250 to 400 € where they also buy 1-3 times a week using online service that it seems more reasonable to buy from home than to go to physically to the store, and we have those with over 600 € of monthly income, where 27 respondents use the internet 1-3 times a week to buy products and 2 respondents up to 3-6 times a week. We also have a graphic presentation of these data to be more easily understood.

Table nr.5 Income level and how often they buy online



The last two questions of the questionnaire are dedicated to experience of consumers during online shopping, respectively what are the positive sides of online shopping versus traditional-physical shopping, as well as the worst experience that happened to them during online shopping.

These are open-ended questions where each respondent can express their opinion about the question posed to them, either in the form of a sentence or in the form of a paragraph

In the answers of 105 respondents, when asked about the positive aspects of online shopping in relation to physical shopping, the answers generally dominate in terms of time spent, emphasizing that during online shopping they have optimal time consumption, respectively savings, time and money that often find products at cheaper prices than in stores as well as fast delivery of products-without long waits.

Saving on the part of transportation costs, is emphasized as a positive side of online shopping, opportunities for cashless purchases, as well as buying products that are not found in our local market are some comments within the positive sides of online shopping in relation to physical purchases.

A very current answer especially during the pandemic period is Participation in online courses, trainings organized by foreign experts.

The question dedicated to the worst experience that individuals have experienced while shopping online has variety answers. Mostly dominating the arrival of the products different from how it looked in the pictures and the impossibility of returning to some companies. Orders from some web sites have not arrived at all, delivery delay more than emphasized during the ordering, poor quality, delivery of products completely from those ordered. These are some of the negative experiences that have happened to individuals surveyed in the questionnaire.

Conclusion and recommendations

As we know the Covid 19 pandemic has cause many social and economic changes globally. From its inception, to prevent the spread of the pandemic, in almost all countries affected by this disease, a series of protective measures have been taken for the physical and social distance between the populations.

Measures have caused changes in individual behavior most of which are of a psychological nature such as: anxiety, fear and insecurity. These also affected the shopping behavior of consumers. The Republic of Northern Macedonia is still very much affected by the pandemic. The very imposition of social distancing to avoid infection, together with the strict isolation measures implemented in the country, have put a large share of retail and many other businesses pending, at least temporarily. Respectively during the isolation most consumers created food and other necessary reserves, although now we are not in isolation, and so many other things are open. The quarantine continue to impact for a long time in our country. Public health requirements forced many to spend most of their time at home leading to greater internet use.

The survey on the impact of the crisis on consumer behavior was conducted in order to examine whether the external shock could encourage the adoption of digital entrepreneurship In the Republic of Northern Macedonia. In this paper, in addition to the descriptive analysis of the survey data, the numerous tables we have used provide important information for identifying target groups of consumers as well as the possibilities that the future can expect for everything to be digital, especially all return consumer purchases online.

The main findings from the survey show that the majority of respondents (63.5%) are aware of changes in their commercial behavior. More than half have changed their behavioral habits by buying products that they could not afford to buy physical during the pandemic but also before the period of the pandemic. Although the pandemic has accelerated the process of digital transformation in the purchase of products and services, it is clear that the citizens of Tetovo where we conducted the survey shift their spending towards the purchase of clothes the most. According to them buying clothes online has made them afraid to go to the store to try them and then to buy them, so they have chosen something faster. From their answers we see an awareness where they show a tendency to increase online shopping and decrease visits to stores during the pandemic. Also consumers have accepted that their habits should be changed. From their answers we have noticed that they are not even very satisfied with the services offered during online shopping, where we have 55% of citizens who are less satisfied, and that they do not have enough information when buying online from local companies in Tetovo, and so they decide to buy from company's abroad country (58.3%).

Our recommendation to consumers is that the more they buy online during the pandemic period, will be to their advantage, considering their health, as well as the more widespread online commerce. Our country to become like other countries in the world where e-commerce is very advanced, even from the survey we saw that many services offered by local companies are not very well designed when clicking on the Internet.

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Savaşlar ve Sebep Oldukları Tehlikeler

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Özet: Savaş, devletler ve halklar arasında örgütlü bir mücadeledir ve bir siyasi zorlama ve siyasi gücün gösterilmesi biçimidir. Savaşın insan yaşamının her alanına verdiği zarar uzun süredir devam etmektedir. Bu savaşlar, haklı ve haksız, saldırgan ve savunmacı savaşlar olmak üzere 3 ana tipe (emperyalist, kurtuluş ve iç savaşlar) ayrılır. Savaş, kitlesel ölümlere, afet ve yıkımlara, maddi ve manevi kayıplara neden olan küresel bir sorundur. I. Dünya Savaşı'nda 10 milyondan fazla insan, II. Dünya Savaşı'nda ise 82 milyondan fazla insan öldü ve yüz binlerce yerleşim yeri yıkıldı. Savaşlarda ve çatışmalarda ölenlerin %90'ı 20. yüzyılda düştü. İkinci Dünya Savaşı'ndan sonra SSCB ile AKP arasındaki çelişkilerin derinleşmesi siyasi ilişkileri germiş, "soğuk savaş" koşulları nükleer silahların kullanıldığı "yıldız savaşları" tehlikesini artırmıştır. Bilimsel ve teknik başarıların modern zamanlarda askeri amaçlarla kullanılması, savaşların yıkıcı gücünü göstermektedir. Halihazırda dünyada silahlı kuvvetlerin sayısının artması, silah ticaretinin hacminin artması, nükleer silaha sahip devletlerin yaygınlaşması, insanları mülteci ve yerinden edilmiş kişilere dönüştüren silahlı çatışmaların yaygınlaşması, büyük güçlerin tansiyonu düşürme çabaları. çeşitli bölgelerde ve jeopolitik planlarını uygulamak için yaptıkları manevralarda, uzayı savaş amacıyla kullanmaya çalışanlarda güçlerin varlığı endişe vericidir. Nükleer silahların sınırlı ölçekte kullanılması, yeryüzündeki doğal dengeyi bozma ve medeniyeti yok etme gücüne sahiptir:

- nükleer savaş, biyolojik bir tür olarak insanın varoluşu için gerekli maddi koşulları bozar;
- antropojenik maddelerin atmosfere atılması, ozon tabakasının incelmeye, ozon deliğinin oluşmasına ve ultraviyole ışınlarının yeryüzüne düşmesi sonucu tedavisi mümkün olmayan hastalıkların artmasına zemin hazırlar;
- savaşlar büyük maddi ve manevi kayıplara neden olur. Nüfusun sosyal durumunu ağırlaştırır, yoksulluktan, açlıktan ve psikolojik durumdan muzdarip olmasını etkiler, yarına olan inancını azaltır;
- savaşların demografi üzerinde olumsuz bir etkisi vardır. Nüfus artışını engeller, nüfusun azalmasına ve yaşlanmasına neden olur, yaş ve cinsiyet yapısında değişikliklere neden olur;
- savaşlar çevre felaketlerine neden olur. Silahların üretimi ve kullanımı sırasında ortaya çıkan zararlı atıklar, çevre ve nüfusun sağlığı ve genetik fonu üzerinde yıkıcı bir etkiye sahiptir;
- kimyasal, biyolojik, nükleer ve konvansiyonel silahların üretimi ve depolanması için ayrılmış alanların kirlenmesi, flora ve faunanın yok edilmesi tehdidi oluşturur;
- kimyasal silahların insan sağlığı üzerindeki etkisi ölümüne neden olur. Bu silahlar geçici körlük, sağırılık, felç, cilt ve gözlerde ciddi yanıklara neden olur.

Bu nedenle, savaşların ağır sonuçları, devletlerin ve insanların savaş ve barış sorununa yeni bir perspektiften yaklaşmasını gerektirmektedir.

Anahtar Kelimeler: savaş, tehdit, tehlike, silahlanma, imha, kayıp

Wars and The Dangers They Cause

Abstract: War is an organized struggle between states and peoples, and it is a form of political enforcement and demonstration of political power. The damage caused by the war to all areas of human life continues for a long time. These wars are divided into 3 main types (imperialist, liberation and civil wars) of just and unjust, aggressive and defensive wars. War is a global problem that causes mass death, disaster and destruction, material and moral losses. More than 10 million people were killed in World War I, and more than 82 million people were killed in World War II, and hundreds of thousands of settlements were destroyed. 90% of those killed in wars and conflicts fell on the 20th century. After the Second World War, the deepening of contradictions between the USSR and the ACP strained political relations, the "cold war" conditions increased the danger of "star wars" using nuclear weapons. The use of scientific and technical achievements for military purposes in modern times shows the destructive power of wars. Currently, the increase in the number of armed forces in the world, the volume of arms trade, the proliferation of states with nuclear weapons, the expansion of armed conflicts that turn people into refugees and displaced people, the efforts of major powers to maintain tension in various regions and their maneuvers to implement their geopolitical plans, those who try to use space for war purposes the presence of forces is a concern. The use of nuclear weapons on a limited scale has the power to disrupt the natural balance on earth and destroy civilization:

- nuclear war disrupts the material conditions necessary for human existence as a biological species;

- throwing of anthropogenic substances into the atmosphere creates conditions for the thinning of the ozone layer, the creation of the ozone hole, and the increase of incurable diseases as a result of the fall of ultraviolet rays on the earth's surface;
- wars cause great material and moral losses. It aggravates the social situation of the population, affects its suffering from poverty and hunger and psychological condition, reduces faith in tomorrow;
- wars have a negative impact on demographics. Prevents population growth, causes population decline and aging, changes in its age and gender structure;
- wars cause environmental disasters. Harmful waste generated during the production and use of weapons has a devastating impact on the environment and the population's health and genetic fund;
- contamination of areas designated for the production and storage of chemical, biological, nuclear and conventional weapons poses a threat of destruction of flora and fauna;
- the impact of chemical weapons on human health results in his death. These weapons cause temporary blindness, deafness, paralysis, cause severe burns on the skin and eyes.

Therefore, the severe consequences of wars require states and people to approach the problem of war and peace from a new perspective.

Key words: war, threat, danger, armament, destruction, loss

GİRİŞ

Şu anda, savaş ve barış sorunu, insanlık için büyük bir endişe konusudur. Savaş, devletler ve halklar arasında örgütlü bir silahlı mücadele olup, siyaseti zorla uygulama ve siyasi güç gösterme biçimidir. Antik Yunan filozofları savaşlardan, yıkıcı etkisi olan ve var olan toplumsal ilişkileri koparan bir olay olarak bahsetmişlerdir. B. Russell, "Batı Felsefesi Tarihi" adlı eserinde Herakleitos'un savaş hakkındaki görüşüne atıfta bulunmuştur: "...savaş her şeyin babası ve kralıdır. Bazılarını köleleştirebilir ve bazılarını özgürleştirebilir. Savaşlarda her şey yaratılır ve yok edilir" (Russell, 2012, 46).

Haklı ve haksız, saldırgan ve savunmacı savaşlar toplu ölümlere, felaketlere ve yıkımlara, maddi ve manevi kayıplara neden olur. Savaşların toplumsal hayatın her alanına verdiği zarar uzun süredir devam etmektedir. Modern savaşlar insanlığı yok etmekle tehdit ediyor. Savaşlar siyasetin sadece devamı değil, aynı zamanda silahıdır. Bugün bazı devletler nükleer tehditlerini artırmaya ve savaş yoluyla topraklarını genişletmeye çalışıyorlar.

İkinci Dünya Savaşı'ndan sonra SSCB ile ABD arasındaki çelişkilerin derinleşmesi siyasi ilişkileri germiş, "soğuk savaş" koşulları nükleer silah kullanan "yıldız savaşları" tehlikesini artırmıştır. Halihazırda silahlı kuvvetlerin sayısındaki artış, silah ticareti hacmi ve insanları mülteci ve yerinden edilmiş insanlara dönüştüren silahlı çatışmaların yaygınlaşması endişe vericidir. Büyük devletler, çeşitli bölgelerde gerilimi sürdürerek jeopolitik planlarını uygulamak için manevralar yapmakta, uluslararası hukuk normlarını göz ardı ederek saldırganı desteklemeleri ve himaye etmeleri, memnuniyetsizliklere neden olmakta ve devletlerarası ilişkileri daha da gerginleştirmektedir.

İlerici güçler birleşip, Dünya üzerindeki tüm maddi dünyanın yıkımını tehdit eden termal-nükleer savaşları önlemek için somut önlemler almalıdır. Bu tür savaşların neden olduğu felaketleri yaşayan ve dehşetlerini yaşayan farklı milletler, sürekli savaş politikasını kınamaktadır. Böyle bir eğilim, Almanya'da dini homojenliğin zorla elde edilmesinin imkansızlığının kavranmasıyla ilgiliydi. Napolyon Savaşlarından sonra Avrupa'da savaşmayı reddeden yeni bağımsız devletler ortaya çıktı. Unutulmamalıdır ki, farklı kalkınma yolları seçmiş ülkelerin savaşa karşı ortak mücadelesi, milletlerin ilerlemesinin temel koşuludur. M. Gandhi bu vesileyle şöyle yazmıştır: "Upanishad" kitabında bu 3 gerçeği (yazar: şiddeti, ayrımcılığı ve düşmanlığı ortadan kaldırmak ve barışı, huzuru, ilerlemeyi yeniden tesis etmek) okuduktan sonra, içinde bir güç ve bir iyilik olduğunu keşfettim. dünya. var Bu güç, kendini kontrol etme gücüdür."

1.1. SAVAŞA NEDEN OLAN FAKTÖRLER

İsviçreli bilim adamı Jean-Jacques Babel'e göre son 6 yüzyılda dünyada 3 milyar 640 milyon insanın yıkımına neden olan 14.513 savaş yaşandı. Böylece 17. yüzyılda 3,3 milyon, 18. yüzyılda 5,4 milyon ve 19. yüzyılda 5,7 milyon insan savaşta öldü. 20. yüzyılda bu gösterge 130 milyonu aştı. Savaşlarda ve çatışmalarda ölenlerin %90'ı 20. yüzyılda düştü. Birinci Dünya Savaşı'na katılan orduya 70 milyon kişi katıldı ve askeri harcamalar 208 milyar

dolardan fazla oldu. 10 milyardan fazlaydı 10 milyardan fazla insanın ölümüne neden olan bu savaşta maddi kayıpların maliyeti 338 milyar doları aştı.

Büyük Vatanseverlik Savaşı (1941-1945) sırasında sadece SSCB'de 27 milyon insan öldü, 70 bin köy, 1756 şehir ve kasaba yıkıldı. Belarus'ta 356 köy sakinleriyle birlikte yok edildi. 20. yüzyılın 50'li yıllarına kadar sivil nüfusun %50'si savaşlarda ve çatışmalarda öldü, 60'larda bu oran %52, 70'lerde %73 ve 80'lerde %85 idi. 21 bölgesel çatışmada nükleer silah kullanılmamasına rağmen, "Nükleer Kulüp"ün üye sayısındaki artış bu tehdidin varlığına işaret ediyor.

Son yıllarda gelişmekte olan ülkelerde silah ve askeri teçhizat ithalatının gıda ürünleri ithalatından fazla olması, nüfusun yoksulluk düzeyinin bir göstergesidir. 2012 yılında dünyanın 128 ülkesi BM'nin "Yoksulluğu Azaltma" programına katıldı.

Amerikalı araştırmacılar M. Bressler ve L. Bressler, M.Ö. 3600'den 1978'e kadar 294 yıl boyunca savaş olmadığını kaydettiler. Bugün, "Hizasızlık" hareketinde temsil edilen 120 devlete ek olarak, bir "nükleer serbest bölge" için savaşan devletler ve bir grup "tarafsız devlet" var, ancak savaşları hayatlarından silmek mümkün değil. halklar bir kez ve herkes için. Demokratik güçlerin savaşa ve nükleer silahlara karşı kitlesel hareketi, Japonya'yı nükleer silahlardan, bunların üretiminden ve konuşlandırılmasından vazgeçmeye ve tarafsız bir konum benimsemeye itmiştir. Japonya anayasasının bir maddeden oluşan ikinci bölümü (Madde 9), uluslararası anlaşmazlıkları çözmenin bir yolu olarak savaşları reddetmesini şart koşuyor. (Jafarova. 2000, s. 5).

Deneyimler, askeri harcamaların azaltılmasının İskandinav ülkeleri ve Japonya ekonomisinin gelişimi üzerinde olumlu bir etkisi olduğunu göstermektedir. Silahlanma ve dönüşüm toplu işsizliğin artmasına neden olur. Büyük Britanya ve FRG'de, askeri üretimde işçi başına yatırılan sermaye, sivil sanayide işçi başına yatırılan sermayeye eşdeğerdir. ABD Kongresi'nin bütçe dairesine göre, askeri sanayiye harcanan 10 milyar ile 40.000 iş yaratmak mümkün. Askeri harcamaların yüzde 8-10 oranında azaltılması, üretimin artırılmasına ve açlık, yoksulluk ve işsizlik gibi sorunların çözülmesine olanak sağlıyor. Askeri sanayi komplekslerinin oluşturulması büyük miktarda fon gerektirir. Geçen yüzyılın 80'li yıllarında, silahlanmaya harcanan yıl için 1 milyar kişiye yiyecek veya 500 milyon kişiye konut sağlamak mümkün oldu. O dönemde bu miktar, 650 milyon çocuğun eğitimi için 1 milyon ortaokul inşaatı anlamına geliyordu.

Savaş tehdidi, devletlerin askeri rekabetini yoğunlaştırıyor. Kasım 1991'de ABD, Houston'daki Petrol Enstitüsü'nün yıldönümü etkinliğinde M. Thatcher, "SSCB'yi nasıl yok ettik" başlıklı konuşmasında, Sovyetler Birliği'nin Batı dünyası için ciddi bir tehdit olduğunu, Batılı ülkelerin Batılı ülkeler için ciddi bir tehdit oluşturduğunu belirtti. Bütçelerinin %5'ini silahlanmaya, SSCB'nin bütçesinin ise %15'ini harcadığını, Batı'nın silahlanmasına ilişkin bilgileri kasten abartarak SSCB'nin silahlanmaya daha fazla kaynak ayırmasını sağladıklarını belirtti (<http://www.168.az/news/analyties/7478>).

2001-2005 yıllarında Rusya, silah ihraç eden ülkeler arasında ilk sırayı aldı. Bu dönemde dünya silah satış pazarının %31'i Rusya, %30'u ABD tarafından paylaşılrken, 2018 yılında silah üreten ilk 100 şirketin 7'si ABD'ye aitti. Bugün Suudi Arabistan, askeri harcamalar açısından dünyada üçüncü sırada yer alıyor ve bölgede liderlik için savaşıyor. Stockholm Uluslararası Dünya Sorunları Araştırma Enstitüsü'nün raporuna göre, 2015 yılında Suudi Arabistan savunmaya 87 milyar dolardan fazla para harcadı (Riyad daha fazla: <https://sputnik.az/world/20160411/404592729.html>).

Farklı bölgelerde etnik, ulusal, dini, siyasi vb. sebeplerden kaynaklanan çatışmaların varlığı devletlerin silahlanma eğilimini artırmaktadır. Dünyadaki 4 bin etnik gruptan yaklaşık 260'ı yeni bir devlet kurmayı talep ediyor. 90'a kadar ulusal çatışmaya şiddet eşlik ediyor. Ayrılıkçı eğilimlerin güçlenmesi sonucunda çeşitli bölgelerde ulus devlet kurma girişimleri artmıştır. BM eski Genel Sekreteri Boutros Boutros Ghali'nin dediği gibi giderse dünya devletlerinin sayısı 400'e ulaşacak. I. ve II. Dünya Savaşları arasında 60 kadar çatışma yaşandı. İkinci Dünya Savaşı'nda maddi kayıpların maliyeti 4 trilyon dolardı, askeri harcamalar 1 trilyon 380 milyar dolardan fazlaydı. 1970'lerde, Stockholm Barış Sorunları Araştırma Enstitüsü'nün hesaplamalarına göre, İkinci Dünya Savaşı sırasında ABD, her düşman askeri için 1.100 kg, Kore Savaşı'nda (1950-1953) 5.600 kg ve Güneydoğu Asya'da 178.000 kg mühimmat kullandı.

Modern zamanlarda, bölgesel ve yerel anlaşmazlıklar, devletler ve halklar arasındaki askeri çatışmaları artırmaktadır (1982'de Falkland (Malvinas) Adaları ile ilgili Büyük Britanya-Arjantin savaşı, 1990'da Irak-Kuveyt, 1990'da Kıbrıs-Yunanistan-Türkiye, Jammu ve Keşmir) Hindistan -Güney Çin Denizi'ndeki Spratly ve Paracel Adaları üzerinde Pakistan, Çin-Vietnam, Çin-Hindistan, Çin-Tayvan, Rusya-Japonya Kuril Adaları anlaşmazlığı, Yemen'de 1994'ten beri silahlı çatışmalar ve etnik-dini çatışmalar Hindistan, Sri Lanka, Bangladeş, Afganistan, Lübnan, Kamboçya, Laos, Myanmar, Endonezya, Filipinler, Türkiye, İran ve Irak'ta Kürdistan sorunu).

F. Fukuyama, "Tarihin Sonu ve Son İnsan" adlı çalışmasında, savaşların sonunu ve birleşik bir dünyanın yaratılmasını kaçınılmaz görüyor. Ancak günümüzde yeni savaş ve çatışma merkezleri ortaya çıkmaya devam etmektedir.

1.2. SAVAŞLARIN ETKİ YÖNERGELERİ

İkinci Dünya Savaşı'ndan sonra devletler ve halklar arasındaki güvensizliğin ve gerginliğin artması, silahlı talebini ve silahlı kuvvetlerin barış zamanında bile güçlendirilmesini beraberinde getirdi. Henry Kissinger şöyle yazdı: "Daha önce hiç bu kadar çok güç birikmemişti ve bu güç daha önce hiç bu kadar idareli kullanılmamıştı...".

Bilimsel ve teknik başarılar sayesinde, yeni savaş araç ve yöntemlerinin ortaya çıkması, füze-nükleer silahların keşfi, silahlı çatışmaların yıkıcı gücünü göstermektedir.

44 günlük İkinci Karabağ savaşı, drone savaşının ve askeri teçhizatın avantajlarını dünyaya gösterdiği gibi, silah alıcılarının sayısını da artırdı. Ukrayna, Türkiye'den satın aldığı "Bayraktar TB-2" insansız hava aracını Karadeniz'de test etti.

Azerbaycan'ın en çok silah satın aldığı ülkelerden biri olan İsrail'den beşinci nesil silah üreticisi olan "Meteor Aerospace", insansız hava araçları (impact-700), insansız gemiler (ORCA), hassas vuruş oluşturma konusunda uzmanlaşmıştır. füzeler ve hava savunma sistemleri.

Modern silahlar insanlığın varlığı için büyük bir tehdittir. Günümüzde propagandayı güçlendirerek, sağlam bir ideolojik ve siyasi zemin oluşturarak, silahlı savaşa son vererek, kitle imha silahlarını imha ederek ve yenilerinin yaratılmasını yasaklayarak bölgesel savaşları önlemek mümkündür. Dünya halkları ve devletleri, gezegenin fiziki bütünlüğünü ancak barışı, sükuneti koruyarak, karşılıklı ilişkileri güçlendirerek ve sağduyuya dayalı olarak sağlayabilirler.

Nükleer silah sahibi olmayan devletlerin kendilerini konvansiyonel silahlarla güvence altına almaları artık imkansız. Öte yandan kitle imha silahlarının artması, silahlı savaşa yaygınlaşması ve dünyanın bir silah deposuna dönüşmesi büyük endişe kaynağı. A. Peccei, "100 yılın sonu için Anıt" adlı çalışmasında, barışı, tutarlı bir sosyal ilerlemenin sağlanması için ana koşul olarak kabul etti. Tabii ki, ulusal çıkarlara yönelik tehdit, savaş bir zorunluluk haline getiriyor.

Churchill'in "Soğuk Savaş" politikasının temellerini atan konuşmasından (5 Mart 1946) 50 yıl sonra, Fulton şehrinde öğrencilere yaptığı konuşmada (5 Mart 1996), M. Thatcher yeni bir tehdidin - nükleer tehdidin ortaya çıktığını duyurdu.

Nükleer savaşın güçlü sosyal sonuçları vardır. Mevcut nükleer silahların yarısının Afrika, Latin Amerika ve Okyanusya üzerinde patlatılması, 1,15 milyar ölüm ve 1,1 milyar tedavi edilemez hastalığa neden olabilir. Bu zamanda radyasyona maruz kalan kişiler yaşama şanslarını kaybederler.

6 ve 9 Ağustos 1945'te ABD'nin Japon şehirleri Hiroşima ve Nagazaki'yi (4,5 ton) bombalaması sonucunda Hiroşima şehri 30-40 saniyede yerle bir oldu ve yaklaşık 300 bin kişi felaketle karşı karşıya kaldı. S. Huntington, "medeniyetler çatışması" kavramında savaşların yeni bir aşamaya girdiğini ve modern çatışmaların Batılı ve Batılı olmayan medeniyetler arasındaki ilişkilere bağlı olduğunu belirtiyor. Modern zamanlarda emperyalist, kurtuluş ve iç savaş gibi savaş türleri vardır.

Kimyasal silahların insan sağlığı üzerinde büyük etkisi var ve ölümüne neden oluyor. Bu silahlar geçici körlüğe, sağırlığa ve felce neden olur, ciltte ve gözlerde ciddi yanıklara neden olur. Kimyasal, biyolojik, nükleer ve konvansiyonel silahların üretimi ve depolanması için belirlenmiş alanların kirlenmesi, flora ve faunanın yok edilmesi tehdidi oluşturmaktadır. Antropojenik maddelerin atmosfere salınması, ozon tabakasının incelmeye, ozon deliklerinin oluşmasına ve ultraviyole ışınlarının etkisiyle tedavisi olmayan hastalıkların ortaya çıkmasına neden olur. Son 50 yılda bu tür 30 hastalık ortaya çıktı. BM tahminine göre, nüfus düşüş süreci 2050 yılına kadar dünyanın 62 ülkesini (Avrupa, Japonya, Avrasya, Çin) kapsayacak. Bu süreç XXI yüzyılın sonuna kadar devam ederse, nüfusun yaş ve cinsiyet kompozisyonunda bir değişiklik olacaktır.

SONUÇ

Konuyla ilgili vardığımız sonuç aşağıdaki hükümlere yansımaktadır:

- savaş politikası, güç ve onun silahı yoluyla bir gerçekleştirme biçimidir;

- savaş, yıkıcı etkisi olan ve toplumsal ilişkileri bozan bir olaydır;
- savaş büyük maddi ve manevi kayıplara yol açar, verdiği zarar uzun süre devam eder;
- devletler jeopolitik planlarını savaş yoluyla uygular ve genişletir;
- yeni çatışma ve savaş merkezlerinin ortaya çıkması, savaş tehdidinin devletleri hızla silahlanmaya sevk etmesi;
- devletler arasındaki çatışmaların şiddetlenmesi, savaşları nesnel bir gerçeklik haline getirir;
- modern silahların kullanımı maddi dünyanın yok olma tehdidini yaratır, çevreyi kirletir ve radyasyonu artırır;
- savaşlar nüfus artışını zayıflatır ve yenilenemeyen kaynakların tükenmesine yol açar;
- savaş tehdidi, silahlı kuvvetlerin artışını ve silah ithalatını, göçü ve mülteci ve yerinden edilmiş kişilerin akışının artışını etkiler;
- silahların üretimini ve satışını sınırlamak, bakteriyolojik ve zehirli silahların kullanımı üzerindeki yasağı ve kontrolü güçlendirmek;
- saldırganlığı önlemek için toplu güvenliği sağlamak.

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Particularities Of The Adverse Possession

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Abstract: Having its beginnings two millennia ago, the institution of adverse possession represents the most spectacular effect of possession. It appears for the first time in Roman law, being provided for by the Law of the XII Tables, where it is defined only as a way of long-term possession of a piece of land. If we analyze the evolution, we can see that, with time, besides the essential element, other conditions are added that lead to the acquisition of the property through this method. In this paper, comparative elements between various types of legislation are proposed for research, which involve the comparative analysis of several civil codes - of France, Italy and the Russian Federation, including that of the Republic of Moldova. These proposals were interspersed with the objective of the given paper - the development of a deep and integral study on all the issues related to the establishment and analysis of the object as a necessary condition for acquiring the asset through adverse possession, which will allow raising the level of knowledge in the given field, will contribute to the correct application of the legislation in force, to the effective settlement of disputes in that matter and, of course, a better understanding of the subject by paying special attention to the comparison process, because we consider this research method effective.

Key Words: comparative analysis, evolution, classification, legislation.

INTRODUCTION

The economic evolution and the technical-scientific development of the society also determine the goods that form the object of the property right, as well as the legal regime applicable to the different ways of acquiring the property right, in relation to their importance in the system of social values.

The institution of adverse possession is omnipresent in real rights treaties, being treated in domestic and foreign specialized legal literature. But, as it was mentioned previously, the notion still appeared in Roman law, respectively: from the Latin words *usus*, *us* - use and *capio*, *capere* - to take, taking; as a result *usucapio*, *usucapere* - taking into use, acquiring as an effect of (long) use.

With the evolution of the Roman Empire, adverse possession acquires new specific legal characteristics, constituting not only a way of obtaining property, but also acquires the quality of classifying some legal situations on the basis of long-term ownership. As a consequence, another similar institution appears, which delimits the functions mentioned above, - *longi temporis praescriptio* (later also regulating *praescriptio longissimi temporis*). The latter represented, rather, a procedural exception placed at the disposal of the non-proprietary possessor to defend himself against possible usurpers, which, however, had such an effect only as long as the person invoking it was in possession of the property in question.

INTRODUCTORY NOTIONS: DEFINITIONS AND CHARACTERISTICS

One of the newest and most important ways of acquiring property rights is adverse possession. Although it is regulated in the new Civil Code of the Republic of Moldova, no definition is provided, in the specialized literature *usucapion* is an original way of acquiring the right of ownership and other real estate rights through the effect of a prolonged possession of an asset over a period of time provided by law. *Usufructuary* (also called *acquisitive prescription*) has been defined as a way of acquiring ownership or other real rights regarding a thing, through the uninterrupted possession of this thing for all the time fixed by law. (Bârsan, 2013). Other authors define this institution as a way of acquiring the right of ownership through long-term possession of a movable or immovable asset under the terms and conditions provided by law. (Baies, 2005).

The English authors give us a definition in a less technical style: "Usucapion is the institution which allows the possessor of the plot of land, who is not the true owner, to acquire the right of ownership over it without the

latter's consent and without payment of compensation, as a result of possession for a period provided by law, at the end of which even the true owner will not be able to bring actions in court to "evacuate" the possessor." (Depoorter, 2002).

Therefore, adverse possession is one of the effects of possession as a state of fact (possession creates a presumption of ownership in favor of the possessor; acquiring the right of ownership by adverse possession; the bona fide possessor acquires ownership of the fruits of the fruitful good he possesses; acquiring the right of ownership by occupation; the actions of the possessor). Considering that it does not operate by right, the acquisition of the right of ownership or other main real right is conditioned by the positive exercise of the right of option regarding the adverse possession, as a right of protest. (Dima, 2006).

So, based on the definitions above, we derive the following characteristics of usucapion:

- long possession in the acquisition term;
- the possessor must be in good faith;
- the possession should be useful.

In the civil law of the Republic of Moldova, the institution of adverse possession was regulated for the first time by the provisions of the Civil Code of 2002. According to the Civil Code of the Republic of Moldova, adverse possession is of two types:

- real estate adverse possession;
- movable adverse possession.

The difference between these two types of adverse possession consists in the time required to possess the asset in order to acquire the right of ownership over it. The adverse possession in the case of movable goods will not be able to operate for those goods for which the transfer of the ownership right, the law requires its registration. So, the scope of movable property covers only unregistered movable property. As I mentioned before, the acquisition of the right of ownership or another right, through any form of adverse possession, represents a faculty for the possessor, representing a complex structure, which brings together the legal fact in the narrow sense of possession, as well as the unilateral manifestation of the one interested in acquiring a real right (Stoica, 2006).

Any immovable property found in the civil circuit can be acquired by adverse possession. As a consequence, assets that are not in the civil circuit (inalienable), such as those in the public domain, cannot form the object of adverse possession. In the following, we will list the assets that cannot be objects of adverse possession:

- 1) The wealth of any nature of the subsoil, the air space, the waters and the forests used in the public interest, the natural resources of the economic zone and the continental plateau, the communication routes, as well as other goods established by law (Constitution of the Republic of Moldova, art. 127);
- 2) Water (RM Water Code, art.4);
- 3) Lands with property rights of the state or of the administrative-territorial units, the right of possession, use and disposal over which belongs to the competence of the Government or local public administration authorities (Law no. 29);
- 4) The goods that constitute the public domain of the state, listed in the Law on public property lands and their delimitation: the lands of scientific research institutes and stations, of agricultural and forestry education units, intended for research, the production of seeds and planting material from the biological categories, as well as obtaining purebred animals; the lands of the forestry fund are public property of the state; the lands of the water fund public property of the state, including the lands of the surface aquatic objectives located on the territory of two or more districts, or located on the territory of a single district and intended for the protection of the energy system, the needs of the field of transport and other state services; the lands of border water objectives; lands declared natural areas protected by the state; the lands of spa resorts of national importance; the lands of water protection zones and sanitary zones, according to the data from the respective cadastres; the lands related to the buildings where the ministries, other authorities of the central public administration, the institutions subordinate to them carry out their activity; the lands occupied by national roads, railways and their protection zones, the lands occupied by national and international gas transport pipelines, by other public

transport networks owned by the state; lands intended for nature protection, including natural areas protected by the state, health protection, recreational activity and lands of historical-cultural value (historical-cultural reservations, memorial parks, archaeological and architectural monuments, etc.) that are of national public interest; the lands intended for defense needs, for the needs of border guards and internal troops; other lands used to ensure state security.)

- 5) The goods that form the public domain of the village (community), city (municipality);
- 6) The goods that form the public domain of the district, the autonomous territorial unit of Gagauzia.
- 7) State roads (national roads; local roads and streets);
- 8) State aircraft (aircraft used for military services, aircraft used for customs services, aircraft used for police services);
- 9) Natural areas protected by the state;
- 10) Monuments that are part of the cultural and natural heritage, etc

In order to acquire the right of ownership through adverse possession, it is necessary that the possession of the asset takes the form of possession, and that the possession is not precarious and useful. In order to be useful, possession must be continuous, peaceful and public (Gîsca, 2022).

a) The presence of a possession - In other words, the possession of the good must take the form of possession. In the specialized literature, this condition was individualized by the fact that the possessor must be in good faith, because there is no possession where there is bad faith on the part of the possessor of the good. Good faith means the possessor's belief that he owns the good with the conviction that he does so as the holder of the right of ownership.

b) Possession should not be precarious - possession is precarious when it is not exercised under the owner's name. So, if a person owns the asset based on a title, other than the transferable title, he will not be able to invoke the benefits of the adverse possession. This is because he owns the property in the name of another person - the usufructuary, the depositary, the tenant.

c) The possession must be useful - In order to acquire the right of ownership through adverse possession, the possession must be useful, that is, when it contains certain qualities or is free from defects. The possession will be useful if it will be continuous, undisturbed, public and non-precarious. The lack of these qualities determines that the possession of the good no longer produces legal effects.

d) Possession must be continuous – Continuity of possession implies the succession of acts of possession at certain intervals of time that denote a certain regularity of the performance of acts of use, taking into account the nature of the work. A possession is discontinuous when the use of the thing is intermittent. It cannot be considered discontinuous possession when the interruptions in the use of the property are due to a fortuitous event or a force majeure – earthquake, floods.

e) The possession must be peaceful – A possession is peaceful when it is not disturbed. By undisturbed possession, the legislator understood a possession that is not founded by acts of violence. A possession is disturbed by violence if the possessor obtained it by violence, both physical and moral, against the previous possessors. Possession will be disturbed regardless of whether violence was used only to acquire possession but during its exercise.

f) Possession should be public – Possession is public when it is exercised in full view, as the owner would exercise it himself. If possession is not exercised under these conditions, it is clandestine possession. Possession is clandestine when the possessor exercises it secretly from his opponent so that he is unable to know it.

The main effect of the adverse possession consists in the acquisition of the right of ownership over the usufructed good, simultaneously with the extinction of the former owner's right of ownership. This effect occurs retroactively (Ungureanu, 2017), in the sense that the usufructuary will be considered the owner from the first day of his possession and not from the moment the term is fulfilled. The usucapion can be invoked both by way of action and by way of exception, by the one who defends himself in a claim action brought by the former owner of the property. Unlike the extinguishing prescription, the acquisitive prescription cannot be invoked ex officio, by the court. After the prescription has expired, the user can renounce it, expressly or

tacitly. The tacit waiver must result from an unequivocal fact, which implies the abandonment of the acquired right. If the renunciation was made in fraud of the usucapant's creditors, they have the right to request the revocation of the renunciation through a Paulian action (revocation). The one who renounces the effects of the adverse possession must have the capacity to alienate. (Ungureanu, 2017).

COMPARISON OF THE BASIC CONCEPTS OF USUCAPION WITH OTHER TANGENTIAL LEGAL INSTITUTIONS FROM CIVIL LAW

Comparing adverse possession and accession as ways of acquiring property, we notice that both have as the object of the acquisition report both movable and immovable goods. According to the method of acquisition, with adverse possession the assets are individual and strictly determined, while with accession there is a main asset and an accessory asset. Thus, with adverse possession, the existence of one good is not necessary to acquire another. After the necessary period of time: in adverse possession, time is a mandatory element for acquiring the property, while in accession, time does not play any role.

There are situations when the adverse possession intersects with the accession, the first depending on the second: when the construction or plantation is made with own materials, but on someone else's land, he will be able to acquire the right of ownership over the construction or plantation after the expiration of a certain term and the fulfillment of the other conditions, if the owner on whose land the construction or plantation was built did not make his right acquired through the artificial real estate accession objectionable by registering it in the real estate register.

COMPARISON OF THE BASIC CONCEPTS OF USUCAPION WITH THE EQUIVALENT LEGAL INSTITUTION IN FOREIGN LAW SYSTEMS

a) The Romanian Civil Code provides for the adverse possession of 30 years, in the situation where the possessor does not possess, based on a just title, regardless of whether it is in good or bad faith. In this case, the one who claims to have acquired the property right or other main real right through adverse possession for 30 years, must prove, in fulfillment of the conditions, the adverse possession for 10 to 20 years, when the possessor possesses an immovable asset based on a just title and it is in good faith. Any transferable legal act of ownership (sale, donation, exchange, legacy with private title), when it emanates from someone other than the true owner, constitutes a just title, even the succession is a just title (not the heir's certificate).

b) In the French Civil Code, adverse possession can be found in the third book ("Different methods of acquiring the right of ownership"), title XXI "On possession and acquisitive prescription", chapter II ("On acquisitive prescription", articles 2258- 2277).

The French civil rules mention the existence of two categories of acquisition prescription: the 30-year prescription and the shortened prescription (from 10 to 20 years), the conditions of which are similar to those in Romanian legislation. This derives from the fact that when creating it, the authors of the Romanian Civil Code were largely inspired by French legislation. Regarding the goods that can be usufructed, as in other states, the editors of the Civil Code mention that the goods or rights that are not in commerce cannot be prescribed. At the same time, the French Civil Code allows the junction of possessions, as well as the possibility of interrupting or suspending the limitation period in the case of adverse possession.

c) The Italian Civil Code regulates the matter of adverse possession in articles 1158-1167, section III ("On adverse possession") of chapter II "Effects of property rights" of Title no. 8 "On possession", Book no. 3 – "Property", distinguishing between movable adverse possession, real estate and registered movable property. The term required for usucapion is 3 years for movable goods and from 10 to 30 years for other goods. In the table below (annex 1) the term required for the adverse possession of the goods in Italy is analyzed in detail.

Annex 1 – The term necessary for usufructuring the goods in Italy

Name	Examples of assets	Duration of possession
Movable accession	Land, buildings, warehouses, offices or real rights	20 years
Universality of goods	A library, a herd, an art gallery	

Movable property held abstractly without just title	Furniture, bicycles, everything that is not considered real estate	20 years (in bad faith) 10 years (in good faith)
Movable assets registered in public registers	Ships, planes, automobiles	3 years (in good faith and just title) 10 years (without these conditions)
Special use	Small funds and funds of rustic mountain cabins with outbuildings	15 years 5 years (with just title)

The legislation of the Republic of Moldova does not expressly provide which assets cannot be usufructured, as for example is provided by the Romanian legislation, which states that assets which, before or after entering possession, have been declared inalienable by law cannot be usufructured. For example, the goods that form the object of public property cannot be acquired by adverse possession. Of course, the text of the law is likely to apply to privately owned goods, to the extent that they have been declared inalienable by law. On the other hand, the inalienability clause inserted in a legal act does not prevent the acquisition of the right of ownership by usufructuary by a third party possessor, because, as it follows from the above-mentioned legal text, only the legal inalienability, and not the voluntary one (contractual), prevent usucapion.

At the same time, art. 527 para. (3) of the Civil Code of the Republic of Moldova provides that usucapion does not apply:

- a) movable assets over which the right of ownership is acquired, according to the law, by registration in an advertising register;
- b) movable cultural assets;
- c) if the deed under which the acquirer acquired the asset is null or voidable.

EFFECTS OF ABUSE

The most important effect of adverse possession consists in acquiring the right of ownership. The usufructuary will be considered the owner not from the moment the legal term of the acquisitive prescription is fulfilled, but from the moment he came into possession of the thing. In other words, the effect of the adverse possession is retroactive.

From this it follows that all the rights that the possessor established over the work in favor of third parties during the usucapion will be consolidated, and the possessor in bad faith acquires definitively and irrevocably the right of ownership over the fruits and products received during the usucapion.

The adverse possession can be invoked both by way of action, when the possessor requests to establish the acquisition of the right of ownership in this way, and by way of exception, when he defends himself against the claim action brought against him by the former owner of the thing. However, it cannot be invoked ex officio by the court, but must be requested by the interested party (Cercel, 2003).

The beneficiary of the acquisitive prescription can waive its effects, but only after its fulfillment. The waiver can be express or tacit. The express waiver does not have to take a solemn form, but the written form is sufficient. The tacit waiver must result from an unequivocal fact, which implies the abandonment of the right won. The possessor must renounce the adverse possession voluntarily and knowingly, as happens when he concludes a lease agreement with the real owner regarding the property he possessed. The one who renounces the effects of the adverse possession must have the capacity to alienate.

The relinquishment of the usufructuary has no effect if this act damages the usufructuary's creditors or other interested parties. Consequently, they can invoke the prescription won by their debtor, even if he has waived it, as an application of the rules that determine the rights that creditors have over their debtor's estate. It was shown that the renunciation cannot be regarded as an act done in fraud of the creditors, against which they can invoke the Paulian action, but as a refusal to enrich themselves, as a simple abdication of the faculty to acquire, which will be attacked by oblique action. In reality, the creditor can invoke the adverse possession that his debtor has renounced only after he has previously attacked through the revocation action the act of renunciation made by him.

CONCLUSIONS

Adverse possession is that way of acquiring the right of ownership and other main real rights by exercising uninterrupted possession of an asset, within the term and in the manner prescribed by law.

The institution of adverse possession is justified, first of all, by referring to the situation of the possessor, in the sense that the need for stability of situations and legal relationships requires, at a given moment and in compliance with certain conditions provided by the law, the recognition of some apparent long-term legal effects of ownership, until the transformation of a *de facto* situation into a state of law - *de jure*.

Secondly, in justifying the institution of adverse possession, the former owner's situation cannot be ignored, in the sense that, indirectly, usurpation also constitutes a sanction against the passivity of the former owner, who disposed of his property and became disinterested in it for a long time, leaving -I to be in the possession of another person who acted as the owner or holder of a main real right.

Adverse possession proves its usefulness also due to the fact that it is an original way of acquiring the right of ownership, so that it can constitute an absolute proof of the right of ownership, thus removing the existing difficulties in terms of proving the right of ownership, both in the matter of the action in claim, as well as in other matters.

The scope of adverse possession requires a double distinction, namely the category of main real rights that can be the object of *usucap* and the category of rights that can form the object of these rights. It is necessary to establish more concretely the object of the adverse possession, because the regulation is a little vague. In this sense, examples from the Italian Civil Code could be taken into account, namely the inclusion as assets that can be usurped of the universality of assets, registered assets, patrimonial rights, as well as non-patrimonial rights (the right to name, pseudonym, etc.) etc.

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Particularities of the movable accession

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Abstract: Property has accompanied human since the dawn of civilization. He is the only being who, endowed with reason, has taken possession not only of his natural environment, but also of other beings. He has declared himself master over everything that surrounds him, over everything he discovers, and he applies or demands the application to other people of social norms through power, first of the public communities, then of the state.

Property is viewed in its double meaning: Economic and legal. Regarded as an economic category property has existed throughout human society, the production and purchase of goods necessary for living is an indispensable prerequisite for social life, and as such property is closely linked to the sphere of production of material goods and the harvesting of the fruits of this activity.

Accession has also known a wide application in Roman law, with current forms known as three distinct ways of acquiring property rights: Adjunct, confusion, and specification.

In preparing this Article, we proposed to analyze the legal provisions, legal literature and judicial practice regarding access, by reference not only to the rules applicable in Romanian law and to those expected to be applicable in the future, but also to the laws of other States that know this legal institution, Such as France, Italy, Belgium, Germany, etc.

Keywords: property, accession, adjunct, confusion, specification.

INTRODUCTION

The diversity of property relations and their intensification pose new problems for those who regulate them. One such problem is the question of where access is situated in the whole range of relationships in society.

Accession, as a means of acquiring property rights, is one of the main institutions of civil law and has been applied from ancient times to the present day. Even though the applicability of cases of accession is now more limited than in the past, the subject is necessary for both theoretical and practical reasons. Today's social life is fast-paced and the legal provisions governing accession are particularly long-lived, so they need to be adapted to the new realities of society. All these aspects, and the lack of a monograph on accession, have led us to set out to produce a work dealing with the main theoretical and practical problems raised by this way of acquiring property rights.

Given the distant origins of this legal institution, its evolution over time and the need for new legal provisions to regulate it, the paper aims to address the topic from a triple dimension: past, present and future. The emergence, evolution, current state and prospects of accession are aspects that are relevant to a comprehensive analysis of this mode of acquiring property rights and lead to a better understanding of the legal mechanism it encompasses.

The Civil Code of the Republic of Moldova regulates in Article 509, paragraph (2) the ways of acquiring the right of ownership. The right of ownership may be acquired, under the conditions of the law, by occupation, legal act, succession, accession, usucaption, [as an effect of acquisition in good faith], as well as by court decision when it is translatiive of ownership.

BASIC CONTENT

Although of much less practical importance than in the case of immovable property, access can also operate in favour of movable property. *Movable accession* is the joining of two movable assets belonging to different owners or the making or obtaining of an asset by one person, by his own labour, using the materials of another. The owner of the main property becomes by accession also the owner of the less important property and is usually obliged to compensate the owner of the accessory property. Although it has a much narrower application than in Roman law, movable accession continues to apply in civil law today.

However, the rules laid down for them have lost much of their former importance (Cercel, 2003), the rule "*En fait de meubles, possession vaut titre*", so that the ownership of movable property is resolved by applying this maxim. In this context, accession applies to movables only in exceptional cases, when possession is not worth ownership, i.e. when there is bad faith possession or when a stolen or lost movable is in the hands of a bona fide third party within three years of the property leaving the owner's possession without his will (Cercel, 2002).

The question of accession is obviously only relevant when movable property belongs to different owners and cannot be separated without significant damage to one of the owners. In this situation, the idea of accession comes into play to decide in favour of the owner of the main thing (*accessorium sequitur principale*) (Cercel, 2003).

Movable accession accessory consists in acquiring the right of ownership of movable property resulting from the union of two items of property belonging to two different owners or by making or obtaining an item of property with materials belonging to another person. Movable accessions presuppose that no agreement has been concluded between the owners of the things being joined to regulate the relationship between them.

The provisions of Article 522 of the Civil Code of the Republic of Moldova regulate three cases of movable accession:

- adjunction,
- specification
- confusion, including some common rules applicable to them.

The regulation in numerous texts of the three forms of movable accessions is due to the influence of the Roman law tradition, taken over by the French Civil Code and even the Austrian Civil Code, but nowadays they are not of particular practical interest.

In all three forms the following general rules apply:

First, if the objects which are joined belong to the same owner, it goes without saying that he also becomes the owner of the new thing created by this union. Moreover, we do not consider that this is an accession of legal significance.

Secondly, if the two (or more) things belong to different owners, when there is an agreement between them, either as to the intention to incorporate the things or when it occurred without intention, but they have agreed on the attribution of the new thing, the agreement between them must be respected.

Thirdly, even if the things are reunited in the same whole with a unique and new use, different from that of the things which have been incorporated, but they can be separated in their original state without causing damage, each owner reserves the right to ask for the separation of his thing. Here again, the parties may act in one way or another, regardless of the legal texts mentioned.

Fourthly, the legal texts governing the right to acquire movable property are not applicable to the person who acquires the fruits as a bona fide possessor, even if the fruits are produced by an asset resulting from the right of accession because, as we shall see, this is another way of acquiring ownership.

From the provisions of the Civil Code of the Republic of Moldova on movable accession, it follows that the ownership of the whole belongs to the owner of the main thing: *accessorium sequitur principale*. He is obliged to compensate the owner of the accessory.

Adjunction involves joining two movable assets belonging to different owners and creating a new one, but without the components having lost their individuality. The joined assets remain distinct and can be recognised.

The property resulting from the union of the two things belongs to the owner of the property considered to be the main property. If things have similar values, the main thing is the one with the greater volume.

The owner for whose benefit the addition works is obliged to pay the other owner the price of the incorporated good.

We consider the principal to be that of two things, for the use or ornament, for the completion of which the union of the other thing served.

When, however, the thing joined is *more valuable* than the principal thing, and when it has been joined *without the owner's knowledge*, the owner may demand the separation and restitution of the joined thing, even if the separation would result in some harm to the thing to which it was joined (Cercel, 2003).

If of the two things united to form one whole, neither can be regarded as accessory to the other, then that one is regarded as the principal which will be greater in value. If the value of both things were more or less the same, then the thing that is greater in volume would be considered as the principal (Cercel, 2002).

The legislation of the Republic of Moldova does not stipulate any exception to the attachment of movable accession, contrary to the doctrine, which states that the attachment does not apply when the accessory property has a much higher value than the principal property and their union was made without the owner's knowledge.

We consider that in this case, the owner of the accessory property, who is not interested in the compensation offered, has the possibility to ask for the restitution of his property, even if the separation of the property would result in damage to the main property.

This approach results from the fact that the law does not state what the ratio between the value of the two assets must be in order for the attachment to be removed (merely stating that the accessory asset has a *much higher value* than the main asset, or that the new asset belongs to the owner who contributed *most to the creation of the asset*), so this is a matter for the court to decide.

According to the Romanian doctrine (Cercel, 2003; Dogaru, 1996), if of the two goods joined by adjunction, neither can be regarded as the accessory of the other, then the thing that will have a higher value will be considered the main thing (*pro pretio cujusque partis*). If the value of the goods is almost equal, then the thing which is greater in volume will be considered principal. If the volume cannot be used as a criterion for determining the principal good either, then the thing resulting from the addition will be common to both owners, if it is no longer possible to separate them (Dogaru, 1996). It has been observed that for the situation in which the addition has occurred due to the bad faith of one of the owners, the solution becomes unfair to the other, so that he should be given the choice between acquiring the right of ownership of the new thing (with the obligation to compensate the bad faith owner with the value of his good) or claiming compensation representing the value of his good and damages, if any (Cercel, 2003).

Specification is the transformation by one person, through his work, of a material belonging to another person, so that an entirely new object is created.

It is called specification, when a person makes a new object with foreign matter (Baieş, 2005).

The question that arises is who owns the property of this thing.

In principle, the owner of the raw material has the right to claim the resulting good, regardless of whether or not the material can be brought back to its original state. He is obliged, according to the principle of unjust enrichment, to return the value of his work to the specifier, who has a lien on the thing until it is paid for (Cercel, 2003).

By exception, when the value of the workmanship is much higher than the value of the material used, the work is the responsibility of the specifier, who is also obliged to return the value of the material used to the owner. If the work is in the hands of the owner of the raw material, he has a lien on the work until compensation is paid. Here too, the law does not establish the ratio between the value of the work and the value of the material, but merely states that the value of the work far outweighs the value of the material, so that this is a matter for the judge to determine *in concreto* in a sovereign manner.

If the specifier has formed a new thing, using partly his own matter and partly foreign matter, we must distinguish between the following cases:

- the materials used may be separated without causing any damage to either of them, and then the person without whose knowledge the materials have been processed may demand restitution of his material;
- the materials can no longer be separated without damage, when the object belongs jointly to both owners, those involved become co-owners, and when the materials used have lost "their entire being" so that their distinction is impossible (Cercel, 2002).

Matter is considered to be the main thing, so its owner becomes the owner of the new thing.

The owner of the matter can demand a matter similar to the matter used and if necessary damages,

In this case, only the matter is a corporeal thing. However, although the workmanship is not a corporeal thing, it has a certain economic value. That is why, although the accession mainly concerns two corporeal things, in the case of a chattel accession it is still possible to unite a corporeal thing with a certain workmanship. In a broad sense, labour is also an appropriable thing, but only in the process of incorporation into a corporeal thing (V. Stoica, 2009).

In the case of *confusion*, the mixing of two movable assets belonging to different owners gives rise to a new asset, the content of which is indistinguishable.

If the mixed materials can no longer be separated without injury or damage, then the thing formed is the property of all the owners, but each in proportion to the size, quality and value of the materials used to make that thing (Baieş, 2005).

If the material of one of the owners exceeds the other material in value and quantity, then the owner of the more valuable material may demand the thing formed by mixing, but paying the other owner the price of his material.

Confusion differs from adjunction where objects, although joined, can be recognized and distinguished from each other. It also differs from specification, because the formation of the new thing does not involve labour, someone's workmanship (Stoica, 2009).

Under the rules of accession, the owner of the main thing becomes the owner of the newly obtained thing (mixture), with the obligation to compensate the owner of the accessory thing. The main thing is the thing which is of greater value or in greater quantity.

If it cannot be established that a thing is principal, the new thing will belong in co-ownership to the owners of the materials in proportion to the size, quality and value of their materials (Cercel, 2003).

In case of confusion, the main thing is considered to be the one that exceeds the other either in value or quantity, or is sold at auction and the price is shared.

The analysis of each of the three cases of movable accessions focused on the interpretation of the applicable legal provisions, the rights of the owners of the joined or incorporated property, the controversies that have arisen in the legal literature and judicial practice, etc.

Rules common to all cases of movable accessions

1. When the thing formed remains common between the owners of the materials from which it was formed, then the thing will be sold by auction and the price divided.

Since no one can be forced to remain in undivided ownership, according to the law in force and in the case of joint ownership resulting from movable property, any of the joint owners may at any time request the termination of this situation. Since it is difficult to divide the property in kind in such cases, the law lays down the rule that the property must be sold by public auction and the price divided (money being essentially divisible). The parties can settle the division by agreement.

2. In all cases where the owner of matter used without his knowledge in the formation of a new thing is entitled to claim the thing formed, he is also entitled to claim instead of the thing formed a matter of the same kind, quality, quantity, weight, size and value of the same matter.

In all cases of adjunction, specification or confusion, in which the owner of the property used without his knowledge is entitled to receive the newly formed property, he also has the possibility to claim a property similar to his property. It is only natural that the owner should be the one to choose between invoking the accession, and thus becoming the owner of a new good, or claiming only what he had. This solution is based on fairness but also on the idea of protecting the right of ownership, and is particularly useful when the owner is unable to pay the other the price of the work or the value of his property, or when the result of the accession is of no interest to him.

3. Those who use foreign materials without the owner's knowledge may also be liable to pay damages.

In the matter of movable accession, the person who uses foreign materials without the knowledge of their owner can also be obliged to pay damages (Dogaru, 2002). It is a sanction for the person who has acted in bad faith (he knew that the material used belongs to another) and a measure to protect the right of ownership.

Damages will include both the damage suffered (*damnum emergens*) and the benefit of which the person concerned was deprived (*lucrum cessans*) (Cercel, 2003).

CONCLUSIONS

From the given research we conclude the following, accession is the material incorporation of a less important thing with another more important thing, each having different owners. The owner of the more important thing becomes the owner of the less important thing, i.e. acquires ownership of the less important thing. As a rule, the former owner of the accessory (less important) good is entitled to compensation under the principle of unjust enrichment.

Given the existence of outdated legislation, the timidity of legislative bodies in adopting new regulations, the dynamics of society and the emergence of new social relations, which were not taken into account when the Civil Code was drafted, it has proved very difficult to address this issue, both theoretically and practically.

Through a comparative study of the legal provisions governing it, through detailed research into the problems that have arisen in legal practice in our country and abroad or have been debated in doctrine, and by attempting to find new legislative and practical solutions to these problems, we hope that we have succeeded in making at least a modest contribution to the theoretical and practical foundation of accession as a means of acquiring property rights.

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Good Faith In Juridical Relations Of The Civil Law

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Abstract: Civil law is based on the recognition of the equality of participants in the relationships regulated by it, the protection of private and family life, the recognition of inviolability of property, contractual freedom, the protection of good faith, recognition of the inadmissibility of interference in private affairs, the guarantee of the restoration of the person in the rights in which he was harmed and their defense by the competent judicial bodies. Good faith is one of the oldest Latin principles – bona fide, which implies mere sincerity and seriousness. In civil relations, good faith takes the place of honesty. The primary wishes of this article are to emphasize the relevance of good faith and to express which civil relations are governed by the principle of bona fide and whether bad faith consists in a violation. In order to achieve the objective of this work, I used the logical method of study, which is the most used method in the legal field. For this article I used other scientific research and civil law books. Regardless of the outcome of human contact, good faith refers to a real purpose, to be honest, transparent, and fair.

Key Words: good faith, civil relations, law system, detrimental reliance, mala fide;

1. INTRODUCTION

G.Vallet stated that “because of good faith, whose influences are so powerfully exercised in social life, people enjoy a more perfect civilization.”[Good faith in the matter of contracts, A.Udriște, M.. Drumar, UNIBUC, Scientific Comuntions 2010], namely the principle of good faith holds in the contemporary period the place of morality in primitive law. In this way, good faith contributes to the improvement of social relations between individuals and ensures loyalty between the contracting parties. However, the real image provokes the question to be addressed in this paper. The study aims to carry out an analysis of detrimental reliance from the point of view of the coexistence of legal relations under civil law and whether the violation of this principle or the deviation from the observance of good faith entails guilt or no.

Detrimental reliance is not studied, sufficiently profound, neither as a principle, but neither as a presumption, and in the judicial practice of the Republic of Moldova, rare are the cases, in which the courts base their decisions, exclusively on good faith. It is stated in the literature that under the influence of German doctrine, the principle of good faith develops in the USA since the end of the 19th century.

The principle of good faith was applied in Roman private law, consisting mainly of rendering the real will of the contracting parties, a position that applied until the beginning of the XXth century. In this regard, the German author Zimmermann, in his article “Roman Law and European Culture”, speaks about the reception of institutions under Roman law [Zimmermann, 2015].

The need to define good faith is determined by the uncontested importance of this principle in legal relations, having implications in almost all civil law institutions. The improper application of a principle characterized by such a frequency of appeal to it leads to the creation of a vicious judicial practice of generous dimensions, given by the wide range of issues whose resolution is based on the principle of good faith.

But these aspects must concern not only doctrinarians, the fruit of whose work positively influences judicial practice, but above all the legislator, who has the duty to follow the course of the application of the existing legal norms and to intervene with modifications if needs so require. The modernization of the Civil Code of the Republic of Moldova, in force since 01.03.2019, affected most institutions of civil law and was an opportunity for the legislator to intervene with adjustments in matters of good faith, starting from its notion. Thus, the modernized Civil Code defines in Article 11 paragraph (1) good faith as: “A standard of conduct of one party, characterized by fairness, honesty, openness and taking into account the interests of the other party to the legal relationship.” [Civil Code of the Republic of Moldova 10.01.22] We consider that this norm, by which good faith is defined, is of a general nature and is applicable to any civil legal relationship, both absolute and relative.

Currently, the authors cannot unanimously put out a common definition of good faith. The history of the development of this institution is long, and its notion dates back to the mists of antiquity. Every historical

period through which it has passed has shaped and attributed its own meaning, and therefore it would be reasonable for those who want to define today the foundations of good faith to be guided by all these peculiarities, which also constitute the quintessence of good faith.

2. MATERIAL AND METHODS

According to the general theory of law, appropriate to the degree of precision and specificity, legal norms can be divided into rules of strict law and on the other hand rules of directives or standards [Dănişor, General Theory of Law, Scientific Ed., Bucharest 1999, p.242]. In the case of the first category of rules, the rule is rigid, precise and inadmissible to subjective interpretation. While norms such as the standard are generally regulated, it is at the discretion of the judge that the subject by his conduct mirrors a standard or not. Good faith also falls within the standard rules, with the legislator indicating the obligation to comply with it, but not giving concrete details on how to act. However, the principle is subsidiary in nature, and sometimes there are special rules that remove its application. [Octavian Cazac, Annotated Civil Code].

The literature mentions Cicero as the jurisconsultus who established the basis of the concept of good faith in civil law. The doctrine explains in details the essence of good faith as the belief that the person acts with good intentions, according to the law, and without hidden purposes. Detrimental reliance has a close connection with the old Roman law, which focused entirely on the concept of honesty, which from the point of view of moral content is perceived as equal to good faith [Ion Dogaru, civil law. Ideas producing legal effects, Allbeck 2002, p.3]. The doctrine has outlined the elements that underlie the concept of good faith, namely: The right intention that always implies the absence of mourning and fidelity in commitments, the successor diligence of prudence that presumes that all our actions and their results do not contravene the law. Also legitimacy, that is, compliance with the legal order, which involves only the Commission of lawful acts and the abstention of one party from harming the other by its acts are elements that form good faith as a Directive of civil law (D. Gherasim, good faith in civil legal relations, 1981, p.8). Specialists say that the minimum non-identification of an element lacks the legal relationship of the status of being in good faith.

The concept of good faith takes 2 forms within the legal relations of civil law, namely honest activity, with mutual trust when concluding civil legal acts subsequently their execution and erroneous and excusable faith protected by law, which equates to a right, but only if the conviction is firm but wrong that the law would be acted upon.

The Romanian literature addresses whether the violation of good faith or the deviation from its observance entails guilt or not. In the Constitution of the Romanian State Article 57 "Romanian citizens, foreign citizens and stateless persons must exercise their constitutional rights and freedoms in good faith, without violating the rights and freedoms of others" [Romanian Constitution of 21 November 1991, in force 8 December 1991], hence it is understood that good faith is presumed, but until proven otherwise. We also understand that bona fide governs any social relationship that arises in the Romanian national law system, including legal relations under civil law. By the comparative method, the Constitution of the Republic of Moldova, in Article 55, mentions that "everyone exercises his constitutional rights and freedoms in good faith, without violating the rights and freedoms of others"[Constitution of the Republic of Moldova 29 July 1994, in force .27 august 1994] that is, any person by his conduct must not violate the law or limit in his rights the other party to the report, being of a reasonable nature, which would essentially mean the assessment of all the circumstances arising in the case of the conclusion of legal acts.

Civil law specialist and lawyer from the Republic of Moldova, Oleg Efrim, at a meeting on good faith subject said, quote "that bona fide is sincerity in words and fidelity in commitments". So vice versa would be the meaning of bad faith, which would mean not being honest in what is stated as part of the report and not taking on the commitments made. In addition, good faith would also concern the relationships in which the person after stating a future behavior does not deviate from it. However, every person should have the freedom to behave as he wants and to say what he wants, sure, within the limits of the law. This freedom should include the freedom to change his mind, to change his position, to choose the way he defends his interests [Octavian Cazac, cit. op.]. It is precisely to establish the limits of freedom that good faith appears in the form of the principle of civil law. In addition, it is also the bona fide that shows by its violated characters whether a legal relationship is of bad faith or not.

In a comparative plan, we note that most of the civil codes adopted lately, more or less, contain references dedicated to good faith, in some codes detrimental reliance being considered a principle of civil law, in others

not. The Civil Code of Ukraine in Article 3 lists among the principles and principle of good faith. Similarly, the Civil Code of the Russian Federation, in Article 1 paragraph 3, provides that when establishing, exercising and protecting civil rights and enforcing civil obligations, participants in civil relations must act in good faith [Civil Code of THE RUSSIAN FEDERATION 21 October 1994]. Art. 8 paragraph 4 of the Civil Code of Kazakhstan stipulates that citizens and legal persons must act in good faith in the exercise of their rights, in a reasonable and fair manner respecting the requirements contained in the legislation, the moral principles of society. [Civil Code of the Republic of Kazakhstan, December 27, 1994]. We refer to the principle of good faith and the Dutch Civil Code in Articles 11-13, but also to the Civil Code of Georgia in Articles 8 and 361. References to good faith are also contained in the French Civil Code and the German Civil Code. Thus, the last sentence of Article 1134 of the French Civil Code states that the agreement is to be executed in good faith, and Section 242 of the BGB provides that the debtor is obliged to perform the obligation in good faith, taking into account the usual practices [German Civil Code in the version promulgated on 2 January 2002]. Section 157 of the BGB also states that contracts must be interpreted in accordance with the law.

In this regard, we can observe that the text of these articles of the French Civil Code and the BGB does not require the conclusion that we are in the presence of a principle of civil law called the principle of good faith. Art. 1134 of the French Civil Code and Section 242 of the BGB refer to the application of good faith in contractual relations. However, it must be noted that the case-law in these countries has gone much further, making it possible to apply good faith also in other civil law institutions.

4. RESULTS AND DISCUSSION

In general, any legal relationship is synallagmatic, the rights of one party are the obligations of the other. If creating a civil legal act, a subject, by disadvantaging the other party, creates its own advantage, it means that it is of bad faith. However, the exception is allowed when a party again argues in good faith what was the reason for its gain. The Civil Code of the Republic of Moldova provides this exception in Article 10 “natural and legal persons participating in civil legal relations must exercise their rights and perform their obligations in good faith, in accordance with the law, the contract, the public order and good morals. Good faith is presumed until proven otherwise” [Civil Code of the Republic of Moldova of 01.03.2019] a relevant example may be a well-intentioned travel company that sets the rate of conversion of the payment into national currency after the rate that is proposed by the agency. The individual who benefits from the tourist services is disadvantaged, and at first impression it can be considered that the agency acted in bad faith. However, if it makes plausible arguments that this advantage is not an abusive one, the legal relationship is considered governed by bona fide.

In contemporary times, the phrase is used that “what is not illegal is permitted by law”. In the case of the principle of good faith and in general things do not take this aspect because the conduct of subjects of civil law must follow the legislation, or according to the Latin maxim, *Ubi lex non distinguit, nec nos distinguere debemus*, that is, where the law does not distinguish, neither should we distinguish. These being stated, it is presumed that deviation from the principle of good faith entails guilt. This is manifested differently depending on the legal relationship in which it was identified. The most common branch in which good faith is shaped is the law of contracts.” – [TALYA ANS UÇARYILMAZ, *the principle of bona fides from Roman law to contemporary law*, 2018, p 4.] In contracts it is most visible if the advantages of one party outweigh the disadvantages of the other and thus the party suffers from it. In the Republic of Moldova, good faith is also mentioned on the part of persons in Civil Code. In the case of a legal person, the administrator must in good faith fulfill the purposes of the entity. If he/she abuses his/her powers, his/her actions or inactions are of bad faith and he/she is to be held accountable. However, administrator can defend his/her position by arguing the conduct, but according to Article 14 of the Civil Code of the Republic of Moldova, “no person can obtain an advantage from his/her unlawful or bad-faith behavior” [Civil Code of the Republic of Moldova of 01.03.2019].

Within the framework of rights in rem, good faith plays a crucial role in the acquisition of the right to property through possession as a state of fact generating legal effects. In the case of possession, the possessor must be of good faith, also in the case of acquiring the right of ownership over the fruits of possession, accession of real estate and securities and legal acts. It is perceived that good faith is the basis of the confidence that the acquired property right was one of good faith which did not make use of the disadvantage of the other party. Another good faith perspective is in the case of obligations, when the debtor and the creditor must, without bad faith, honor their obligations. The legislation of the Republic of Moldova regulates that if there are deviations from the good faith observance of obligations, the clause containing them becomes null.

The protection of good faith is raised to the rank of principle, the principle of the protection of good faith is met and recognized in several subjects of civil law, and doctrine and jurisprudence currently maintain that good faith is presumed regardless of the matter in which it is raised. We believe that we are in the presence of a fundamental principle of civil law whose content is given by the fact that good faith is always presumed and protected in civil legal relations [Dogaru, 2007].

We believe that through the amendments made in the Civil Code of the Republic of Moldova in matters of good faith, a change of value of the principle of good faith was managed from a simple guarantee, into a standard of mandatory conduct. If, in the pre-modernization period, the principle of good faith, although recognized as a fundamental principle, could be easily invoked, most of the time its existence being remembered only when a defense plan was drawn up when solving a dispute, being left at the discretion of the court to assess the sufficiency of evidence, In order to combat good faith, however, the amendments set out clear and sufficient requirements to be met to be considered a participant in civil legal relations in good faith, in some cases at risk of losing the right [Arapu E.].

5. CONCLUSIONS

Following the analysis of good faith from the point of view of its existence as a principle of legal relations of civil law in this paper, we have grasped its history as the standard of law. In addition, we have identified the way it manifests as a composing element of the civil law legal relationship and we have identified the conditions for a legal relationship to be classified as a good faith one. The literature used was multi-horizontal and launched ideas that led to the evolution of the study and the emergence of several questions suitable for future articles. Also thanks to the literature and legislation through which we have highlighted the similarities of the manifestation of good faith in different states with different law systems.

Furthermore, we have presented whether violation of the principle of good faith or deviation from its observance is considered illegal. We have noticed that any deviation from the law, in this case from the principle, is perceived as a violation. Any case in which the right is abnormally interpreted and consequently the holder of another right is prejudiced, can speak of nothing but an action in bad faith. The abusive exercise of subjective rights, the failure to observe the theory of solidarity and the commitments initially assumed also lead to the idea of unfair and fraudulent behavior.

In conclusion, good faith is established by a set of actions or inactions that the participants in essential legal relationships must assume, which by their nature are reasonable and fair. The principle is vital for building relationships based on good-faith intention and mutual loyalty.

In the light of the above, We consider that a problem of non-compliance with the principle of good faith is the judicial practice that interprets the law extensively, being partially or totally diminished the concept of good faith, which states that any natural person or legal person must exercise their rights and perform their civil obligations in good faith, in accordance with public order and good morals.

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Real Estate Accession: Practical and Comparative Aspects

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Abstract: The legal right of ownership over a building also gives the right of ownership over everything that produces the thing and everything that joins, as an accessory, with the thing, in a natural or artificial way. This right is called the right of accession, and this is the definition in the Civil Code.

In the matter of artificial real estate accession, the elements of continuity in the legislative plan show the fact that this institution establishes the rule according to which the accessory good loses its individuality through its incorporation into the main good, so that the accessory good belongs to the owner of the main good. Thus, the accession usually leads to the modification of the object of the property right, in the sense that the owner of the land also becomes the owner of the construction that was built on the land, regardless of whether the accessory asset (the construction) and the main asset (the land) had, from the beginning, the same owner or belonged to different people.

Accession, as a way of acquiring the property right, represents one of the main institutions of civil law, having applicability from ancient times to the present day. Even if, at present, the applicability of accession cases is more restricted than in the past, the approach to this topic is imposed by both theoretical and practical needs. The social life of our days knows an alert rhythm, and the legal provisions that regulate the accession enjoy a special longevity, so they must be adapted to the new realities of society.

Keywords: accession, territory, property, natural, artificial, legislation

Introduction

Accession, as a way of acquiring property rights, represents one of the main institutions of civil law in the Republic of Moldova, having applicability from ancient times to the present day.

The actuality of the subject:

Even if, at present, the applicability of accession cases is more restricted than in the past, the approach to this topic is imposed by both theoretical and practical needs. The social life of our days knows an alert rhythm, and the legal provisions that regulate the accession enjoy a special longevity, so they must be adapted to the new realities of society.

All these aspects, as well as the lack of specialized literature in the field in the Republic of Moldova, led us to analyze and research the given problem, in which we will detail the main theoretical and practical problems raised by this way of acquiring property rights in Our country.

Considering the distant origins of this legal institution, its evolution over time and the need for new legal provisions to regulate it, the work aims to approach the theme from a triple dimension: past, present and future.

The appearance, evolution, actuality and prospects of the accession are aspects that belong to a complete analysis of this way of acquiring the property right and lead to a better understanding of the legal mechanism that it encompasses.

The objectives of the work

Studying the national and international specialized literature, several objectives were outlined that are included in the work, as follows:

- identify review of legislation, national and foreign specialized literature in relation to the way of acquiring the property right through real estate acquisition;
- identify because of the theoretical and practical gaps arising from the laws and practice of our country;

-Set with certainty of the necessary documents for the registration of the property right acquired through real estate acquisition;

With a view to the most in-depth and extensive research of the objectives, following their gradual attainment of depth by selecting the appropriate methods of scientific research of the real estate acquisition. The methodological basis of the investigations consists of:

-The logical method used constantly throughout the study (deductive analysis, classifications, definitions) is the basis of the study and the resulting synthesis with the argumentation of the conclusions and propositions of law *ferenda*.

-Historical method, used to research the origin of the real estate acquisition;

-The comparative method, thanks to which a study was carried out in a comparative sense with the legislation of other countries, than the national one;

-The method of observation, the synthesis was carried out and I emphasized the positive part of this way of acquiring the property right.

The notion and characteristic elements of real estate acquisition

Accession appears as a rule with exceptions, as not in all cases the constructions, works or plantations built on a land belong to the owner of the land.

According to the legal dictionary, by accession we understand a way of acquiring a property, resulting from the natural attachment or by someone's action of an asset to another more important asset, belonging to another person.

It is stipulated that by accession, the owner of an asset becomes the owner of everything that attaches to the asset or is incorporated into it, unless the law provides otherwise.

The principle of accession, according to which "everything that joins and incorporates with the thing belongs to the owner of the thing". According to this principle, the right of ownership extends not only to the thing that forms the object of its right, but also to all those that unite with it.¹

Accession is, therefore, an original way of acquiring the property right.

The justification of this institution resides in the connection of accessoryity that arises between the less important thing and the main thing. This connection of accessoryity is manifested by a union of the two things in such a way that their separation is possible only with the damage of both or the total or partial destruction of one of them. Consequently, the owner of the main thing will receive the new good, considering that the accessory thing is incorporated into the main thing (*accessio cedat principali*). The goods that belong to the public property cannot be the object of this way of acquiring the right of ownership.

One way of acquiring the property right is accession. It is regulated by articles 520 – 522 of the Civil Code of the Republic of Moldova. From the interpretation of these articles, it appears that the accession represents that way of acquiring the right of ownership characterized by the incorporation or union of an asset with another asset, each with different owners. A legal provision that comes to enshrine this fact is represented by art. 502, part two, C. Civil. So,

"...everything that unites the asset or is incorporated into it as a result of the act of the owner, another person or a fortuitous case, belongs to the owner unless the law provides otherwise".

From the analysis of this regulation, it follows that the accession can only operate when two assets, having different owners, or united in such a way that their separation is no longer possible except with the damage of both assets or the total or partial destruction of one of them. Goods that are part of the public domain cannot be acquired by accession.²

Accession is the material incorporation of a less important thing with another more important thing, each having different owners.

¹Stella Andreica Bachelor Thesis - Property Law, Craiova 2010

²Ion Bîta, lect. Univ. Doc. USEM, Civil law. The property right and its dismemberments, Course, Chisinau 2013, p. 50

The owner of the more important thing becomes the owner of the less important good, that is, he acquires the right of ownership over the less important thing. As a rule, the former owner of the accessory good (less important) is entitled to compensation based on the principle of unjust enrichment.

From the analysis of the Civil Code regarding accession, it follows that it is operative only if two assets with different owners have joined in such a way that their separation is only possible through the total or partial damage or destruction of one of them. In relation to the main asset to which it refers, the accession can be:

Movable - when the goods that make up its object are movable; Real estate - when the goods are immovable. In turn, real estate acquisition can be:

- Natural - what occurs as a result of a natural phenomenon, without the intervention of man;
- Artificial - when it involves human intervention.

Accession, as a way of acquiring ownership, is the legal expression of the union of assets belonging to different owners. As the physical interaction between goods cannot be stopped, we appreciate that the accession, as a legal institution, cannot disappear either. As long as the possibility of the physical, material union of two assets belonging to different owners is recognized, there will also be the possibility of acquiring the right of ownership over another asset, through accession.

Natural real estate accession consists in the union or incorporation of two assets with different owners, without human intervention.³The Civil Code of the Republic of Moldova regulates the following cases of natural accession, namely:

a) Alluviums are increases in land that are made imperceptibly as a result of the successive deposits of earth at the banks of flowing waters. This results from the provisions of art. 328 para. 1. Civil Code, part I, according to which: "land additions to the banks of flowing waters belong to the owner of the riparian land only if they are formed gradually". By land additions, we must understand not only the land, but all that the soil brings to the surface, and all that the flowing waters bring and leave on the shore, such as sand, gravel.

And vice versa, if the riparian land was gradually and definitively occupied by the bed of the flowing water, this part of the land will return to the owner of this water - the second part of art. 520 paragraph 1 C. civil.

It should be noted that our Romanian neighbors regulate alluvium in the Romanian Civil Code, as land increases that are made successively and imperceptibly, on the banks of flowing waters, as well as lands left by the imperceptible retreat of flowing waters from one of the banks to the other, without the owner of the opposite shore being able to reclaim the land thus lost. They belong to the owner of the riparian fund.

The lands left after the withdrawal of the waters (lakes, ponds, ponds) that remain in the property of the one to whom they belonged are not subject to the above rule. However, the aforementioned owner has no right to the riparian land covered by the rising waters, due to extraordinary circumstances.

Also, the bed of the flowing water that has changed its course remains the property of the bordering owners who, within one year, can bring the water into the old bed, in compliance with the legal conditions for bringing it back.

As for the land left after the retreat of the sea water, it belongs to the public domain. Regarding the public domain art. 135 point 4 of the Romanian Constitution provides that it also includes waters with exploitable energy potential and those that can be used in the public interest. On the other hand, the beds of rivers and streams, the basins of lakes of public interest, the bottom of inland maritime waters and the territorial sea belong to the public domain, as provided by art. 5, par. 1 of the Land Fund Law no. 18/1991.

According to the regulations in force (art. 135, point 5 of the Romanian Constitution and art. 5 of Law no. 18/1991), goods in the public domain are inalienable.

With regard to the lands in the abandoned riverbeds, which became available following the regularization works, Land Fund Law no. 18/1991⁴by art. 78 provides that they will be set up for agricultural production, fisheries or, as the case may be, forestry, together with the basic works performed by their owners.

³Commentary on the Civil Code of the Republic of Moldova, volume I, ed. "Arc", Chisinau 2005

⁴Monica Baidoc, jurist, Article: Accession - method of acquiring real estate ownership (juristconsulting.ro)

It can be noted that, at present, the alluvium is subject to the regulations of the Civil Code only to the extent that certain special regulations have not intervened.

b) Avulsions represent the addition to a land of a piece of land, torn from another land, by the action of running water. This addition will become the property of the owner of the land to which it was attached, if the former owner does not claim it within one year. This results from the provisions of art. 520 paragraph 3. C. Civil. A clarification is required if this piece of land, which, of course, can be individualized and recognized, comes from the public domain, the claim is imprescriptible.

From the perspective of the Civil Code, avulsions represent the addition to the land of one owner of a large part of land torn from the land of another owner, and which can be recognized. This addition becomes the property of the owners of the land to which it was attached, if the former owner does not claim it for one year. The right to the claim action is imprescriptible if that piece was torn, by the action of a water, from a land belonging to the public domain.

c) Islands. A situation inappropriate for natural real estate acquisition is regulated in art. 520 para. 4 C.Civil, and refers to the case when a flowing water naturally changes its course, forming a new arm, cuts and surrounds the land of a riparian owner, thus making an island, the land owner will lose the land transformed into an island. According to this provision: "if a flowing water, forming a new arm, surrounds the land of a riparian owner, he remains the owner of the island thus created".

The islands that are formed on non-floating and non-navigable land belong to the owner of the fund on which they were formed. If the water is public property, the islands and shoals will have the same regime. The civil code also provides that, if the formed island crosses the middle of the river, then each riparian owner has the right of ownership over the part of the island that extends towards him, starting from the middle of the river.

A similar situation is the one provided for in art. 520 para. 2 C. civil, when: the waters of rivers, streams, canals, ponds or other waters overflow or decrease. Thus, this article provides: the owner of the land surrounded by rivers, lakes, ponds, canals or other waters does not become the owner of the lands created by the temporary decrease of the waters. The owner of these waters does not acquire any rights over the land covered as a result of sporadic overflows. In this case, the owner of the land surrounded by standing water does not become the owner of the land that appeared due to the temporary decrease of the water, just as the owner of these waters does not acquire any right over the land covered by sporadic overflows.

In the same way, it should be mentioned that Romanian legislation regulates the way of acquisition by accession of animals and birds, thus in the case of fixing on a fund some animals and flying, semi-wild animals (pigeons, bees, etc.), i.e. living things that live in freedom, based on where they settle. They belong to the owner of the fund on which they are located, but only during the time they are on this fund and only as a relative presumption of ownership, provided that this transfer was not made by fraud. If the animals or birds are property public, the access will not be able to work.⁵

The artificial real estate acquisition is characterized by the fact that it involves human intervention and the payment of compensation to the one to whose detriment they act. The basis of the compensation action is the principle according to which "no one is allowed to enrich himself at the expense of other people". Thus, the onerous nature of this form of accession is highlighted, regarding which the rule that "the main thing is the land, so that the owner of the land also becomes the owner of the constructions, plantations, works executed by man" also applies.⁶

This way of acquiring property rights requires human intervention. This matter is governed by the principle according to which the accession is always made for the benefit of the owner of the fund, the owner of the land, who also becomes the owner of the constructions or plantations made on it.

Our civil legislation recognizes three ways of acquiring property rights through artificial real estate acquisition: the construction or plantation made on one's own land, but with the materials of another; the construction or plantation is made with own materials but on someone else's land; the construction or plantation is made on two lands belonging to different owners.

⁵C. Stătescu, C. Bârsan. Civil law. Real rights. Bucharest, 1988 page 836; Genova Vrabie, TR Popescu, Civil law, Bucharest, 1994, page 102.

⁶Bogdan David Artificial real estate acquisition, Universul Juridic, Bucharest 2012.

a) The construction or the plantation made on the land or with the materials of another. In this situation, if it was found that, after the completion of the work, the materials used to carry out the work were not the property of the owner of the land, by virtue of the real estate accession, the owner of the land will also become the owner of the construction or plantation. Instead, the land owner will be obliged to pay him compensation. The amount of this compensation will depend on the attitude of the owner at the time of using the materials, in the sense of whether he knew or did not know that the materials belonged to a third person, that is, he was in bad or good faith. If the term "constructions" does not raise questions, then regarding "works" the legislator has expressly indicated what is meant by them, attributing to them "planting, as well as the developments brought to a land that are not permanently incorporated into it". From the interpretation of the same article, it appears that if the owner of the land was in good faith in using the materials, he will be obliged to pay only the value of the materials. If he was in bad faith, he will also be obliged to repair the damage caused. In a comparative sense, with Romanian legislation, where any construction, plantation or work done in or on the land is presumed to be done by the owner of that land, at his expense and that they belong to him, until proven otherwise". The mentioned article establishes a presumption in favor of the owner of the land, a presumption that has a relative character, so it can be overturned by contrary evidence. In the specialized literature,

But, if he is in good faith, in the sense that he executed the works believing that the materials belong to him, he could invoke art. 1909 Civil Code, which provides better protection than accession. If, however, it is in bad faith, he could only invoke the accession, as a way of acquiring the right of ownership over constructions, plantations, works, which has a direct tangent with the legal provisions of the Republic of Moldova.

b) The construction or plantation is made with own materials but on someone else's land. By virtue of the principle that governs this matter, the owner of the land will also become the owner of the construction or plantation. However, in this situation the owner of the land has the option to keep the works invoking the right of ownership by accession or to compel the third party to erect them at his own expense and to repair the damages caused⁷. In this case, the owner of the land can erect the works himself, but at the expense of the one who erected the constructions. However, such a possibility will only exist if the third person, i.e. the builder, was in bad faith - art. 329 paragraph 4, Civil Code. If the builder was in good faith, he cannot be forced to erect the construction. If the owner of the land opts to keep the constructions or works, legally, he has two possibilities to incentivize the third-party builder: either the payment of the consideration of the materials and the cost of the work, or the payment of an amount of money that will be equal to the increase in the value of the land.

It is also necessary to analyze this situation in a comparative sense. For example in art. 494 Romanian Civil Code provides that "if the constructions and plantations were made by a third person with their materials, the land owner has the right to keep them for him or to oblige that person to erect them". In this case, the land being the main asset, its owner will also become the owner of the construction or plantation by accession. As for the builder, who until then was the owner of the materials, he becomes a simple creditor of the owner on whose land he built the construction or the plantation.⁸

c) The construction is done on two plots belonging to different owners. The completed construction will be the property of the land owner on whose territory the largest part of the built surface is located, regardless of which of them erected the construction. In the situation where the built surface is equal on both plots, from the interpretation of this article we see that the legislator grants a right of option to the non-builder neighbor to become or not the owner of the construction. If he chooses to acquire the property, he is obliged to pay the builder a compensation that includes the value of the materials of the entire construction, the cost of the work, as well as a royalty for the surface right representing the value of the use of the related land, for the entire duration of the construction's existence. If he does not opt for the acquisition of the construction, he will be able to ask for compensation consisting of the allowance that the builder must pay for the use of the neighbor's land on which the construction is built - the surface right, as well as the value of the devaluation of the neighbor's land as a result of the construction. Interpreting by analogy the provisions above, we consider that they will also apply to situations when the construction is carried out on three or more plots of land, following that the neighbor on whose land the largest part of the construction is located can express his option to

⁷Sergiu Baies, Aurel Băiesu, Valentina Cebotari, Ion Crețu, Victor Volcinschi, Real rights, General theory of obligations, Volume II, Legal Quarter, CSPJ, 2005.

⁸Cristinel Ioan Murzea Civil law. Real rights Course notes, 2009., p.40.

acquire or not the ownership of the entire construction.⁹ Likewise, it is necessary to emphasize the fact that Romanian legislation does not provide for this situation, and it is impossible to make a comparative analysis.

The regulation of real estate acquisition in the Romanian legislation in a comparative way, we could analyze the acquisition as a way of acquiring the right of ownership through the prism and in accordance with the New Civil Code of Romania, which, by acquisition, it is understood that the owner of an asset becomes the owner of all that sticks to the property or is incorporated into it, if the law does not provide otherwise.

Regarding natural real estate access, Romanian legislation establishes that land additions to the banks of flowing waters belong to the owner of the riparian fund, only if they are formed gradually. It is noted that Romanian legislation also contains regulations regarding stray domestic animals on someone else's land, which is not stipulated in our national legislation. I believe that it would be a successful idea to borrow the idea of regulation from across the Prut, and to integrate it into the national legislation of our country, thus widening the spectrum of natural access and its establishment method. I believe that these regulations will solve a series of gaps in litigation cases arising between the parties in the process regarding domestic animals.

Conclusions

The right to property is more than just a legal concept. It represents one of the fundamental problems of individual existence and human society.

In our current legal system, the right to property occupies a privileged position, taking into account the fact that it is the main real human right, and the principle of property defense is one of the most important of civil law, expressing the general orientation of the legislation. Moreover, today there is talk of a constitutional and European dimension of the right to property, since it is a fundamental right of the country's citizens and is regulated in international acts, especially in art. 1 of the First Additional Protocol to the European Convention on Human Rights, considering, as a matter of principle,

It can be said that, in our legal system, property benefits from a double guarantee: a constitutional guarantee and a common law guarantee manifested through legal means of defense, within which the claim action occupies an important place.

The problems arising in the matter of artificial real estate acquisition cannot be correctly solved without an exact knowledge and without a correct application of the normative "formulas". The unknowns raised in the various cases submitted to judgment only increase the complexity of the issues. We also appreciate that knowing the order of operations is particularly important in the matter of artificial real estate acquisition. Without a coherent and correct evolutionary picture of the cases subject to judgment, the courts can easily fall into the trap of appearances.

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Slovak transportation sector from the perspective of market concentration level

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Abstract: This paper assesses the concentration of Slovak transportation sector, and its potential impacts on competitiveness of businesses operating within the sector. It analyses the concentration of transportation sector with the use of relevant metrics as market share, concentration ratio CR3, CR5, CR10 and Herfindahl index. The aim of this paper is to analyze financial results of Slovak transportation businesses and measure the concentration level of whole sector to explain its competitiveness in context of whole Slovak economy. To achieve defined aim of the paper, the use of specific methods was the main part of the research. Specific research methods include: (1) mathematical and statistic methods, (2) data processing with use of computer editor MS Excel, (3) application of special indicators: concentration ratio and Herfindahl index. Mathematical and statistical methods enable the quantification of key metrics that assess the competitiveness of industry – in this case transportation sector. First, we had to review market share of businesses (expressed in %). Then we could proceed to calculation of another important indicator – concentration ratio. Concentration ratio depends on market shares of businesses within the sector, and most often is identified for three (CR3), five (CR5) and ten (CR10) businesses with highest market share (also expressed in percent). The final indicator was Herfindahl index (also known as Herfindahl-Hirschmann index) which measures absolute concentration of sector. All in all, the paper should expand the knowledge about transportation sector in Slovakia, and could possibly inspire a reader to consider, what is the position of the industry in context of whole economy of Slovak republic.

Keywords: concentration of sector, transportation sector, concentration ratio, Herfindahl index

1. INTRODUCTION

From many perspectives, transportation is one of the most important pillars of global economy and society. This sector is, however, facing unprecedented changes caused mainly by growing pressures linked to environment protection. The use of traditional combustion engine will be with the highest probability completely replaced by alternative drive systems. Autonomous driving is another challenge, and rapid rise of car sharing services also causes substantial shifts. Growing popularity of shared green mobility services (e.g. bikesharing) reflects the changes of how people think about the transportation: more and more they prefer modern, flexible and environmentally-friendly modes of transport. According to expert reports, it is only a matter of time until the full automatization of transportation sector (which means for example interconnection and communication of autonomous vehicles) (Wengle et al., 2019).

Global economy highly relies on proper function of transportation. It is almost impossible to imagine the world economy could prosper without well-functioning transportation networks. Despite transportation has benefits for the economy, it also brings some negative consequences on the environment and society. Activities executed by transportation companies have impact on hydrological conditions, water quality or biodiversity. Environmental damage then results in worsened health of population around the world. Road accidents, poor working conditions, noise emissions or infrastructure capacity problems are among other cons of transportation sector (Wengle et al., 2019).

Current incentives are widely oriented on the transition to a sustainable transportation system. To accomplish this transition, three main pillars are presented as the most important (Wengle et al., 2019):

- decarbonization,
- internationalization of external costs,
- investment in infrastructure.

It is almost inevitable for the society to adopt zero-emission vehicles, shift towards the public transport, or prefer green mobility modes (cycling, walking etc). External costs of transportation need to be significantly reduced, what may be done by eco-taxes implementation, for example. The transition will not be successful

without adequate infrastructure, which has to be substantially strengthened to support transportation sustainability.

As is listed in the official statement released by European Commission (2011), “transport is fundamental to our economy and society.” Well-functioning transportation and logistics system are necessary for prosperity of global economies worldwide. Especially in turbulent times, efficient transportation and logistics chains represent crucial economic and social benefits, both in developed or emerging countries (OECD, 2018).

It is obvious, that current and future developments create major challenges for whole sector. Transportation sector is forced to adapt to new modes of mobility and new standards and regulations, as a consequence of increased awareness for sustainability. Authors of this paper fully agree with following suggestion, published by European Commission: “global transportation is at cross-roads, and new challenges has emerged while the old remained.”

In the global environment, and in the environment of Slovak republic as well, following modes of transportation are crucial: road, rail, water and air. According to data from Eurostat (2018), road transportation clearly dominates in the division of freight transport (76%) as well as passenger transport (92%) in EU28 countries. In following tables (Table 1 & Table 2), we present latest available data about domestic freight and passenger transport, relevant for year 2020.

Table 1: Summary data of Slovak freight transport for year 2020

Transport type	Transport of goods by freight transport (thousand tons)	Performances of freight transport (million t-kms)
Railway transport	43 443	7 268
Road transport	168 652	31 591
Waterway transport	1 599	682
Air transport	0	0
Total	213 694	39 541

Source: Statistical Office of Slovak Republic (2021)

Table 2: Summary data of Slovak passenger transport for year 2020

Transport type	Transport of passengers (thousand persons)	Performances of passenger transport (million pass-kms)
Railway transport	49 577	2 180
Road public transport	156 333	3 180
Road nonpublic transport	270	7
City transport	283 913	981
Waterway transport	38	1
Air transport	39	68
Total	490 170	6 417

Source: Statistical Office of Slovak Republic (2021)

In the following table (Table 3), we present financial results for ten strongest companies from Slovak transportation sector. Data are relevant for fiscal year of 2021.

Table 3: Revenues of top companies

Rank	Company	Revenues for 2021 (EUR mil.)
1	eustream	622,9
2	Tesco International Clothing Brand	525,9
3	Slovenska Posta	321,6
4	Narodna dialnicna spolocnost	315,4
5	Zeleznicna spolocnost Cargo Slovakia	263,3
6	BUDAMAR LOGISTICS	252,8
7	BIC Slovakia	225,5
8	GOOD ROADS	221,1
9	METRANS /Danubia/	189,8
10	Zeleznice Slovenskej republiky	162,3

Source: Own calculations based on data obtained from Finstat.sk

In the following table (Table 4), descriptive statistics of dataset is explained. Data are relevant for fiscal year of 2021. The research sample contains 10 037 business units.

Table 4: Descriptive statistics for used dataset

Variable	Value
N	10 037
Mean (EUR)	1 405 025
Standard deviation (EUR)	12 895 948
Minimum (EUR)	0
Maximum (EUR)	622 935 000

Source: Own elaboration.

2. AIM AND METHODS

The main aim of the paper is to assess the state of Slovak transportation sector, especially from the perspective of market concentration. In the paper, we therefore use relevant indicators for industry concentration quantification. During the process of the research, general and specific research methods were used. General methods (mainly analysis, comparison or synthesis) were predominantly used for explanation of key topics in the introductory part of the paper. This part had mainly descriptive character as it outlines current state of transportation sector in the Slovak republic. Specific methods, however, were necessary for the research aim fulfillment.

Among the specific research methods, following were used:

- mathematical and statistic methods,
- data processing with use of MS Excel interface,
- quantification and implementation of key indicators relevant for the research: market share, concentration ratio and Herfindahl index.

Mathematical and statistical methods enabled the calculation of indicators that measure the concentration level of particular economy industry – in this case transportation sector. First of all, market share of businesses operating in the transportation sector (expressed in %) was calculated, based on total revenues of reviewed subjects. Then we proceeded to quantification of another indicator – concentration ratio.

Concentration ratio depends on market shares of businesses within the industry. It is most often identified for three (CR3), five (CR5) and ten (CR10) businesses with highest market share (also expressed in %). In our research, we also used CR3, CR5 and CR10 values.

The final and the most complex indicator was Herfindahl index (also known as Herfindahl-Hirschmann index) which measures absolute concentration of industry. Concentration ratio and Herfindahl index are two most frequently used indicators which evaluate the level of industry competitiveness (Bikker & Haaf, 2002). Results obtained from CR3, CR5, CR10 and Herfindahl index quantification became the basis for evaluation of concentration among subjects of transportation sector of Slovak republic.

3. RESULTS AND DISCUSSION

This chapter summarizes the research itself. It calculates market share, concentration ratio and in the final step, Herfindahl index. The research sample contains businesses, which officially operated in the transportation sector in Slovak republic. All indicators are calculated based on data of year 2021, as for year 2022 not complete data were available for all industry participants.

3.1. Characteristics of key indicators

Following indicators measuring the industry concentration allow for assessment of competition quality in the economy. Relevant institutions therefore have an opportunity to monitor the competitiveness of businesses which operate in specific sector of economy (MacKay & Phillips, 2005).

The fact is, numerous methods which evaluate the degree of concentration within the industry can be found in the literature. In this paper, indicators of absolute concentration were calculated (these indicators quantify the

degree of concentration in all subjects). Among absolute concentration indicators we include concentration ratio and Herfindahl index (Fendek & Fendeková, 2008), which are based on the calculation of market share. Fundamental data for quantification of selected indicators are total revenues of individual businesses – based on these data market share and subsequently concentration ratio and Herfindahl index were determined.

Market share

Market share is the basic indicator of market concentration. It represents the share of the individual enterprise revenues on the revenues of whole sector. It determines how the company performs in comparison to the other market participants – other competing businesses. Analytically, market share is expressed by the following formula (Fendek & Fendeková, 2008):

$$r_k = \frac{q_k}{q} = \frac{q_k}{\sum_{j=1}^n q_j}$$

where n – number of companies operating in the sector,

q_k – revenues of k company, $k = 1, \dots, n$,

q – total revenues for whole sector,

r_k – market share of k company.

Market share can be expressed as relative or as percentage result. It takes values from the interval $<0; 1>$ for the first, and $<0; 100>$ for the latter. Extreme values indicate either full concentration of the industry – monopoly for $r_k=1$, or the absence of market operators in the sector for $r_k = 0$ (Fendek & Fendeková, 2008). In this paper, we work with percentual expression of market share.

Concentration ratio (CR)

Concentration ratio indicates the market share held by few of the strongest industry businesses. Analytical formula of the concentration ratio quantification is as follows (Fendek & Fendeková, 2008):

$$CR_\psi = \frac{1}{q} * \sum_{k=1}^{\psi} q_k$$

in which ψ lays in the interval $<1;n>$ and CR_ψ takes values from range $<0;1>$ when calculated in relative numbers, or $<0,100>$ if we calculate percentage results. The concentration ratio is most often quantified for three, five or ten strongest companies in the industry (quantification of indicators CR3, CR5 and CR10). In some other studies, authors prefer indicators CR4 and CR8 quantified for four and eight strongest subjects (Hirschmann, 1964; Rhoades, 1993; Nauenberg et al., 1997). In this paper, we work with percentual expression of concentration ratio.

Herfindahl index

Herfindahl index is the composite indicator which measures the absolute industry concentration. In the literature we may also find the similar concept known as Herfindahl-Hirschmann index (Grullon et al., 2017). It is widely used for sector analysis and it is well-known and generally accepted indicator of market concentration (Brezina et al., 2016). It explains the impact of individual businesses' revenues on the concentration of whole industry. Herfindahl index quantifies the square of the market share of each subject in the industry and sums up the resulting numbers (Cavalleri et al., 2019).

Analytical expression of Herfindahl index is as follows (Fendek & Fendeková, 2008):

$$H = \sum_{k=1}^n \left(\frac{q_k}{q} \right)^2$$

and the meaning of the variables remains identical, as in the previously defined formulas.

Herfindahl index H takes values from $<1/n, 1>$. Extreme low value $H = 1/n$ means that every company has equal market share in the industry. For extreme upper level, for which $H = 1$ there is a pure monopoly on the market – when a single business holds 100% of whole sector revenues (Brezina, 2009).

In practice, the Herfindahl index may not be expressed as a number of the interval mentioned above. The reason is that in sectors with a high number of enterprises, Herfindahl index would be captured by very low numbers. The value of H tends to be therefore adjusted by the appropriate multiplier, most commonly 10,000. This conversion of H value enables to classify the degree of concentration of the industry, according to the following criteria defined by the US Federal Trade Commission (2010):

- for $H < 1500$, the industry is not concentrated,
- for H is in the range of $<1500; 2500>$, the industry is moderately concentrated,
- for $H \geq 2500$, the industry is concentrated.

Herfindahl index values also impact how government sets and enforces competition policy (MacKay & Phillips, 2005).

The Herfindahl index was firstly applied in 1950 in, by O. C. Herfindahl in his dissertation thesis. Later, in 1959 he used it in a study about international copper industry (Herfindahl, 1964). However, the similar concept (sum of squared market shares), is known since 1940 when A. O. Hirschmann executed a trade study. Hirschmann in his paper suggests that original idea of the index belongs to him (Hirschmann, 1964). In the literature, it is therefore possible to find concepts of Herfindahl index or Hirschmann-Herfindahl index, but both of them represent the same indicator.

Herfindahl index has been used in multiple studies to consider concentration level across wide variety of industries, for example in banking, insurance, mining, automotive or creative industry (Aijde & Ajileye, 2015; Brezina et al., 2009; Fedderke & Naumann, 2011; Hojdik, 2020; Kozáková & Kmety Barteková, 2020; Rolim et al., 2019; Rianto & Awwaliyah, 2019; Williams et al., 1994). Its main limitation is, that it can measure industry concentration only on geographically isolated markets (most often isolated countries) – it cannot be applied for international markets, as the final results may be misleading (Aghion et al., 2005).

3.2 Market share quantification

Calculation of market share was based on revenues of companies, which are listed in Table 1. In the following table, we present market shares of ten strongest companies of Slovak transportation sector. Market share is expressed in percent and informs about the relative strength of businesses in the industry.

Table 5: Market share of top 10 companies

Rank	Company	Market share for 2021 (%)
1	eustream	5,19
2	Tesco International Clothing Brand	4,38
3	Slovenska Posta	2,68
4	Narodna dialnicna spolocnost	2,62
5	Zeleznicna spolocnost Cargo Slovakia	2,19
6	BUDAMAR LOGISTICS	2,11
7	BIC Slovakia	1,88
8	GOOD ROADS	1,84
9	METRANS /Danubia/	1,58
10	Zeleznice Slovenskej republiky	1,35

Source: Own calculations based on data obtained from Finstat.sk

The power distribution between bicycle manufacturers reflects that there is not a single business with dominant position. On the contrary, it is possible to state, that industry revenues are quite evenly spread between the competitors. The leading company – eustream, holds top position based on their revenues of year 2021, with 5,19% market share.

Second strongest business is Tesco International Clothing Brand, as it covers 4,38% of the market, while Slovenska Posta holds third place with 2,68% of market share. Despite the fact, that business Zeleznice Slovenskej republiky possesses just 1,35% of the market, it is enough to place into the top 10 of the market share rankings. This suggestion, in some way, reflects that competition level in the Slovak transportation sector is very high. After deeper analysis, in 2021 there was 10 037 businesses relevant to transportation sector in Slovakia (n=10 037). From all these businesses, 8 499 has recorded revenues.

3.3. Concentration ratio quantification

Concentration ratio depends on market share values. As we already mentioned, concentration ratio in the industry is most often calculated for three, five and ten strongest companies in the industry. Table 6 contains already calculated concentration levels CR3 and CR5 for the bicycle manufacturing industry in Slovakia, based on revenues achieved by enterprises in the relevant period.

Table 6: Concentration ratio CR3, CR5 and CR10

Concentration ratio	Value (%)
CR3	12,25
CR5	17,06
CR10	25,82

Source: Own calculations based on data obtained from Fintat.sk

The results show current state of concentration ratio for year 2021. Concentration ratio CR3 represents the share of three strongest manufacturers which control 12,25% of local transportation sector. Especially the position of two strongest companies seems to be untouchable and probably any competitor can threaten their position in the near future. Concentration ratio CR5 reaches value of 17,06% and concentration ratio CR10 is at the level of 25,85%. We can describe these values as the fact, that ten companies control one quarter of whole Slovak transportation sector.

3.4. Herfindahl index quantification

The last step in this analysis is Herfindahl index quantification, a key metric evaluating a degree of industry concentration. First, we determined the number of businesses in the sector to 10 037 (n = 10 037). The number of industry participants is relatively high, and therefore Herfindahl index quantification is relevant (if the number of businesses in the industry is too low, Herfindahl index quantification may not be relevant, as the market has signs of oligopoly). Based on the previous calculations, Herfindahl index of the Slovak transportation sector is presented in Table 7.

Table 7: Herfindahl index quantification

Herfindahl index (as coefficient)	0,009982897
Herfindahl index multiplied by 10 000	99,82897

Source: Own calculations based on data obtained from Fintat.sk

Herfindahl index complexly assesses the degree of industry concentration. For the analyzed period, in this case for year 2021, Herfindahl index reached the value of 99,82897 (after the modification by 10 000 multiplier). According to generally accepted methodology of the Federal Trade Commission (2010), the industry can be clearly classified as not concentrated (because values of Herfindahl index are significantly lower than 1500). This suggestion is supported by other criterion where Herfindahl index for not concentrated industry takes values which are lower than 1800 (Brezina et al., 2009; Fendek & Fendeková, 2008).

Herfindahl index values calculated for Slovak transportation sector classify it as not concentrated industry. Based on the quantified results, it could be also defined as low concentrated industry. Currently, more than ten thousand businesses are operating within the industry and none of them have dominant position in the sector. More precisely, there is not business, or group of businesses, which would possess such a power to disable other competitors to expand their market activities. All in all, competition level in Slovak transportation sector is high and therefore the conditions for business activities execution is optimal for all industry participants.

4. CONCLUSION

Results of the research prove that Slovak transportation sector is highly competitive industry and is not dependent on performance of small group of strong businesses. Quantification and explanation of presented indicators enabled us to state that sector of transportation in Slovakia shows signs of not concentrated industry. Our statement is, except of quantified indicators, supported mainly by two facts: (1) there is large number of businesses operating in the sector, which exceeds the mark of 10 000, (2) the relative strength of individual businesses is evenly spread across industry competitors. According to methodology related to Herfindahl index calculation, Slovak transportation sector ranks in the category of not concentrated industries, what represents relatively high competition level and therefore suitable conditions for business activities within the sector. Despite the fact that this sector has recorded stable development in past years, it is difficult

to predict the future. What is inevitable for businesses, however, is the need to stay ready to react to changing conditions in the world. As global intentions and goals definitely incline to ecological solutions, green mobility and environmental sustainability, we can expect massive shifts in the business models of companies operating in the transportation sector – and this applies for all companies, both in the world and in Slovak republic.

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The Palestinian Economy and China's Economic Expansion

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Abstract: China manifests as a major player in the international arena with economic and military power. It seeks to establish a multi-polar world order that would be an alternative to the unipolar system on which the United States alone sits. As a result, China is becoming a strong economic competitor to the United States. The Chinese economic power hidden by state funded institutions are offering an alternative to the current international world order hidden by the World Bank and the International Monetary Fund (IMF). The purpose of this paper is to examine whether the Palestinians can benefit from the economic expansion of China. Thus, can the Palestinians shift their economic reliance on China in order to achieve an independent Palestinian economy? The Palestinians should rely on both the historical relationship and strengthening their economic ties with China. This paper will analyze the economic assistance -foreign aid sources- that Palestinians receive in order to determine whether it is possible to shift the economic reliance on China. The paper concluded that China cannot be a better alternative to the United States and the European powers. Nevertheless, it should play a parallel role to the United States. This will aid the Palestinians in achieving their legitimate goal of establishing an independent Palestinian economy.

Keywords: China, Economic Assistance, Foreign Aid, International Monetary Fund, Palestinian Economy, World Bank.

1. Introduction

The Russian military invasion of Ukraine which began on February 24, 2022 is another sign of the development of a new world order. This world order is manifested by the rising coalition between Russia and China that is challenging the United States hegemony (Hanappi, 2022). This marks the establishment of a new international order based on multi-polarity and changes in the centers of power (Chan, 2013). The current world order-which was established after the end of World War II - was unable to create an independent Palestinian State. So as the Chinese and Russian coalition manifest the new world order is emerging (Larson and Shevchenko, 2010). The purpose of this paper is to examine whether the Palestinians can benefit from the economic expansion of China through the Belt and Road initiative in order to achieve an independent Palestinian Economy. The Palestinians should rely on both the historical relationship and strengthening their economic ties with China.

The reason that Palestinians should rely on their historical friendship with China, lies in the fact that the Palestinian economy is a small open economy. So, we have a small economy trading with a large economy, i.e., the Chinese economy will not benefit substantially from the Palestinian economy. Thus, Palestinians need to create an economic incentive for China to cooperate with them.

One of the channels of the Chinese economic expansion is the Belt and Road Initiative. The Chinese are trying to revive the old Silk Road through the Belt and Road Initiative. Nations that are located along that road can benefit substantially from the Chinese economic expansion. Kazakhstan lies along the Belt and Road Initiative in a strategic location where it connects China with Russia and Europe. This is why Kazakhstan became Beijing's closest Central Asian ally. Hence, China conducted a large number of joint projects including infrastructure, transportation and connectivity sectors. In addition, there is a joint corporation in energy and finance. This Chinese corporation had aided Kazakhstan's economy, especially with the falling oil prices (Harutyunyan, 2022). The Palestinians should try to convince China that they are a strategic partner following the Kazakhstan's example in order to benefit economically from China.

We will try here to stand on the historical development of Chinese attitudes towards the Palestinian issue and how it can play a greater role in the future. In addition, we will examine whether it is possible to rely on China to pressure Israel in implementing international resolutions, and to what extent it can contribute to building the institutions of the future Palestinian state.

2. The historical positive support for the Palestinian issue from the Great Powers

A number of great powers had historically supported the Palestinian cause in seeking an independent Palestinian state. In this section we will look at the European position, Russian position and the China position.

2.1. The European position

The European position has not been unified towards the Palestinian cause since the beginning of the struggle until the present day. Perhaps the simplest evidence is the colonial history of the European countries in the Arab world and the division of the areas of influence of each country in the Arab countries. As for Palestine specifically, the British-French competition for control of it was clear, as each of them sought to make it under its influence. Furthermore, both France and Britain supported the idea of establishing a national state for the Jews in Palestine (Robson, 2011).

The weakness of the European role after the end of World War II had manifested in the Arab-Israeli conflict and how to establish a Palestinian state. This included: the November 1976 statement in which the European countries expressed an explicit position on the Palestinian cause, and demanded Israel's withdrawal from the Arab lands occupied in 1967 as a prelude to the establishment of a Palestinian state on this area of land. The Venice Declaration in 1980, which was characterized by support for the Arab right and its explicit recognition of the right of the Palestinian people to self-determination and the establishment of their independent state (Allen and Hauri, 2010). In addition to the European role in the Madrid Conference in 1991, and then the Florence statement in 1996, in which the European countries expressed their position on the necessity of establishing a Palestinian state and stressed the dangers of retreating from the peace process and took a supportive stance for any serious and fruitful negotiations whose final outcome would be a Palestinian state Viable living side by side with a secure Israeli state. The United States became the primary supporter for the Israeli State and the main sponsor for resolving the Arab-Israeli conflict (Isma'i, 2011).

At the end of the twentieth century, a new formula was formed, one of its goals was the establishment of a Palestinian state, and the European Union, along with the United States, Russia and the United Nations, was one of its pillars. A vision of the Palestinian state, which considered that the establishment of the Palestinian state should be through negotiations only and that the operations carried out by the Palestinian factions are unacceptable terrorism. The negotiations are based on the principle of land for peace, and its legal framework is the relevant United Nations resolutions and the initiative of Prince Abdullah bin Abdulaziz. This is according to the mechanism of the road map and the Quartet (Samara, 2022).

As of 2021, nine out of 28 European Union (EU) member states recognize the state of Palestine. The first country to recognize Palestine while being an EU member state is Sweden in 2014 (Persson, 2015). Malta and Cyprus and other countries of central Europe had recognized Palestine prior to joining the EU. While some countries, the Czech Republic in particular, have become Israel's closest allies in Europe (Persson, 2018). The EU maintains a representative office in Ramallah, accredited to the Palestinian National Authority (PNA). The Palestinian Liberation Organization (PLO)'s general delegation in Brussels, accredited to the EU. In western Europe, Spain was the first country granting diplomatic status to a PLO representative, followed later by Portugal, Austria, France, Italy and Greece. The EU states consider the Israeli settlements illegal under international law, and they will not recognize any changes to the 1967 borders other than those agreed between the parties. The EU has also been highly critical of Israeli military actions in the Palestinian territories, often referring to them as "disproportionate" and "excessive force" and calling for an immediate cease-fire. The EU has also been critical of Israel's Gaza blockade, referring to it as "collective punishment." The Palestinian government called on the EU to recognize the State of Palestine many times, EU member states divided over the issue. Some, including Spain, France and the United Kingdom, stated that they might recognize if talks did not progress, while others, including Germany and Italy, refused. EU member states were divided in their vote on United Nations General Assembly resolution 67/19 in 2012, which recognized Palestine as a non-member observer state at the UN. Fourteen member states voted for, thirteen abstained and the Czech Republic voted against (Akasaka, 2008).

2.2. Russian position

The vote of 1947 at the General Assembly for the creation of the State of Israel is often glorified as a humanitarian gesture, a universal expression of repentance and remorse for the Holocaust. As well, the Soviet Union support of the State of Israel is associated with the common struggle of the Russian and Jewish peoples against Nazi Germany. The Soviet stand is mostly striking considering the steady negative attitude of the regime to Zionism, and the overt pro-Arab line taken by the Kremlin. For a clear understanding of the relationship between the Soviet Union and Israel, need to explicate the basis of their relationship. Initially, Soviet-Israeli relations were of a positive nature (Gorodetsky, 2001). The honeymoon phase in Soviet-Israeli relations was in 1949, as was expressed in Moscow's support for the United Nations Partition Resolution in

November 1947, recognition of Israel in May 1948, and support for Israel's admission to the United Nations in December 1948 and May 1949. In fact, the support the Soviet Union initially showed for Israel was one of the (then) rare areas of agreement between the United States and the Soviet Union in the Third World. Therefore, the friendly attitude toward Israel lasted only for a few months. The honeymoon phase in Soviet-Israeli relations was in 1949, as Moscow's support for the United Nations Partition Resolution in 1947, and then recognized Israel and support for its admission to the United Nations. Therefore, the friendly attitude toward Israel lasted for a few months then progressive deterioration in the relations set in after 1955 (Ginat, 2000). In addition, there was a gradual improvement in relations between the Arab countries and the Soviet Union; "the center of the anti-Western struggle in the Middle East shifted to Egypt in 1950-1 and it was only natural that the Soviet Union came to support the Arab states against Israel". In 1987, the relationship coming to be better and Soviet diplomats were also implying that an exchange of consular delegations with Israel might be forthcoming. Then, despite that Gorbachev has allowed Soviet Jewish emigration to Israel and upgraded the Soviet-Israeli dialogue since 1986, the Israeli government remains strongly opposed to a Soviet-backed international conference on the Arab-Israeli conflict, or to any process involving the PLO. The possibility exists that Gorbachev expects economic and diplomatic gains. That is, allowing more Jews out of the Soviet Union and edging towards diplomatic relations with Israel could pave the way for Soviet participation in a Middle East peace conference. An interesting component which affects Soviet-Israeli relations is the tie the Soviets have to the PLO. Then, the PLO has been given a few official benefits: an embassy in Moscow and continued expressions of support for self-determination. While Moscow has helped arm, train, and encourage the PLO for years, this attitude toward the PLO has evolved as a function of its perceived need to align itself with the mainstream of the anti-American coalition in the Arab world". Therefore, while the PLO was granted an increasingly central position by Arab leadership, Moscow never agreed to act as the PLO's protector. Moreover, the Soviet Union was under no obligation whatsoever—moral, legal, or military—to assist the PLO. The Soviet Union's relationship with the PLO is therefore significant more on a clandestine rather than on an official level, but this relationship can either prove to be a "help or a hindrance" to Soviet foreign policy with Israel. With the rise of Gorbachev to power in the Soviet Union, a warming trend is present in Soviet relations with Israel. These efforts paid off in July 1987 when, it seems clear that both the Soviet Union and Israel are becoming increasingly interested in alleviating previous tensions and improving relations. In fact, the good relations may facilitate negotiations in the context of the Arab-Israeli conflict, as the Soviet Union possesses contacts with both factions (Dietrich, 1991).

Mikhail Gorbachev also encouraged (albeit unsuccessfully) Yasser Arafat and the PLO to recognize Israel before the Palestinian Declaration of Independence on November 15, 1988, the Soviet Union became one of the first countries to recognize the new State of Palestine on 18 November 1988 and officially established full diplomatic relations with it by the end of 1989. Soviet Relations with Israel have continued to advance, in October 1989, for the first time in eight years, the Soviet Union refused to vote against Israel's membership in the UN. Nevertheless, the Soviet Ambassador to Syria Zotov who argued that there was hope of a serious settlement to the Arab-Israeli conflict and that Soviet diplomacy must be constructively engaged in achieving it. However, Moscow appeared to postpone extensive diplomatic relations until Tel Aviv provided a progress toward a legitimate negotiating process in which the Soviet Union was involved. Then Soviet Union took steps towards official diplomatic relations with Israel, simultaneously upgraded the PLO mission in Moscow to embassy status as they continued efforts to maintain a balanced position (Freedman, 1991; Dietrich, 1991).

The Russian position even after the collapse of the Soviet Union continued to back up the two-state solution on the basis of the United Nations Resolutions.

2.3. China Position

The great Chinese leader, Mao Zedong supported the national liberation movements in the third world including the Arabs and Palestinians. During the 1960s, the People Republic of China (PRC) strongly supported Yasser Arafat and the Palestine Liberation Organization (PLO). In addition, the PRC established close relations with the Fatah party as well. In 1965, the PLO established a diplomatic office in China. After the PRC was admitted to the United Nations as a member in 1971, it continued to support the Palestinian cause. An embassy of the PLO was opened in Beijing in 1974. The PRC supported United Nations General Assembly Resolution 3379 which had equated Zionism with racism in 1975. The resolution, however, was later revoked with Resolution 4686 in 1991, a vote for which China was absent (Samara, 2022).

3. The Economic Support for the Palestinians

Unlike the European and US economic foreign aid which is based on intervening in the political structure of a state, the Chinese economic support is independent of any political or social policies. In other words, the Chinese economic support tries to deal with economic aspects of a state regardless of its political or social structure. Thus in order for a state to receive financial aid from the Chinese government it does not have to alter its political position or implement certain social policies. This is a clear difference from both the European and US financial aid that is usually tied to implementing certain political and social changes. China's financial aid is not based on any political or social conditions, i.e., it tries not to intervene in the inner politics of a state (Fon & Alon, 2022).

According to the data published by PEC DAR in 2019, the Official Foreign aid given to Palestine During the Period between 1994- 2017, reached the amount of USD 36.5 billion, 35.4 billion USD of the aid has been given as grants and 1.06 billion USD as loans.

The table below will show the breakdown of the economic assistance in both amount and percentages.

Table 1: The amount and percentages of aids given to the Palestinians from the highest ten countries for the period 1994 to 2017.

	Amount	%
Total Economic Assistant	36.50	100.0%
European Union and European Institutions	6.57	18.0%
USA	5.74	15.7%
Saudi Arabia	3.60	9.9%
United Arab Emirates	2.08	5.7%
Norway	1.72	4.7%
Germany	1.68	4.6%
United Kingdom	1.28	3.5%
World Bank	1.06	2.9%
Japan	0.95	2.6%
France	0.91	2.5%

Source: PEC DAR 2019

The highest aid during the era was from the European Union & its Institutions with the amount of USD 6.57 billion forming almost 18 percent of the total aid. The next from the USA with the amount of USD 5.74 billion forming almost 15.7 percent of the total aid, following them Saudi Arabia with the amount of USD 3.6 billion that forms 9.9 percent of the total foreign aid. (These numbers do not include their contribution to the UNRWA budget).

More than 70 percent of the total aid given to Palestine comes from only 10 countries and international bodies: The European Union & its Institutions 18 percent, the USA 15.7 percent, Saudi Arabia 9.8 percent, United Arab Emirates 5.7 percent, Norway 4.7 percent, Germany 4.6 percent, United Kingdom 3.5 percent, The World Bank 2.9 percent (does not include the loan of the amount of USD 269 million), Japan 2.6 percent, France 2.5 percent.

The Arab aid given to the Palestinians formed about 23 percent of the total aid: The aid provided from Saudi Arabia 42.8 percent, United Arab Emirates 25.9 percent, Algeria 10.3 percent, Kuwait 8.5 percent, and Qatar 8.5 percent, and 4.1 percent from other Arab countries.

The direct support to the treasury and the government budget: The highest aid was from Saudi Arabia with the amount of USD 3 billion forming 21.75 percent, next the EU & its Institutions with the amount of USD 2.9 Billion forming 20.68 percent, then the USA with the amount of USD 1.54 Billion forming 10.98 percent, Algeria USD 800 million forming 5.71 percent, and Norway USD 700 Million forming 4.97 percent of the total budget.

Here we need to mention that: According to anti-terrorism policy USA and European countries and EU always imposed some conditions for the economic supports to the Palestinians. The EU notified the Palestinian Non-Governmental Organizations (PNGO) network of conditions attached to the EU's funding contracts, namely that

civil society organizations are obligated not to deal with individuals or groups designated as “terrorist” by the EU.

The effect of foreign aid on economic growth of a nation is clearly ambiguous. In the case of Palestine, foreign aid had failed to create an independent economy. This was due to the continuous Israeli occupation of the West Bank and Gaza, where Israel has succeeded in preventing the independence and the break away of the Palestinian economy from the Israeli economy. Through its control of the physical borders, resources, Palestinian labor, and the lack of a local currency; Israel was able to maintain a strong iron grip on the Palestinian economy and forming what is known as a semi-independent Palestinian economy. In addition, Israel has succeeded in benefiting from the foreign aid given to the Palestinians to boost its economy, and thus foreign aid did not play the role of aiding the independence of a Palestinian economy (Samara, 2017).

4. Public Debt- External loans

The public debt has reached \$3.7 billion as of June 2021. The table below shows the breakdown of the public debt in both amounts and percentages.

Table 2: Palestinian Public Debt for the period as of June 2021 (in Millions of Dollars, and percentages of total debt).

	Amount	%
Total Public Debt	3,702.4	100%
Domestic Debt	2,384.9	64%
Foreign Debt	1,317.5	36%
Arabic Financial Institutions	817.4	22%
International and Regional Institutions	334.5	9%
<i>World Bank</i>	275.2	7%
<i>European Investment Bank</i>	34.6	1%
<i>International Agricultural Development Fund</i>	1.9	0%
<i>OPEC</i>	22.5	1%
<i>German Development Corporation Bank Loan</i>	0.2	0%
Bilateral Loan	165.6	4%
<i>Spain</i>	83.0	2%
<i>Italy</i>	82.6	2%

Source: Palestinian Ministry of Finance

Looking at table 2 we noticed that foreign debt is only 36 percent. Meanwhile, domestic debt occupies 64 percent of the total debt. The Arabic Financial Institutions occupy 22 percent of the total and 61 percent of the foreign debt. Nonetheless, the International and Regional Institutions recorded 9 percent of the total Public Debt, for the World Bank share reached 7 percent of the total Public Debt. Finally, Italy and Spain percentage of total Public Debt reached 4 percent.

Table 2 shows an absence of the financial role of Chinese institutions. Thus, China support for the Palestinian Government is non-existent in terms of loans. Meanwhile, the World Bank clearly has a material presence. This reflects the reliance of Palestinian policy makers on Western Financial Institutions. Therefore, the question will be can China substitute that role? Is it in the interest of the Palestinian people to substitute this role?

5. Aid Received Through the UNRWA During the Same Era

Besides the 36.5 billion USD that Palestine received, countries and other donors provided support to the UNRWA with the amount of 16.5 billion USD. 76.5 percent of the aid provided to UNRWA comes through 10 donors as follows: United States of America USD 4.47 billion forming 27.06 percent from the total UNRWA budget. EU & its Institutions USD 2.96 billion forming 17.95 percent, United Kingdom USD 1.03 billion forming 6.26 percent, Sweden USD 0.89 billion forming 5.4 percent, Saudi Arabia USD 0.89 billion forming 5.4 percent, Germany USD 0.58 billion forming 3.53 percent, Norway USD 0.58 billion forming 3.53 percent, Japan USD 0.55 billion forming 3.31 percent, Switzerland USD 0.34 billion forming 2.07 percent, Denmark USD 0.32 billion forming 1.93 percent from the total budget.

6. Conclusion

According to the above analysis, we can derive the below economic trends.

The USA and EU are the greatest donors for Palestine, but their support is based on certain political concessions. Although, Russia and China play a major role in their support to the Palestinian people internationally, they are not one of the top ten donors.

Given the mentioned economic trends, our paper concludes that the Palestinian people are in need for everyone's support. In other words, they cannot depend on one party and neglect the others. The Palestinians have a legitimate right and should exert more efforts in building stronger relationships with all countries. Therefore, we conclude that choosing China as an alternative to the US is not a good choice. China is not a better alternative to the Palestinian people but China's role should be parallel to the US role. This is due to the rising power and influence of the Chinese in the international arena. Thus, China can play a major contributing role to aid the Palestinians in achieving their goals, especially in their current economic expansion. China's economic expansion through the Belt Road initiative allows it to have a stronger role in the international arena. Hence, China's rising economic power does not only allow it to influence great powers such as Russia but influence also small nations. Unfortunately, the Palestinians -due to the Israeli occupation- have no control over their natural resources. So, unlike African countries, the Palestinians cannot attract the attention of China using natural resources. The Palestinians should concentrate on their historical relationship and try to convince China that they are a strategic ally in the area. It's important for Palestinians to engage China in order to counter the bias US position towards Israel. However, the challenge lies in the fact that the Chinese – Israeli economic relationship has improved dramatically. Thus, China sees economic benefit from having a good relationship with Israel. The Palestinians need to think of ways in order to keep China on their side. Nonetheless, the total control of the borders of the Palestinian territories by the Israeli occupation is a major challenge to Palestinians, they cannot have any economic relationship without the permission of Israel. Even if Palestinians can convince China of their strategic location in the Belt and Road Initiative, Israel has to also allow the increase in economic activity with China.

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The Impact of The Eurobond On The Management Of Public Finances in The Face Of The Earthquake and Pandemic. Case of Albania

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Abstract: The debt of the Central Government during the last years has generally been characterized by a positive performance, being in line with the macro-fiscal objectives, the budgetary needs for financing and the medium-term strategic objectives of debt management.

In accordance with the macro-fiscal objectives, the level of central government debt in relation to GDP¹ has entered a downward trajectory since 2016. Estimates for the end of 2019 show a decrease of about 2.5 percentage points in central government debt in relation to GDP.

Borrowing has responded to budgetary needs, enabling the refinancing of the existing debt and the financing of the planned deficit. Borrowing needs have marked a gradual decline, reflecting the improvement of the debt profile and the reduction of the government's fiscal risk.

During the last five years, domestic financing sources have maintained the main weight in covering borrowing needs in gross terms. However, during the most recent years, the role of borrowing from abroad has stood out, in function of good liquidity management and repayment of debt obligations in foreign currency for the short and medium term. This method of borrowing was dictated by the drop in interest rates in the international markets, as well as by the favorable financing conditions from international financial institutions.

The medium-term strategic objectives of debt management have generally been met, both in terms of achieving optimal ratios between cost and risks, and in terms of the development of the government securities market.

The lower exposure to risks has been achieved through the higher concentration of domestic borrowing in long-term securities with fixed interest rates.

On the other hand, the drop in interest rates, accompanied by the higher use of foreign financing sources of a bilateral and multilateral nature, have influenced the optimization of the overall cost of borrowing.

In this respect, it is worth noting that over the last few years the costs per unit of debt have decreased significantly, despite the increase in the debt stock in absolute value.

Keywords: debt ,risks rates, borrowing, macro-fiscal objectives, Eurobond, debt refinancing, negotiable instruments, internal borrowing, external borrowing, refinancing risk.

1. Introduction

In accordance with the macro-fiscal objectives for the consolidation of public finances, the level of central government debt in relation to GDP starting from 2016 to the end of 2019 was on a downward trajectory. During 2020, the debt stock of the central government increased as a result of the measures taken to overcome the negative consequences of two disasters natural disasters that hit the country consecutively: the earthquake of November 26, 2019 and the pandemic caused by COVID-19. Estimates for the end of 2020 predict a debt level of central government about 80% of GDP.

During the last years, from the point of view of the composition of the debt of the central government, it has been characteristic to increase the share of tradable instruments (treasury bills, bonds, eurobonds) and loans in the form of budget support. The increase in the weight of these instruments has come as a result of the use of the favorable conditions of the international markets and the use of the favorable funding sources made available by the international financial institutions.

Borrowing during the last years has made it possible to ensure liquidity, manage debt obligations, as well as finance the planned budget deficit, in accordance with the objectives strategies for reducing exposure to risks. On average, over 80% of the total gross borrowing is based on internal financing sources, thus supporting the

¹ The GDP used in reports with actual data up to 2018 refers to the Macroeconomic and Fiscal Framework (2020-2022), approved with CMD No. data up to 2018 refers to the Macroeconomic and Fiscal Framework (2020-2022), approved with CMD No. 4, dated 09.01.2019. Meanwhile, the GDP used in the reports with the projected data refers to the data of the Draft Macroeconomic and Fiscal Framework (2021-2023).

development of the domestic market of government securities, as well as aiming to limit the implications of macroeconomic indicators that may be caused by the increase in foreign currency debt beyond the borders of determined in debt sustainability analyses.

During the years 2016-2019, loan needs in relation to GDP have gradually decreased, reflecting the consolidation of the internal debt structure and the reduction of the government's fiscal risk. During 2020, borrowing increased in line with the increased budgetary needs in the context of managing the situation created by the spread of the COVID-19 pandemic. The main source of borrowing continues to remain the internal market, although during 2018 and 2020, there was an increase in foreign financing as a result of the issuance of Eurobonds and budget support granted from international financial institutions.

2. Overview of Eurobond

A Eurobond is a fixed-income debt instrument (security) denominated in a different currency than the local one of the country where the bond's been issued. Hence, it is a unique type of bond. Eurobonds allow corporations to raise funds by issuing bonds in a foreign currency. The bonds are also called external bonds because they can be originated in a foreign currency (external currency). If a Eurobond is denominated in US dollars, then it can be called a euro-dollar bond. If it is denominated in Chinese yuan, then this would be named euro-yuan bond.

3.1 How Do Eurobonds Work?

The essence of Eurobonds is that a company can choose any country to issue bonds depending on its economic and regulatory environment (e.g., interest rates in the country, economic cycle, market sizes, etc.). What makes the bonds attractive among investors is a small notional amount of a bond (face value or par value), which means that the bond is relatively cheap to obtain.

Importantly, Eurobonds are highly liquid and can be converted into cash within one fiscal year. The categorization of Eurobonds is dependent on the currency in which the bonds were issued. If a US-based company decides to release Eurobonds in China in British pounds, then the bonds will be categorized as euro-pound bonds.

3.2 How Is A Eurobond Issued?

Typically, financial institutions, such as investment banks, issue bonds on behalf of the borrower. If a bank will be responsible for the underwriting process, it implies a guarantee to the borrower that the whole bond issue will be sold in the primary market during the initial debt offering process. Please note that the term "Eurobond" refers only to the fact that the bond was issued in a different country and currency. It does not need to be a country in Europe. It can be whatever country in the world.

Eurobonds are issued by many institutions, such as:

Corporations

Governments

Syndicates

The primary reason for issuing Eurobonds is a need for foreign currency capital. Since the bonds are fixed-income securities; they usually offer a fixed interest rate to investors.

3.3 Benefits To Issuers

The main benefit to local investors in purchasing a Eurobond is that it provides exposure to foreign investments staying in the home country. It also gives a sense of diversification, spreading out the risks.

As mentioned previously, Eurobonds are pretty cheap, with a small face value and are highly liquid.

If a Eurobond is denominated in a foreign currency and issued in a country with a strong economy (and currency), then the bond liquidity rises.

4. Materials And Methods

This is an empirical research, we have reviewed existing theories and experience in this field. Primary data obtained from official public sources and users of information on the main topic were used. All information on the importance of Eurobonds issuance in the consolidation of public finances was analyzed and used to draw relevant conclusions and recommendations.

5. The History Of Eurobond Over The Years In Albania

- Eurobond 2010

The Ministry of Finance managed to successfully issue the first Eurobond of our country in the international market. This was a historical moment, not only for our Government, but also for the whole country. The capital market gave the green light to Albania at that time, thus ushering in a new era in the management of public finances. The leading banks of the Eurobond transaction, Deutsche Bank and JP Morgan, had confirmed the purchase of our issue in the value of 300 million euros and with a coupon price of 7.5%.

- Eurobond 2015

On 5th November 2015, the Republic of Albania successfully launched and priced a EUR 450 million 5 year Eurobond issue achieving a coupon of 5.75%. The transaction represents a triumphant return to the international capital markets following the Republic's inaugural EUR 300 million 7.50% bond issued in 2010, which matured on 4 November 2015 and was fully repaid in accordance with its terms.

- Eurobond 2020

On June 9, 2020, the Republic of Albania successfully entered the markets with a new 7-year international obligation in the amount of €650 million with a coupon of 3.50%. The government intends to use the funds of this issue to help finance expenses, including economic recovery following two successive shocks such as the earthquake in November 2019 and Covid 19.

The transaction marks the latest return of the Republic of Albania to the recent capital markets, following previous issues carried out in 2010 and 2018.

Without challenging differences of the story for developing economies during the first half of 2020, this exit to the high market a high offer of investors exceeding several times the amount required by the Albanian Government. In the purchase, the participation of more than 190 investors was noted, including some investors who were previous buyers of bonds of the Republic of Albania. The Government of the Republic of Albania sees this result as a sign of a complete confidence of investors in the prospects and development paths in Albania.

6. The Impact Of The Eurobond On The Albanian Economy According To The World Bank And The International Monetary Fund

Albania's economic model requires greater investment in people's skills, firm productivity, sustainability, and public finances, says the new World Bank Country Economic Memorandum (CEM) for Albania, released today. Albania has been severely impacted by the economic shocks which followed both the 2019 earthquake and the COVID-19 pandemic. Once the ongoing health crisis subsides, the country will need to refocus on its long-term economic objectives, which include building a strong and sustainable growth model to improve citizens' living standards, thereby helping incentivize people with skills and talent to remain in Albania.

Through this report, World Bank conduct a fresh analysis of Albania's development challenges, summarize progress with reform implementation, and offer key recommendations that can help Albania achieve a sustainable, resilient and inclusive economic recovery. World Bank recommendations are also to focus on what needs to be done to enable the Albanian people to have healthy and productive lives and more and better jobs. The report points out four development priorities for a stronger economy in Albania:

Investing in people and upskilling. To address the skills gap, Albania needs to shift its workforce from low- and medium-skilled jobs to high-skilled ones. This requires improving the learning process, reforming the university system, and better matching skills development to labor market needs.

Increasing firm productivity and creating better job opportunities. GDP per person employed in Albania would increase by 40% if Albanian businesses had the same level of productivity as the average Western Balkan firm. For Albanian firms to be more productive, the business environment must be improved, innovation must be strengthened, and integration of Albanians into the global economy must be deepened.

Building a more sustainable growth model. More than 70% of Albania's waste is mismanaged, while earthquakes and floods cause damage costing \$147 million each year, on average. Albania needs to build an economic model that is environmentally conscious, and more resistant to natural disasters.

Strengthening public finances. Albania's public debt is well above the average of the six Western Balkan countries. To ensure the sustainability of the country's finances, personal income tax rates should be fairer, VAT revenues increased, and fiscal policy credibility reinforced, particularly through a sustained political commitment to fiscal rules.

The International Monetary Fund (IMF) said on October 14, 2021 that Albania's debt is expected to stand at close to 80% of GDP by the end of this year, despite the recovery of the economy from the coronacrisis and the 2019 earthquake. Officials from the fund urged Tirana to recreate room for fiscal policy manoeuvre by lowering the "very high" fiscal deficit and public debt ratios, as well as to invest efficiently in people and the economy.

According to the IMF mission with the recovery firming up, fiscal policy should pivot towards rebuilding the firepower to withstand future shocks and reduce debt while meeting Albania's development needs all these will hinge on raising tax revenue.

Albania last tapped international markets in June 2020, raising €650mn. The issue, which was strongly oversubscribed, had a coupon rate of 3.65%.

7. Foreign Borrowing

During the last five years, foreign borrowing has covered an average of about 17% of the government's general borrowing needs. The main sources of financing remain multilateral and bilateral sources, which have mainly been used to finance priority projects, as well as development policies and reforms undertaken by the government. These sources have had a significant impact mainly in terms of optimizing debt costs and securing the currency needed to service foreign currency debt obligations. Also during 2020 it is valid to noted:

The Eurobond issued in June 2020, in the amount of 650 million Euros, which serves for the refinancing of 250 million Euros of the Eurobond 2015 and other obligations in foreign currency, as well as to meet the budgetary needs planned for 2020.

The budget support granted by the IMF in the amount of 174 million Euros through the Rapid Financing Instrument (RFI), which will serve to meet the urgent needs of the balance of payments from the spread of the COVID-19 pandemic and the earthquake in November 2019.

Regarding the Eurobond instrument, on June 9 2020, the Ministry of Finance and Economy announced the exit with the Eurobond, where the process was finalized with an issue with the terms of the following:

Amount: 650 million Euros;

Maturity: 7 years;

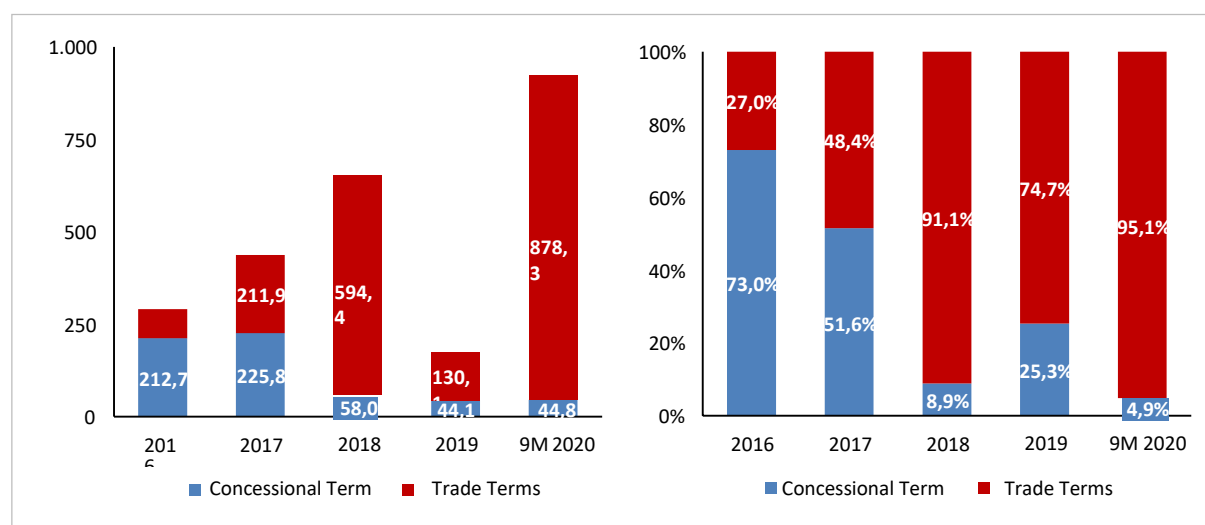
Interest rate Yield: 3.625%;

Coupon: 3.50%;

Price: 99.239%.

The issuance of the Eurobond instrument, in addition to meeting liquidity needs, sent a positive signal in terms of the ability to secure funds and the sustainability of public finances in Republic of Albania.

Graphic Presentation 1: Gross foreign borrowing by concessionality (2016-9M 2020)



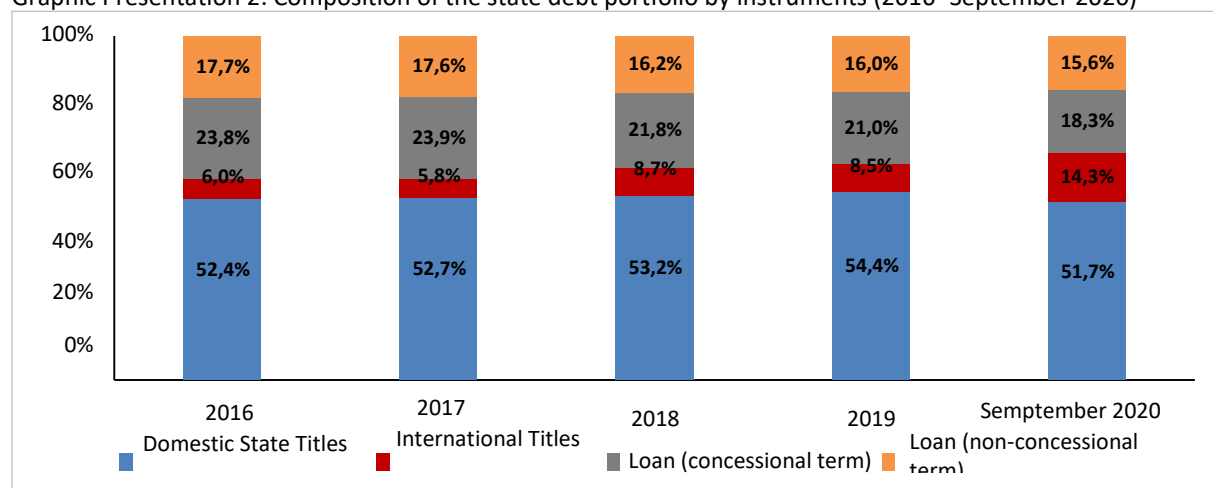
In mln Euro

Source: Ministry of Finance and Economy (2020)

8. State Debt Portfolio

From the point of view of portfolio composition by instruments, domestic government bonds continue to dominate more than half of the government debt portfolio. Meanwhile, in the external debt portfolio, there is a tendency towards increasing the concentration of international titles, reflecting the borrowing policies during the last years, which, starting from the limitations of the internal market, aimed to reduce the pressure of borrowing to facilitate the restructuring process of the domestic debt portfolio and stimulate private sector lending.

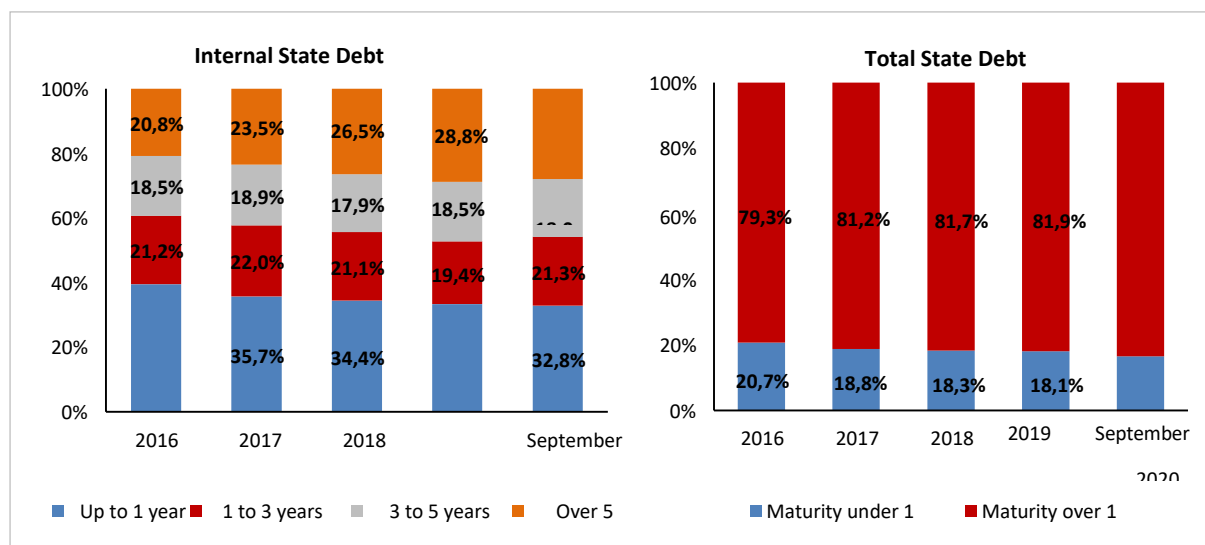
Graphic Presentation 2: Composition of the state debt portfolio by instruments (2016–September 2020)



Source: Ministry of Finance and Economy (2020)

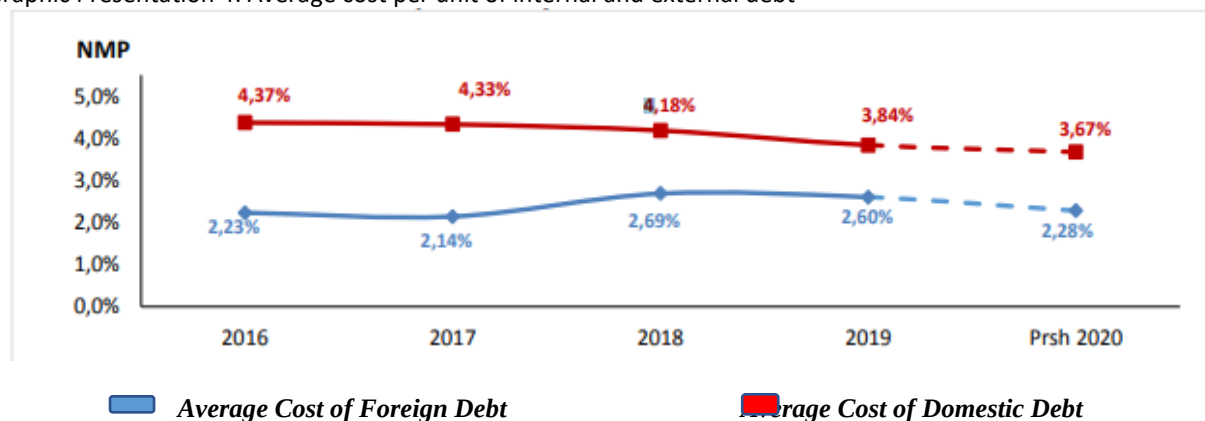
Regarding the composition of the state debt portfolio according to the (original) maturity of the loan instruments, a gradual reduction in the concentration of short-term instruments is observed, reflecting the policies undertaken within the framework of risk management in the domestic debt portfolio.

Graphic Presentation 3: The composition of the state debt portfolio according to the original maturity of the loan instruments (2016- September 2020)



Source: Ministry of Finance and Economy (2020)

Graphic Presentation 4: Average cost per unit of internal and external debt



Source: Ministry of Finance and Economy (2020)

9. Eurobond Analysis In Albania

Eurobond is a borrowing instrument/agreement. Through its issuance, the Albanian government borrows from investors in the international capital markets. The last Eurobond, which was issued by the Albanian government in the financial market of London, was a loan of 650 million euros, for 7 years and with an interest rate of 3.625% per year.

I think it was quite successful. Compared to the expectations for the situation of the capital markets, the result achieved was much better both in terms of the interest rate of 3.625% and in terms of the amount of loans offered by investors. The latter was several times higher than the amount of 650 million euros requested by the Albanian government.

The interest rate that will be paid by the government is slightly higher than what is paid for the loan taken through the Eurobond of 2018. The slight increase in interest is more than justifiable, if we compare the severe situation of the crisis COVID that we are going through with the normality of two years ago.

The plans were for a longer-term issue of up to 10 years, but it seems that investors had a preference for the 7-year term.

9.1. What Will The Money Borrowed Through The Eurobond Be Used For?

Of the 650 million Eurobond, 250 million is paid to the investors of the 2015 Eurobond that matures (expires) in November of this year. The rest, about 400 million euros, goes to finance part of this year's budget deficit.

According to the latest budget update, this year's budget deficit will be around 5.5% of GDP. This represents an amount of around 750-800 million euros. To spend this money (which it does not have) the government must borrow. The loan obtained through the Eurobond finances about 400 million euros of the budget deficit. The rest of the deficit, around 350-400 million euros, is to be financed by internal borrowing and/or IMF and EU loans.

Eurobond has another advantage. Borrowing through the Eurobond also represents an inflow of euros in Albania and this is quite important for financing Albania's high deficit in goods trade with the world. In normal times, the Albanian trade deficit in goods is financed by the trade surplus in services (including tourism), foreign direct investments and emigrant remittances.

COVID affected the Albanian economy even worse, because it stopped the export/import of goods where there is a high deficit and closed the export/import (e.g. tourism, agriculture and the service sector) where there is a surplus.

So it seems clear that the Eurobond of 650 million euros creates good and relatively cheap ammunition for Albania (about 400 million euros) to finance the high trade deficit and to keep the balance of payments and the foreign exchange market stable.

Last but not least, the money borrowed through the Eurobond can be converted into gold Euros if, far from it, the COVID and earthquake crisis returns once more. Then it is easy to imagine that the eurobond money becomes the first line of defense, while the foreign exchange reserve of the Bank of Albania becomes the last line.

9.2. Were There Better Options Than The Eurobond?

Albania had other options, but not as good as the Eurobond. The variant without the Eurobond would be more complicated. As I said above, the variant without the Eurobond would not exclude the use of the country's foreign exchange reserve to stabilize the balance of payments. This is especially so if the crisis returns again (and again far away).

Meanwhile, most of this year's budget deficit (around 700 million euros in value) would have to be financed internally. This additional borrowing need would be added to the borrowing for the internal refinancing of the public debt (about 2.5 billion euros in value) that matures every year.

This variant, although not preferred, being possible, I think helped to reduce the interest rate of the Eurobond of 650 million.

9.3. Does The Eurobond Increase Public Debt?

Eurobond is a borrowing option. It reflects the issuing country's need for deficit financing or maturing debt refinancing or both.

What increases the public debt is the budget deficit. The year's budget deficit is the new debt added to the old outstanding debt. But it must be said that the Eurobond interest rate affects the cost of debt service for better or worse. The latest Eurobond lowers the cost of servicing the government's debt because it has an interest rate of 3.625% and refinances (replaces) 250 million euros of old debt with an interest rate of 5.5%. So, from the end of this year, the government pays about 2% less per year for 250 million euros of debt (about 5 million euros less).

10. Benefits And Problems Does Borrowing Through Eurobonds Create

Borrowing through Eurobonds makes, in the case of Albania, the government's debt more long-term and more liquid. This means that Albania's Eurobond can be sold and bought by investors before maturity. Investors like

investing in liquid debt and it lowers interest, ie. government debt service costs. Also, a longer-term debt facilitates the management process and reduces the amount of annual refinancing.

Another good thing is that direct access to the markets also requires transparency and accountability of the government in the management of public finances. Therefore, foreign capital markets begin to become an (independent) point of reference and evaluation for the work of the government.

A problematic side of borrowing in euros to finance an increasingly large part of budget deficits through eurobonds is that it increases the share of public debt in foreign currency. This makes the debt more sensitive to unfavorable developments in the capital and foreign exchange markets. Hits such as the loss of competitiveness of the Albanian economy would call into question the credibility of the country to pay the debt to foreigners.

Another problem is that the introduction of euros at the time of borrowing through the Eurobond brings pressure for the strengthening of the ALL against the Euro and this makes the Albanian economy less competitive, adversely affecting the trade balance, favoring imports and harming Albanian exports.

History shows that all bankrupt countries have defaulted on foreign currency denominated debt. But, for the reasons I mentioned above, this Eurobond had to be issued.

11. Macroeconomic Situation

11.1. Albania's Credit Rating

The Republic of Albania has secured credit rating from the two main agencies: Moody's and Standard & Poor's. These agencies perform the credit evaluation of the Republic of Albania. During the last years, these agencies have evaluated the Republic of Albania, based on economic growth and stability, institutional and governmental capacity, fiscal policy as well as sensitivity to potential risks. The rating agencies emphasize that looking at the ongoing data of the indicators, Albania's credit profile balances the progress of the reform in pursuit of membership in the European Union against the ongoing structural economic challenges and the still limited institutional strength compared to other countries. Meanwhile, being a small economy, Albania's credit profile is exposed to external shocks.

Table 1: Evaluation results of recent years

	2019	2020	2021	2022
Moody's	B1 (Stable)	B1 (Stable)	B1 (Stable)	B1 (Stable)
Standard & Poors	B+	B+	B+	B+

Source: Moody's dhe Standard & Poors

11.2. Macroeconomic situation in the last years from 2019-2022

In recent years, until the impact of the pandemic, public finances had entered a safe and optimal trajectory of fiscal consolidation, materialized in the most important sustainability.

First, this materialized in the reduction of the general budget deficit from 5% of GDP in 2013, below the level of 2% in 2019.

Whereas, in 2020, as the main response to the amortization to some extent of the impact of the pandemic and earthquake a rather expansionary fiscal policy was undertaken.

As a result, the total budget deficit reached 6.7% of GDP and the public debt increased to 74.5% of GDP, i.e. by about 9 pp compared to the end of 2019.

The year 2020 recorded a recession of 3.5%, which due to the pandemic and earthquake reached the peak of GDP contraction in the second quarter at about -11.1%, but showing signs of recovery and returning to positive ground again in the last quarter of the year and in the following period.

During 2021, the country's economy showed very encouraging signs marking a rapid recovery of economic activity, where the Gross Domestic Product (GDP) for 2021 has increased by 8.54% compared to 2020, according to the latest estimate available from Institute of Statistics.

This recovery relies on a wide range of factors and is present in almost all sectors of the economy.

The reduction (almost removal) of restrictions after the decrease in infections, where the vaccination process also played a key role, the increase in business and consumer confidence, the improvement of partner economies, as well as fiscal and monetary support policies, have influenced the increase in consumption, public and private investments, as well as exports.

The production sector as well as the service sector have benefited from these developments, ensuring recovery for business and employment, as well as creating good premises for the medium-term perspective. The Albanian economy recovered significantly during 2021, after last year's recession.

The effects of the pandemic were contained as a result of support from fiscal policies monetary combined with regulatory measures.

Economic growth was stronger and more broad-based than expected. The base effect and impact from electricity generation were also separate factors contributing to growth.

Demand recovery has been rapid and output has exceeded pre-earthquake and pre-pandemic levels.

The labor market also shows improvement with an increase in employment and a decrease in the unemployment rate.

Both the manufacturing and services sectors have benefited from these developments, ensuring recovery for business and employment and creating good premises for the medium-term perspective.

Regarding the economic outlook, assuming that the evolution of the pandemic will stay within some moderate limits during the coming months.

Secondly, taking considering that the main economic and financial fundamentals have not suffered any problematic shocks and are normally expected to continue to remain relatively solid, for the medium-term period ahead, growth is expected to return to relatively stable positive levels.

The growth of 8.54% through 2021 represents a very strong rebound, significantly above the initial forecast. In the medium term, growth is expected to converge and stabilize around the 4% level, which is also the estimated level of potential growth by the Ministry of Finance and Economy.

More specifically, Albania's medium-term economic growth is projected at 3.2% in 2022, 3.9% in 2023 and 4.0% in 2024. In line with the medium-term growth projections, employment is expected to increase by an average of 1.3% per year during the period 2022-2024. Higher labor force participation rates will be the main generator of increased labor supply.

From 2022 onwards, the fiscal policy in the medium term will be oriented towards fiscal consolidation, in accordance with the fiscal rules defined in the Organic Budget Law.

Fiscal consolidation and public debt reduction are essential for reducing debt-related vulnerabilities that prevent growth and cause macroeconomic instability.

As a result, starting this year (2022), public debt to GDP is expected to return to a downward trajectory, in accordance with the relevant fiscal rule, where it is expected to fall to around 71.3% of GDP from around 73.2% in 2021.

Also, in terms of the need for financing in the medium term, the most important component of the need for financing is the financing of the central government deficit. Except deficit financing, borrowing serves to meet liquidity needs, to refinance existing debt, as well as to manage debt obligations in foreign currency.

Table 1: Expectations of the main macroeconomic and fiscal indicators (2019-2023)

Indicators	Average 2010- 2018	2019	2020	2021	2022	2023
Real economic growth (in %)	2.7	2.2	-6.1	5.5	4.8	4.5

Average annual inflation (in %)	2.2	1.4	1.4	2.4	2.8	3.0
Primary balance (in % of GDP)	-0.5	0.2	-	-	-	0.6
Interest expenditure (in % of GDP)	2.8	2.1	2.2	2.6	2.7	2.9

Source: Ministry of Finance and Economy (2020)

CONCLUSION

The issuance of the Eurobond instrument, in addition to meeting liquidity needs, gives a positive signal for the ability to secure funds, despite the fact that after 2020 we had an increase in Public Debt.

First, the Albanian economy is reliable for partners and international financial institutions.

Secondly, receiving the Eurobond has given a positive reaction in reducing the budget deficit and has been injected in the form of budget support in various sectors of the economy such as (Reconstruction, Tourism, Health, Agriculture, Education).

Thirdly, the exit to the international markets for the emission of the Eurobond instrument within the framework of two economic shocks brought stability to the administration of Public Finances in the Republic of Albania. Borrowing through Eurobonds makes, in the case of Albania, the government's debt more long-term and more liquid.

This means that Albania's Eurobond can be sold and bought by investors before maturity. Investors like to invest in liquid debt and it lowers the interest ie. government debt service costs. Also, a long-term debt facilitates the management process and reduces the annual refinancing amount.

Another good thing is that direct access to markets also requires transparency and accountability of the government in the management of public finances. Therefore, foreign capital markets begin to turn into an (independent) benchmark and evaluation point for the government's work.

History shows that all bankrupt countries have defaulted on foreign currency debt. But, for the reasons I mentioned above, this Eurobond had to be issued.

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Fiscal Capacity for The Municipalities Indebtedness in The Republic Of Macedonia

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Abstract: The fiscal decentralization is a process of carrying over the competences and managing responsibilities for the process of making fiscal decisions to the lower levels of authority, and transferring the responsibilities for the governmental competences and for the consumption from the central to the local authority, in which the local self-governments are given significant authorization for making decisions. The fiscal decentralization is an essential component for the reform for decentralization. And in order the local self-government units to be able to perform the newly-acquired competences and functions they should have available determined volume of revenue, i.e. capacity for financing (fiscal capacity). By implementation of the process of fiscal decentralization the local self-government units are given greater autonomy, i.e. freedom in this respect- providing incomes from the own sources in order to fulfill the newly-acquired competences. One of the priority aims when the process of decentralization is implemented is the advancement of the public sector's effectiveness and improvement of the quality and quantity of the services offered to the local population in order to improve their lives. The decentralization base for success is the municipalities' financial ability. Namely, by establishing this new system, the local self-government units create themselves the fiscal policy and they should themselves take care for providing revenues mainly from the own sources and find out a way for increasing the fiscal capacity in order to provide a standard level of public goods and services. The basic aim of the research in this study is through a method of analysis to determine some indicators of the general credit balance of the local self-governments units (municipalities). These indicators are base for determining the main problems leading to unfavorable credit balance of the local self-government units and enable taking defined steps for its improvement. We can mention the following recommendations for real determination of the local self-government units' fiscal capacity: providing data on the municipal GDP value; encouragement of the municipalities which fiscal capacity is under the average to take indispensable measures for increasing their fiscal effort; Increasing the taxpayers scope, i.e. expanding the tax base; Selection of an appropriate tax rate according to the population's economic capacity; Improvement of the taxes administration and collection.

Keywords: Fiscal capacity, Credit rating, Local self-government units

1. INTRODUCTION

The fiscal capacity may be defined as the regional and local self-government units' ability to collect revenues from their own sources in order to pay a defined (standardized) packet of public goods and services. (Measuring fiscal capacity of local self – government units in the Republic of Macedonia – Foundation Open Society Institute – Macedonia and Centre for Economic Analyses – Skopje 2006). Main measures for the fiscal capacity in the transition countries are: the personal income tax amount, the collected revenues and minimal expenditures for public services, per capita income, consumption needs, per capita incomes and consumption, the common per capita consumption and various normative revenues.

In order to determine the fiscal capacity properly it is indispensable to have a database that can be provided only if there is statistics of good quality, cadastral system etc. Tax bases of different taxes on a local level are useful indicator of the municipalities' financial power (fiscal capacity) and how much it is used by the local authorities (fiscal effort).

Fiscal effort is a measure that shows the local authority capacity to collect municipal revenues, according to its territory economic power. (Measuring fiscal capacity of local self – government units in the Republic of Macedonia – Foundation Open Society Institute – Macedonia and Centre for Economic Analyses – Skopje 2006) (relation between the total municipal revenues and the selected measures for fiscal capacity). In the municipalities where there is not sufficient fiscal capacity usage, i.e. the collection is significantly under the state average, it is indispensable to take measures for stimulating the local authorities for the collection improvement (the fiscal effort) and for improving the public services quality.

2. THE MUNICIPALITIES CREDIT RATING

The credit rating can be defined as a common name for the criteria, i.e. measures on which basis the ability of some physical and legal entity (debtor) to repay the loan is determined, i.e. its creditworthiness, i.e. the credit risk or the possibility that the credit provider will not be able to collect its crediting concerning the issued credit.

For determining the general credit status of the local self-government units (municipalities), some indicators are used (analyzed). These indicators represent a base for determining the basic problems that lead to unfavorable credit status of the local self-government units and enable taking some steps for its improvement.

Risk categories that are used (by the international agencies for credit rating) for assessing the units' general credit status in order to be improved: (Josifov & Nikolov, 2007)

- Economic and social conditions
- Financial working : budget execution, fiscal flexibility and financial information
- Financial management
- Debt information

We can say that the indicators connected to these risk categories are tools for determining the general credit status of the municipality, and its capacity for the debt payment.

The indicators are focused on the risk factors that influence the local self-government units' financial state, and which can be controlled by the representatives of the actual local authority (the mayor and the town council).

2.1. ECONOMIC AND SOCIAL CONDITIONS

The municipality economic conditions are assessed in order to assess the revenues structure stability (in conditions of macroeconomic and political changes) and expenditures made by the municipality in order to provide the indispensable public services for defined period of time which is conditioned by the demand for that kind of services of the concrete community. And the demographic indicators also point out these trends in the demand and expenditures in a long-term.

Starting from the fact that primary source of the local self-government units' own revenues are the property tax and the municipal fees, the economic indicators should direct towards the factors that generate these revenues, (Јосифов Ѓорѓи, Николов Марјан, Прирачник за анализа на кредитноспособноста на ЛС, Проект за деловно опкружување – Агенција на САД за меѓународен развој, Скопје 2007 година) such as, for instance: the property value trends; business space rent, trends in the planning permissions, construction of apartments than has already begun etc.

Other own source of revenues is the personal income tax generated by the local self-government. And the economic indicators for this source of revenues should show the employment on the local and regional level and the trends in the personal income tax, both for the past and the future period.

Important items in the local self-government units' revenues are also the inter-governmental transfers and a part of VAT that are characterized by high stability degree. By comparing the decentralization process and the distribution transfers, the indicators of these revenues will be more relevant.

The economic indicators should enable to see on which sector the local self-government unit's economy relies, and the mutual connection of the local economy and the regional and national economies flows.

The local economy structure is an important aspect. What part of the economic activities is in private hands, on which sector it relies and what the largest employers economic state is. What the employees' structure is – in which kinds of enterprises and activities they are distributed.

It is important to determine for each unit of the local self-government which revenue item is more dominant, income from the property tax or personal income tax, because the incomes from the personal tax are more elastic in the conditions of economic fluctuations.

While the demographic indicators show the trends in the long-term demand for services provided by the local self-government units and they should include: (Josifov & Nikolov, 2007) population number, natural population growth, urban and rural population as a percentage of the total population in the municipality. On the basis of these data the changes that would happen concerning the services demand can be predicted. So, the high rate of the dependant population (very young and very old) and the accelerated population growth, have a negative effect. The higher incomes and the higher number of educated population are the positive aspect.

2.2. INDICATORS OF FINANCIAL WORKING

The indicators that reflex the budget execution, the fiscal flexibility and other aspects of the financial working are the basic factors that define the local self-government units' ability for paying its debts and determining eventual risks, in which group the following indicators belong: (Josifov & Nikolov, 2007))

- Budget execution – means analysis of the planned and realized budget. Namely, this analysis comprises: if the planned things are realized, in other words if there are eventual deviations and the reason for that. Then, if the responsible persons are ready to react should there are changes with both the income or expenditure side, in order to remove the eventual deviations. In that way we can see the general budget trends, can detect the eventual problems and take over appropriate measures.
- Fiscal flexibility – means the local self-government units' ability to keep a balanced budget in the conditions of a crisis, without disturbing the public services performance and fulfilling the obligations to the creditors.

The most flexible item in the local self-government units' revenues from which the obligations to the creditors are paid, are the revenues from their own sources (property tax, communal taxes and part of the personal tax). So, starting from their importance, and in order to assess correctly the local self-government units' creditworthiness, the historical trends and the reasons for the eventual variations in these revenues sources should be taken into account. Also, the local self-government units may find themselves in a situation not to be able to fulfill their liabilities should a significant part of their own revenues are used for not-flexible expenditures (salaries and etc.) and should the inter-governmental transfers are not appropriate for timely and quality services performance, which the local self-government units have gained through the decentralization process.

The expenditures flexibility indicators show the degree to which the local self-government units can decrease the expenses without disturbing the services performance. The least flexible expenditures are those that cannot be decreased due to legal or political reasons and most frequently they comprise the employees' salaries and the basic services for delivery of communal services (water, sewerage, electric power, garbage collection, public transport).

The capital expenditures are also very important item which should be taken into the account from the aspect of the existing basic infrastructure of the local self-government units (roads, water system, sewerage etc.) and its extension, which is a precondition for attracting new investments and development of the local economy, which on the other hand will enable further strengthening of their own revenues sources.

a) REVENUE INDICATORS

The revenue indicators comprise: (Josifov & Nikolov, 2007)

- 1) Property tax income as a percentage of revenue and of own sources,
- 2) Other tax incomes from the own sources (as a percentage of an income from the own resources),
- 3) Incomes from the own sources per capita,
- 4) Unrepeatable incomes from the own sources (as a percentage of total revenues from the own sources)

The first two indicators determine the realized property tax incomes available to the local self-government for fulfilling its liabilities. Here, we should take into consideration the movement of these incomes during the previous period, and the changes during the year, and should identify the entities that are the biggest taxpayers and regularly fulfill their liabilities, and those that not fulfill them, as well.

Incomes from the own sources per capita – This indicator enables to see tax incomes realization from the own sources of different local self-government units on which basis their economic state is assessed.

Unrepeatable incomes from the own sources – This indicator shows if and to which extent the current activities of the local self-government units can be covered by the one-off incomes sources (goods sale etc.). Here, it is necessary to see how important these incomes are for the local self-government units functioning and for maintaining balanced budget.

b) EXPENDITURES INDICATORS

The expenditure indicators comprise: (Јосифов Ѓорѓи, Николов Марјан, Прирачник за анализа на кредитноспособноста на ЛС, Проект за деловно опкружување – Агенција на САД за меѓународен развој, Скопје 2007 година) expenses for the personnel as a percentage of the total current-operational expenditures. The historical trends in this kind of expenses should be taken into consideration and we should make a comparison of the planned expenses to the realized ones and find out why the eventual changes in this kind of expenditures have happened.

Concerning the expenditure items structure, the capital expenses and maintenance expenses are treated as a positive aspect. Then, the budget successful managing, i.e. realization of the planned things especially the capital budget and the payment of high amounts by the current incomes. While the high rate of the salary is a negative aspect. These indicators concerning the budget management are important indicator of the local self-government units' financial management. The positive profit and loss account (surplus) in the current-operational budget is treated as especially positive aspect.

c) OTHER INDICATORS OF FINANCIAL WORKING

The following ones are also indicators of financial working: (Јосифов & Nikolov, 2007)

1) Incomes from own sources as a percentage of total operational expenses

Namely, the indicator of a primary surplus in the operational budget is used for measuring the financial performance. So, the primary operational surplus as a percentage of the total operational expenditures is a good indicator of the municipality financial ability to pay its debts.

And it is very important to see if the concrete local self-government unit is faced with operational surplus or operational deficit in the budget that is maybe conditioned by the increased expenses for realization of the responsibilities transferred by the central authority in the process of decentralization. In fact, if the transfers from the state budget are not sufficient, then the local self-government units may use the incomes from their own sources, in order to provide standardized packet of services for the people. But that, in turn, reflects negatively to the local self-government units in relation to the debts payment.

Very important indicator of the local self-government units' creditworthiness is the fact to which extent these units use the incomes from their own sources for covering the operational expenditures and the expenditures for the responsibilities obtained by decentralization.

2) Transfers for communal services/Total operational incomes

This indicator points out what percent of incomes from the own sources is used by the local self-government units for performing the communal services. The higher the amount of incomes from the own sources intended for performing these services is, the smaller is the part used for paying the local self-government units' debts. It is important to find out if the trend in this indicator is static or it changes in some periods.

3) Current working capital at the fiscal year end

This indicator shows the liquidity of the local self-government units and the practice of managing the local self-government units' cash. Under current working capital of the local self-government units we understand incomes from the own sources available to the local self-government units on their account, for covering the operational expenditures. When we want to determine the local self-government units' creditworthiness, we should take this indicator into the consideration in order to find out how successful they are in managing the cash flows and the eventual problems and their ability to fulfill the debts within the given terms.

2.3. INDICATORS OF FINANCIAL MANAGEMENT

Under financial management we mean the methods, the practices and the tools used by the financial managers of the local self-government units for implementing their responsibilities with regard to assessment of the local self-government units' financial policies, the budget preparing and its implementation, revenues collecting and their managing, purchases and cash management in everyday working. (Јосифов & Nikolov, 2007)

Favorable factors are: liquid assets and market real assets, and stable reserves in regards to the annual expenditures. While unfavorable factors are: the short-term debt, then if it is not serviced periodically, the long-term debt is generally negative except it is used as a support for productive (self-sustainable) activities.

Then, debts with a short repayment term are negative because of the constant pressure for refinancing and due to the potential burden on the current incomes.

The elements included in determining the risks associated with the system for managing the finances of the local self-government units, are: (Josifov & Nikolov, 2007)

- Assessment of the financial policies of the local self-management units.
- Methodology for capital budgeting and execution
- Review of the local self-government units' budget/accounting, cash management, purchases, revenues collecting and other management information systems for the revenues assessing and the expenditures control.
- Financial reports and monitoring/legal obligation for financial reports and other ways for monitoring the financial performance of the local self-government units.

Successful management with the finances of the local self-government units understands making exact and consistent reports, timely implementation of independent audits, providing true information on cash flows and the available cash for the debts paying. Clearly defined financial relation between the local self-government units and the public enterprises (such as communal ones) that can create hidden debt is of an especial importance.

2.4. DEBT INDICATORS

Debt indicators are divided into two categories: (Josifov & Nikolov, 2007) the local self-government units that have already got into debts and the local self-government units that get into debts for the first time.

For the local self-government units that get into debts for the first time the debt indicator is the local self-government units' capacity for borrowing (Јосифов Ѓорѓи, Николов Марјан, Прирачник за анализа на кредитноспособноста на ЛС, Проект за деловно опкружување – Агенција на САД за меѓународен развој, Скопје 2007 година)

For the local self-government units that have already got into debts the debt indicator includes: (Josifov & Nikolov, 2007)

- Maximal annual debt payment as a percent of the current-operational budget/incomes from own sources. According to the law provisions, more than 15% of the total revenue in the current-operational budget of the local self-government units in the previous fiscal year must not be used for the debts payment.

In case of local self-government units that accumulate liabilities over 90 days, it is of special importance to determine how it happened. Whether that comes out from the late incomes collecting or it is a consequence of more serious structural fiscal imbalance.

- Unpaid liabilities base per capita, which indicator is especially important for the creditors, on which basis they can assess the local self-government units' indebtedness.

4. CONCLUSION

Getting into debts is a procedure for creating financial liabilities by concluding a contract for a loan and/or securities issuing.

The conditions for the local self-government units getting into debts, kinds of getting into debts that can be according to the term (short-term and long-term) and according to the creditor (from the country or from abroad), are determined by the Law for financing the local self-government units.

By implementing the process of decentralization and carrying over some functions on the local level, the local authorities gain new responsibilities that require significant capital crediting.

The basic aim of the municipal credit market development is attracting capital investments on a local level in order to build infrastructural facilities of public character for providing living conditions of higher quality for the citizens.

One of the challenges for our country set by the decentralization process is extending and improving the existing infrastructure and building new quality one which is a precondition for attracting new investments, and with that, advancement of the economic development and maintaining the macroeconomic environment stability. The local self-government units and the municipal enterprises are important link in the entire process, because construction of facilities of public interest, i.e. creation of indispensable infrastructure for providing living conditions of higher quality for the local population, is their responsibility.

The main role in the financial sector in our country still belongs to the banks that are carriers of the largest part of the financial activities. Besides the banking sector, also the capital market sees increase, and there is also increase in the wider population's awareness of the advantages of investing in securities. The actual legal framework in that area has significant contribution which is a base for the capital market development in R. Macedonia. Namely, in the Law for securities and its amendments the principles of legality, transparency, non-discrimination, competition, protection of the securities holders and investors, strengthening and increasing the legal safety and the securities stability in total, are observed. Other important moment in this respect is the establishment of the first investment funds in R. Macedonia and the benefits offered by them: exploitation of the portfolio managers' expertise, who will manage the assets invested by the physical and legal entities in these funds, decreased risk when money are invested in different securities and lower trading and investing costs.

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Perspectives and Importance Of The State Securities Market Development in The Republic Of North Macedonia

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Abstract: The financial markets represent the most important part of the total economic and financial system of the national economies and they enable their undisturbed functioning. In fact, the financial markets are driving force of a national economy. The financial markets perform important functions which efficient performance influences the economic growth and development and living standard of a national economy to a great extent. For advancement of the financial market development, among the other things, the development of the state securities market has an important role, and they are very important link in the process for dynamizing the national economy growth. Namely, the state securities market development is a base, and of course a possibility for more efficient financing of budget needs in a short-term (current financing of the public expenditures) and in a long-term (providing long-term financial resources for supporting the economy growth), and lowering the macroeconomic risk associated with the external financing as well. The developed state securities market is also a base for encouraging the competition in the financial sector in the direction of creating new financial instrumental products. The state securities market development should be seen as a dynamic process in which the stability of the macroeconomic and financial system in building an efficient market and establishing a credibility of the government as a securities issuer is the most important. The basic aim of the research in this paper is through the method of analysis to determine the possibilities and future perspectives for development of state securities market. Namely, in order to enable the state securities market development as a segment of the financial market, it is indispensable to fulfill some preconditions from the point of view of creating a defined ambient, or more precisely, providing macroeconomic stability, legal framework and developed financial system, or in other words, developed financial market which is a driving force, a bloodstream of a national economy. This is especially important for the developing countries, in conditions of existence of limited financial capacities and institutional support, in which conditions investing in building and modernizing the local infrastructure is considered as uncertain.

Keywords: financial market, state securities market, economic growth, alternative ways of financing

1. INTRODUCTION

One of the indispensable assumptions for advancing the economic growth of a country is the existence of developed infrastructure. But, having in mind the limited resources intended for infrastructural projects from the one hand and constant increasing population's needs on the other hand, the need for finding out alternative ways of financing the infrastructure development and providing public services of higher quality is imposed.

In the contemporary financial markets, the cheapest instrument for financing infrastructural projects, and for covering the municipality's budget deficit, are the municipal bonds. In the world practice the municipal bonds are good alternative for investing and directing the savings due to the low risk and the tax exemption.

For a national economy, the financial market development is important precondition for dynamizing the economic growth. Therefore, the development of the state securities market as a segment of the financial market is also important, because through this market, more efficient financing of the budget deficit (occasional inconsistency of the public revenues and public expenditures) is enabled. Here, the market determination of the interest rates of the issued securities and comprising wider circle of investors, are the basic market principles which observing is a condition for the state securities market development.

For supporting the state securities market development, defining clear legal framework concerning the issuing and trading the state securities is of great importance.

2. FACTORS FOR THE STATE SECURITIES MARKET DEVELOPMENT

The state securities market development in R. Macedonia is conditioned by several factors. The following factors have key influence on this market advancement and development in our country: (Стратегија за развој на пазарот на државни хартии од вредност, МФ и НБПМ, Септември 2003 година)

- More efficient financing of the budget needs in a short- and long-term.

Successful financing of the budget needs in a short-term means providing necessary financial resources in order the state to be able successfully to realize its functions and to avoid obligations that the state cannot settle on time. Otherwise, some social consequences would occur (transfers in the social area, children protection, pension payment etc). And that will disturb the state credibility. One way for providing indispensable financial resources for overcoming periodical inconsistencies between the public revenues and the public expenditures are the state securities and the development of the market in which they would be traded.

Efficient financing of the budget needs in a long-term means providing necessary financial resources in a direction for the infrastructure advancement and development, which would create preconditions for new investment activities and development of the economy and the entire economic life in the country. In this way, better living conditions and better living standard would be enabled.

➤ Attaining sustainable indebtedness level

To prevent the state to be in a situation not to be able to fulfill its obligations on time and to fall into unfavorable credit risk.

➤ Development of market-oriented instruments of the monetary policy.

After the monetary independence, our country has been faced with a situation of non-existence of developed financial market and financial institutions, and non-existence of state and commercial securities, which is a reason for impossibility to introduce indirect, market-oriented instruments for monetary regulation. At the start of 2000, NBRM left the direct monetary instruments, giving priority to the market mechanism and the market institutions and instruments. So, in the period that followed, in our country, as in the other countries with undeveloped financial markets, treasury bills were used as a basic instrument for monetary regulation, which together with the credit auction and foreign exchange swap operations, belong to the group of operations of the open market type. So, the monetary instruments that are used for implementing monetary interventions are conditioned by the state securities market development.

➤ Investment funds development

The investment funds are non-banking investments that have a possibility to pick up financial resources from smaller individual investors, to whom in return they issue shares or a certificate for participating in the funds financial assets and the collected resources in this way are invested in the securities in the financial market, creating diversified investment portfolio. (Vitanova, 2003)

In the developed countries where there is increased real income per capita, and financial strengthening of the middle layer of the population, the investment funds see significant breakthrough. The investment funds dynamic growth is a result of several reasons: (Vitanova, 2003)

- They can give relatively high income, anyway higher than the fixed-term saving deposits
- They are relatively safe (due to the portfolios diversification)
- They have high liquidity degree (that is enabled by the fact that the fund shares can be sold)
- Pension system reform

Pension funds represent institutional investors who provide security and stability in income to individuals even after the end of working life. (Vitanova, 2003) However, providing a reliable income for retirees is not at all simple, because it is conditioned by the influence of numerous factors such as inflation, changes in the age structure of employees, changes in the length of working life, as well as fluctuations in the financial markets, which is why they are constantly controlled by side of the state.

3. PRECONDITIONS FOR THE STATE SECURITIES MARKET DEVELOPMENT

In order to provide successful development of the state securities market, which is a dynamic process, it is indispensable to have stability of the macroeconomic and financial system. Namely, the basic preconditions which should be met for establishing effective securities market are: (Стратегија за развој на пазарот на државни хартии од вредност, Министерство за финансии и НБРМ, Септември 2003) (Витанова Гордана, Финансиски пазари и институции, Економски факултет - Прилеп, 2003) stable state with high credibility, strong fiscal and monetary policy, efficient, legal, tax and regulatory infrastructure, security arrangements for

the debts repayment, liberalized financial system with competitive mediators and defined development level of the treasury system.

Macroeconomic balance is one of the basic priorities of R. Macedonia. The macroeconomic stability is a result of maintaining stable prices, denar exchange rate, compliance of the relations in the trade and payment balance and the fiscal position sustainability in a middle-term. Although many reform processes have been realized in our country in the fiscal, monetary, financial, tax and customs system, foreign-trade system has managed to maintain the macroeconomic stability and revive the economic activities.

Reform processes were present in the financial system, too (from the aspect of the legislative, ownership, corporative management, principle of market working). So, at the moment, this system in R. Macedonia consists of the following financial institutions: banks, saving banks, Macedonian stock exchange of state securities, brokerage firms, insurance companies and leasing enterprises, pension funds, investment funds.

For our country, it is characteristic that of all financial segments, the banking sector is the most developed one. Namely, the banks have the highest percentage of participation in the total financial potential and they are dominant financial institution. Among the other banking operations they perform, the banks can issue own securities to the capital market and mediate in the turnover of securities of other entities.

One of the key reforms in managing the public finances is the implementation of the treasury system in 2001. Under the term “treasury system” we understand (Стратегија за развој на пазарот на државни хартии од вредност, МФ и НБРМ, Септември 2003) a sum of state functions directed to providing efficient financial managing with the public financial resources, fiscal discipline and dedicated and transparent public consumption which realization is achieved through the following functions: the budget execution (payment transactions for the budget institutions), the public revenues management, budget accounting, debt management, liquidity management etc.

So, we can conclude that quality financial planning, then more active role of the state in the market for state securities, defining of strategic directions for getting into debts, application of new instruments, determining a sustainable level of issuing, risks assessment etc., are indispensable preconditions for successful development of the state securities market.

4. STATE SECURITIES PRIMARY MARKET DEVELOPMENT

The state securities primary market development should be seen as a part of the process of economic stabilization through finding out non-inflation sources of financing by observing the market principles when budget deficits are covered, which understand flexible and competitive determining of the interest rates.

The basic characteristic of the state securities market in R. Macedonia in the early stages of its appearing is non-existence of continuous primary market which is a reason why the financial market development in R. Macedonia remains a step back behind the countries in transition.

Non-existence of continuous primary market in the state is determined by several factors, such as: (Стратегија за развој на пазарот на државни хартии од вредност, МФ и НБРМ, Септември 2003)

- For servicing foreign debt of the country the resources are provided mainly through getting into new debts with the international financial institutions and through a credit from NB of R. Macedonia,
- The revenues realized by selling the enterprises in social ownership were an important source for financing the public expenditures,
- There was not a treasury system, as a system for efficient public financial resources management up to 2001,
- In executing the public expenditures, the system of “cash rationing”, or so called deferred consumption (untimely payment of the immediate liabilities etc.) was used.

Here, for establishing a developed market of the state securities the following key elements are of especial importance: (Стратегија за развој на пазарот на државни хартии од вредност, МФ и НБРМ, Септември 2003) correct selection of financial instruments, having a wide circle of potential investors and selection of appropriate selling techniques.

4.1. FINANCIAL INSTRUMENTS FOR THE PUBLIC DEBT MANAGEMENT

One of the key elements for advancing the state securities primary market development is a correct selection of financial instruments for the public debt management. There are many financial instruments available to the fiscal authority for realizing this aim: treasury bills, conventional bonds (coupon bonds with fixed interest rate), bonds with variable interest rate, annuity bonds, zero-coupon bonds, indexed bonds, convertible bonds, redeemable bonds etc.

Concerning the different groups of investors' preferences satisfaction, and increasing the demand for state securities, special attention should be paid to the selection and design of the financial instruments. Furthermore, we should be careful when we want to extend the basket with different kinds of securities because very large number of financial instruments may lead to breaking and segmenting of the anyway shallow market of the state securities in the initial phase, which would lead to liquidity decreasing in this market. So, in order to provide the state securities markets liquidity, it is indispensable to provide optimal volume of diversified securities and their standardization concerning both the kinds and the terms.

4.2. POTENTIAL INVESTORS IN THE STATE SECURITIES

The identification of groups of investors with similar preferences is very important aspect in formulating appropriate policies for securities issuing. We can mark off two basic groups of investors in the state securities: (Стратегија за развој на пазарот на државни хартии од вредност, МФ и НБРМ, Септември 2003) institutions from financial and non-financial sector (big investors) and individual investors (small investors).

The institutions from financial and non-financial sector belong to the group of big investors: (Стратегија за развој на пазарот на државни хартии од вредност, МФ и НБРМ, Септември 2003) banks, non-banking financial institutions (insurance companies, pension funds, investment funds etc.) and companies from non-financial sector.

Diversification of the investors is an important condition for the state securities market development which from its part causes demand growth, decreased expenses of the state, securities maturity increase, introduction of financial innovations etc. And depending on concrete needs (financial needs, the aim of the public debt management) which group of investor will be given priority will depend first of all on the tradition and the institutional development, and on macroeconomic and financial conditions, as well.

The characteristic of the countries in transition is that mainly banks are those that invest in state securities. While bank deposits are the individual investors' practice. But with the economic development and the financial markets advancement it is expected that the actual situation will be most probably changed. In this direction, also the fiscal authority should run an appropriate policy, in other words, creation of securities depending on preferences not only of the existing, but also of the potential investors.

Special attention should be paid to the promotion campaign in order to restore the trust and to increase the potential investors' interest in investing in securities. Through such a campaign, education of wider population will be enabled concerning the kinds of securities, possible advantages of the investment, their importance for financial markets development, and the economy as a whole.

4.3. TECHNIQUES FOR THE STATE SECURITIES SELLING

The state securities selling can be realized by applying one of the four basic selling techniques: (Стратегија за развој на пазарот на државни хартии од вредност, МФ и НБРМ, Септември 2003) selling through trade union, public call, continuous sale and auction sale. Here, which technique will be applied depends on the state securities kind, the financial market development and the institutional development. When treasury bills are sold, auction mechanism is the most frequently used technique, while when longer-term securities are in question other techniques have priority. The most frequently applied mechanism for the state securities selling is the auction sale. However, sometimes more techniques are applied, and in this case the attention should be directed to achieving an appropriate coordination among them in order to avoid negative effects which would come out from their simultaneous use.

When the scope of participants should be determined, the basic starting principle is providing satisfactory level of competition that would prevent eventual connection among the participant for speculative goals.

5. STATE SECURITIES SECONDARY MARKET DEVELOPMENT

The secondary market of state securities comprises trading with already issued securities (treasury bills and bonds) which will enable their owners to manage the portfolio more efficiently and to realize higher yields. The secondary market is an ambient in which through expression of the securities offer and demand powers their price is determined. Namely, in this market, the securities liquidity, i.e. their conversion into cash is enabled.

The primary and the secondary markets, as segments of the financial market are mutually closely related and conditioned. The secondary market cannot exist without the primary market because it trades with securities issued in the primary market. On the other hand, the investor will decide whether to buy some financial instrument in the primary market if it is possible to provide its liquidity, i.e. to sell it quickly and easily in the secondary market.

The state securities secondary market development degree is determined by the existing competitive market infrastructure, which contributes to reducing the difference between the securities selling and purchase price and at the end to their higher liquidity.

There are several factors important for the state securities secondary market development: (Стратегија за развој на пазарот на државни хартии од вредност, МФ и НБПМ, Септември 2003)

The first one is primary market development with an increased presence of the state in this market for encouraging the state securities demand, with the final aim its stabilization and achieving the targeted amounts for their sale.

The second is counter markets development, which in conditions of competitive market infrastructure will enable reduction of the transaction costs and development of a liquid secondary market of the state securities.

The third one is the time settlement of the concluded transactions which from its part influences the liquidity. The shorter the time from transactions conclusion up to their settlement is, the more liquid the securities are. So, in order to advance the state securities secondary market, special accent should be put on creating a system that will enable the transactions settlement during the same day.

The forth is more active participation of the financial mediators (primary dealers) who are involved in trading with the state securities, publish the prices (both buying and purchase prices), inform the Central bank on the concluded transactions, keep defined amount of securities in order to realize their basic function-providing better liquidity of the state securities secondary market, through regulating the relations of the offer and the demand, incorporating the available information into the state securities prices and prompt transactions execution.

6. CONCLUSION

The state securities market development should be seen as a dynamic process in which the stability of the macroeconomic and financial system in building an efficient market and establishing the government's credibility as securities issuer is the most important. The basic preconditions which should be met for establishing effective securities market are: stable state with high credibility, strong fiscal and monetary policy, efficient, legal, tax and regulatory infrastructure, security arrangements for the debts repayment, liberalized financial system with competitive mediators and defined development level of the treasury system.

The following ones are identified as key factors for the state securities market development in R. Macedonia: more efficient budget needs financing in a short- and long-term; a need of achieving a sustainable indebtedness level (due to the possibility the country to be faced with a danger of getting into big credit risk and impossibility to service its liabilities in time); development of market oriented instruments of the monetary policy (which is conditioned by the securities development, commercial securities, sound financial institutions and developed and transparent financial markets); the pension system reform (which will mainly depend on the state securities market development which should create financial instruments adequate for these institutions needs) and the investment funds development.

Considering the importance of the clear legislation as a base for the state securities market development, the special attention is paid to the legal framework for issuing and trading the state securities.

Having in mind the initial stage of the state securities market development in the Republic of Macedonia special attention is paid to the state securities primary market development, for which the following key elements are identified: selection of financial instruments, identification of potential investors and selection of adequate selling techniques. Also the identified activities to be taken in order to develop the state securities secondary market, which is conditioned by building competitive market infrastructure.

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Directions of Ensuring Economic Security of The Republic of Azerbaijan.

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Abstract: One of the important issues is the effective, dynamic growth of economic security in the national economy and its ability to meet the needs of society. Economic security also has an impact on reducing poverty and unemployment and ensuring economic development. On the one hand, the world economy in modern times each state in a situation of globalization, on the other hand, rapidly polarizing the level of economic development of the countries as a solution to the main problems facing them and depends on ensuring economic security. National economic security efficient, dynamic growth in the economy and the ability to meet the needs of society. The importance of the research from the point of view makes it even more relevant. Also Reducing poverty and unemployment, ensuring economic development. There is also the effect of economic security. The state in these areas. It is known that programs and reforms are underway. Note based on all these factors we can say that my research work is very relevant.

At the same time, the article notes the analysis of key economic indicators, the implementation of state programs and reforms in these areas.

Keywords: economic security, economic development, food security, poverty, unemployment rate, etc.

Introduction.

At present, ensuring economic security in the context of innovation is one of the most pressing issues. There are many factors that protect economic security, and they interact with each other. They form a complex system. That is, when you study them separately, it is difficult to achieve the set goal. In this regard, it should be approached on a systematic basis. It is also advisable to create and use an economic security management system.

The development of the country's economic security is a complex and complex process. Therefore, it should be analyzed taking into account not only the dynamics of economic growth. Economic security must guarantee and protect vital needs from external and internal threats. The economic understanding of security is a relatively new phenomenon in economic theory.[1]

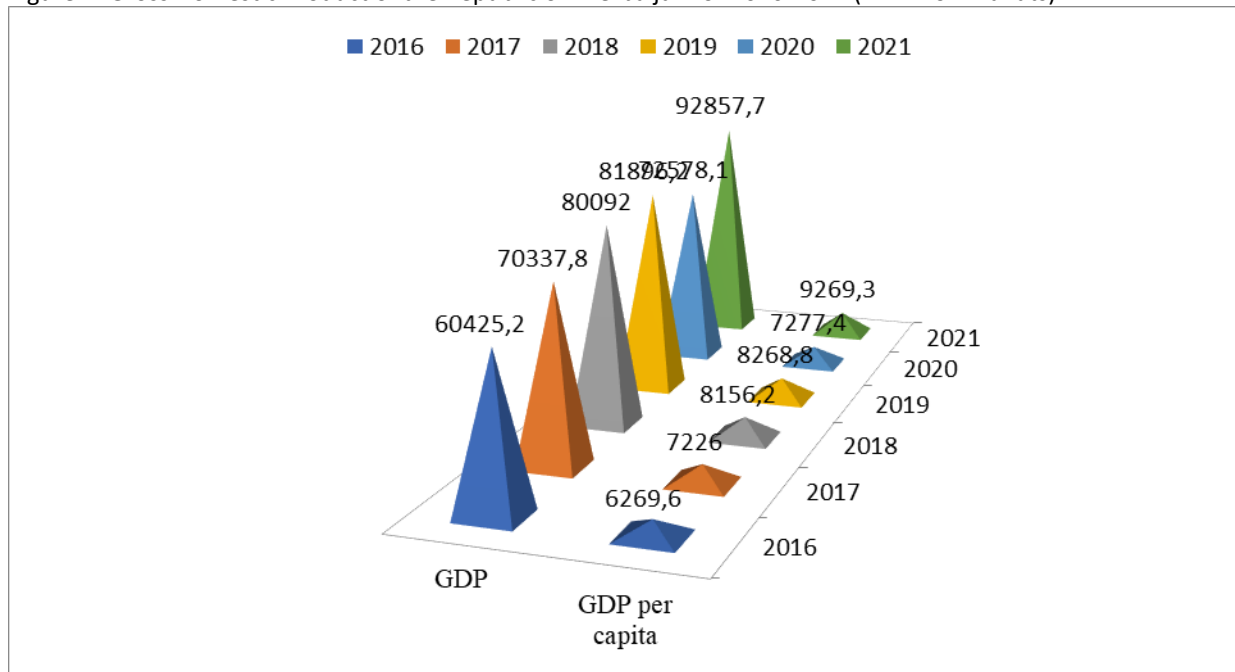
It should be noted that in order to ensure the economic security of the country, it is important to eliminate both foreign and domestic socio-economic threats. External socio-economic threats include the following: Increased tendency of Azerbaijan to become a source of raw materials for industrialized countries. This is evidenced by the fact that most of Azerbaijan's exports are crude oil. These are factors that can pose a great threat to the country's economy. Therefore, many measures are being taken in the country to prevent this. These measures include:

- Strengthening the efficient use and control of natural resources;
- Development and implementation of a modernization policy in the field of production and processing of fuel and raw materials;
- Transition to competitive technology;
- Reduction of dependence on imports;
- Assisting the production of competitive products for the world market and increasing the share of final products;
- Diversification of exports, ie the simultaneous development of a wide range of unrelated products and production volumes;
- Improving the regulation of foreign trade.

Analysis

More internal socio-economic threat to the country's economic security depends on the level of indicators that make up the structure of the country's economy. These indicators are too high to ensure the economic security of the country. Although they interact with each other and condition each other, they differ in their importance and place in ensuring economic security. That is why these indicators should be characterized separately. We observe an increase in the share of GDP in our country. Of course, the pandemic, which is a global problem, will have a negative impact on GDP in 2020, but we can see growth in 2021. If we take into account that after the years of independence, population growth has become more massive, nevertheless, the GDP per capita continues to grow year by year.

Figure 1. Gross Domestic Product of the Republic of Azerbaijan for 2016-2021 (in million manats)



Source: State Statistics Committee of the Republic of Azerbaijan. [2]

As can be seen from the table, 39403.1 million manat of the gross domestic product, ie 65.7 percent fell to the share of non-oil sectors of the economy, and 34.3 percent (20584.6 million manat) to the oil and gas sector. The value of GDP per capita was 6223.8 manat. In 2021, the country produced 92857.7 million manat, or 5.6 percent more than the same period last year. Value added in the non-oil and gas sector of the economy increased by 7.2 percent, and in the oil and gas sector by 1.8 percent. 42.5 percent of GDP production is industrial, 10.1 percent is trade; repair of vehicles, 6.9% transport and warehousing, 5.9% agriculture, forestry and fishing, 5.9% construction, 1.8% information and communication, 1.3% tourist accommodation and catering, 17.2% fell to the share of other spheres, net taxes on products and imports made up 8.4% of GDP. GDP per capita amounted to 9269.3 manat.

The country's economic security management system has a hierarchical structure. It is structured as a country, region, enterprise and person. It should be noted that, in any form, they include forecasting, economic analysis, planning, organization, flexible management, reporting and control. Among them, it is necessary to apply the method of systematic analysis in order to identify the elements of a single system. It is also possible to define the general directions and tasks of ensuring economic security.

Analyzing the main macroeconomic indicators of the country, we can see that the inflation rate in 2021 will be high. It should be noted that the government is constantly pursuing a policy to move to a single-digit inflation rate system. From this point of view, although the creation of new jobs is small, the country is achieving unemployment. As in all countries, the problem of unemployment in our country is one of the most pressing issues facing the state. However, one of the consequences of the pandemic in the world, as well as in our country, is the suspension of production facilities in the country, as well as trade facilities, which has had a negative impact on unemployment in the country.

Table 1. Indices of key macroeconomic indicators, as a percentage of the previous year

	2016	2017	2018	2019	2020	2021
Gross Domestic Product	96,9	100,2	101,5	102,5	95,8	105,6
Income of the population	108,7	108,4	108,0	106,9	98,2	102,6
Average monthly nominal salary	107,0	105,7	103,0	116,6	111,4	103,4
State budget revenues	100,0	94,4	136,3	108,4	106,9	102,1
State budget expenditures	99,8	99,1	129,2	107,5	108,1	103,8
Deposits of the population in banks	78,6	101,5	110,8	103,1	94,7	113,0
Credit investments in the economy	75,7	71,5	110,7	117,5	95,0	117,8
Population (end of year)	101,1	100,9	100,8	100,9	100,5	100,4
Consumer price index	112,4	112,9	102,3	102,6	102,8	106,7
Poverty level, in percent	5,9	5,4	5,1	4,8	6,2	-

Source: State Statistics Committee of the Republic of Azerbaijan.

In addition, compared to 2020, the income of the population in 2021 increased by 2.6 percent in nominal terms and amounted to 57.2 billion manat. In 2021, the nominal income of the country's population amounted to 57181.5 million manat, or an average of 5,708 manat per capita. It should be noted that the consumer price index in 2021 increased by 6.7 percent compared to 2020. [2]

One of the indicators of economic security of the republic is the level of poverty in the country. If the level of poverty in the country is declining, it indicates the correct implementation of the country's economic development strategy. In order to reduce poverty, it is necessary to increase the subsistence level and completely reduce the unemployment rate by creating new jobs.

The successes achieved as a result of the well-thought-out economic policy pursued in Azerbaijan give grounds to unequivocally state that our independent state is a state that ensures its economic security. Along with other purposeful work carried out in this area, a civil legislation base has been created. [4, 37]

In the era of globalization, food security is one of the important attributes and components of the complex security of the state, including economic security. It should be noted that the problem of food security is important for all countries. It requires both institutional and executive action against food security in Azerbaijan. This problem is reflected in the establishment of the State Commission on Food Security, the "Food Security Program of the Republic of Azerbaijan" approved by Presidential Decree No. 640 of March 2, 2001 and other documents. The "Food Security Concept" defines the elimination of problems in the field of food security, quantitative, qualitative, economic and social aspects of food security, food security policy, the basis of the program of legal, regulatory and organizational measures in this area to ensure food security in the country. The main goal of the "Food Security Concept" is to achieve food independence of the country, to create conditions for all categories of the population to obtain stable quality food products and to organize food supply for emergencies.

In order to ensure the diversification and inclusion of the country's economy on the principles of sustainable development, the formation of a competitive agricultural production and processing sector, approved by the Decree of the President of the Republic of Azerbaijan No. 1138 dated December 6, 2016. The "Strategic Road Map" identifies specific priorities and measures for the formation of an improved food security system based on a risk analysis approach, covering all stages of the value chain. [6] In addition, in order to implement paragraph 5.5 of the Decree of the President of the Republic of Azerbaijan "On additional measures to improve the food security system in the Republic of Azerbaijan" dated February 10, 2017 No. 1235 "On food security in the Republic of Azerbaijan 2019 2025 State Program for the Year." [7]

As living standards improve, concerns about food safety and potential contaminants will continue to be an important public health concern. Consumers demand the quality and safety of the foods they consume

because food is essential to sustain life as a source of energy and nutrients. In general, consumers rely on the government to make sure all food is not only safe, but also sold the way they claim to be.

For example, a can of olive oil labeled "Contract of the Century" must contain exactly what is stated on the label, minus the naturally occurring trace elements that are part of the olive oil and cannot be extracted or removed completely without destroying the olive oil. [8, 47]

Ensuring economic security in the context of the new economic environment is a long-term strategic challenge, which is directly related to ensuring the normal functioning of the economy and the people. To solve this problem, an economic security concept based on all aspects of economic development, both at the macro and micro levels, must be developed. In order to ensure the effectiveness of the system of measures envisaged in this concept, any laws and regulations adopted at different stages of the transition period on the formation and transformation of the national economy should not conflict with previously adopted documents. At the same time, it is necessary to coordinate the interests and principles of the political, economic, moral and national mentality with the course of economic reforms and achieve their systematic implementation. [9, 79]

The scientific study of the individual provisions of the theoretical views of economic security can be noted in particular that it is impossible to achieve absolute security. In this context, protection against threats is almost a local part of the work to ensure stable and sustainable economic development. In this regard, it can be argued that any mechanism and means aimed at economic development can be assessed in the form of measures to protect economic security, and the theoretical views of economic security have been extensively analyzed. [10-11]

It should be noted that most of the economic indicators have risen significantly since independence. However, Azerbaijan's economic security indicators are lower than those of industrialized countries. The main reason for this is Azerbaijan's transition to a market economy. Naturally, the concept of economic security of the country should reflect this reality.

The result

It is obvious that the dynamics of the country's socio-economic development is a prerequisite for ensuring its economic security. Thus, in order to ensure the sustainable and sustainable development of the country's economy, the problems encountered in the development process must be addressed in a timely manner. Otherwise, these problems become a shackle of socio-economic development and a constant source of danger for the country. These problems must be solved step by step, through a constantly updated economic mechanism and through the evolution of development.

The development of the national economy and ensuring economic security in the country should be improved in these key areas.

- Programming and forecasting of external and internal threats in national economic development.
- Development and implementation of the State Program on ensuring economic security.
- Strengthening state control over the use of the country's resources.
- Formation and development of correct and honest and effective ratios between the spheres of material production, which are considered the main basis of the economy.
- Strengthening the promotion of independent action in socio-economic development.
- Development and implementation of relevant work in order to achieve effective employment and increase labor productivity in the country.
- Improving the current legislative framework in this area to accelerate the development of small businesses and entrepreneurship in the country.
- To sharply reduce the expenses of public administration structures, etc.

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The Effect of Heavy Metal Pollution in Ergene River on Paddy Production in the Region

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Abstract: In this study, the effect of heavy metal pollution of the Ergene River in the Thrace Region, especially from industrial wastes, on paddy production was investigated. Thrace region ranks first in paddy farming in Turkey and meets more than half of the production (55%). Turkey's paddy cultivation area is 1 million 100 thousand decares and 600 thousand decares are in the Thrace region. In the Thrace Region, paddy production and cultivation is mostly in Edirne. The contribution of paddy to the regional economy is extremely important. With the increasing world population, the food needs of people are also increasing rapidly. The importance of water in meeting food needs is gain more and more value every day. Today, irrigation water used in industry and agriculture has an important place in the rapid pollution process of nature. The importance of water in paddy farming is indisputable. With the increasing population and pollution of the world, the pollution of the waters has made it necessary to protect the quality of the existing irrigation water and to use it in the most economical way. The quality of the water used in paddy cultivation also affects the quality of the paddy grown. Some chemicals in bad quality water to be used may be taken by the product and threaten human health. In addition, poor quality irrigation water causes pollution and barrenness of agricultural lands and limits the use of water for agricultural purposes, as in the Ergene Basin. Heavy metals, especially in the water and soil structure of the Ergene River, show carcinogenic effects on humans.

Key Words: Ergene Basin, Ergene River, Heavy Metal Pollution, Rice Production

Özet: Bu araştırmada, Trakya Bölgesi'nde bulunan Ergene Nehri'nin özellikle sanayi atıklarından kaynaklanan ağır metaller yönünden kirliliğinin çeltik üretimi üzerine etkisi incelenmiştir. Türkiye'de çeltik tarımından Trakya bölgesi ilk sıralardadır ve üretimin yarısından fazlasını karşılamaktadır (%55). Türkiye çeltik ekim alanı 1 milyon 100 bin dekadır ve 600 bin dekarı Trakya bölgesinde bulunmaktadır. Trakya Bölgesi'nde de çeltik üretimi ve ekimi en çok Edirne ilindedir. Çeltiğin bölge ekonomisine katkısı son derece önemlidir. Giderek artan dünya nüfusu ile birlikte insanların gıda ihtiyaçları da hızla artmaktadır. Gıda ihtiyaçlarının karşılanmasında ise suyun önemi her geçen gün daha fazla değer kazanmaktadır. Günümüzde doğanın hızlı bir kirlenme sürecine girmesinde sanayi ve tarımda kullanılan sulama suları önemli bir yer tutmaktadır. Çeltik tarımında suyun önemi tartışılmayacak boyuttadır. Artan nüfus ve dünyanın kirlenmesi ile birlikte suların da kirlenmesi mevcut sulama sularının kalitelerinin korunmasını ve en ekonomik bir şekilde kullanılmasını zorunlu bir hale getirmiştir. Çeltik yetiştiriciliğinde kullanılan suyun kalitesi, yetiştirilen çeltiğin kalitesini de etkilemektedir. Kullanılacak kötü kaliteli sulardaki bazı kimyasal maddeler ürün tarafından alınarak insan sağlığını tehdit edebilmektedir. Ayrıca kötü kaliteli sulama suları tarım topraklarının da kirlenmesine, çoraklaşmasına sebep olmakta ve Ergene Havzasında olduğu gibi suyun tarımsal amaçla kullanılmasını sınırlamaktadır. Özellikle Ergene Nehri'nin su ve toprak yapısında bulunan ağır metaller, insanlar üzerinde kanserojen etkiler göstermektedirler.

Anahtar Kelimeler: Ergene Havzası, Ergene Nehri, Ağır Metal Kirliliği, Çeltik Üretimi

1. INTRODUCTION

The Ergene River collects the waters of a large part of Thrace. Its length is 281 km. It rises from Kara Tepe (473 m), which forms the continuation of the Istranca (Yıldız) Mountains to the southeast and is located in the northeast of Saray. After flowing in the northeast-southwest direction for a while, it starts to flow in the southeast-northwest direction by drawing a large arc in the west direction in the middle of Thrace. It merges with the Çorlu water, one of its most important tributaries, near Muratlı. The waters of Ergene, whose regime is irregular, swell in winter and spring; at the end of summer it becomes weak. Irrigation dams were built in the springs of some waters originating from the inner slopes of Istrancalar and descending to Ergene (Doğanay, 2007; Gökdemir, 2006). Industry in the Ergene basin is increased rapidly day by day. Industries in the basin give their wastes to the Ergene River and its tributaries.

Paddy plant is very important because it is the staple food of more than half of the world's population (Özşahin, 2008). Rice, which is extremely important as a human food especially in the Far East and South Asian countries, and whose per capita consumption is up to 200 kilograms in some countries, is the most consumed product in the world after wheat. Paddy cultivation is carried out in Turkey, as in many other countries of the world,

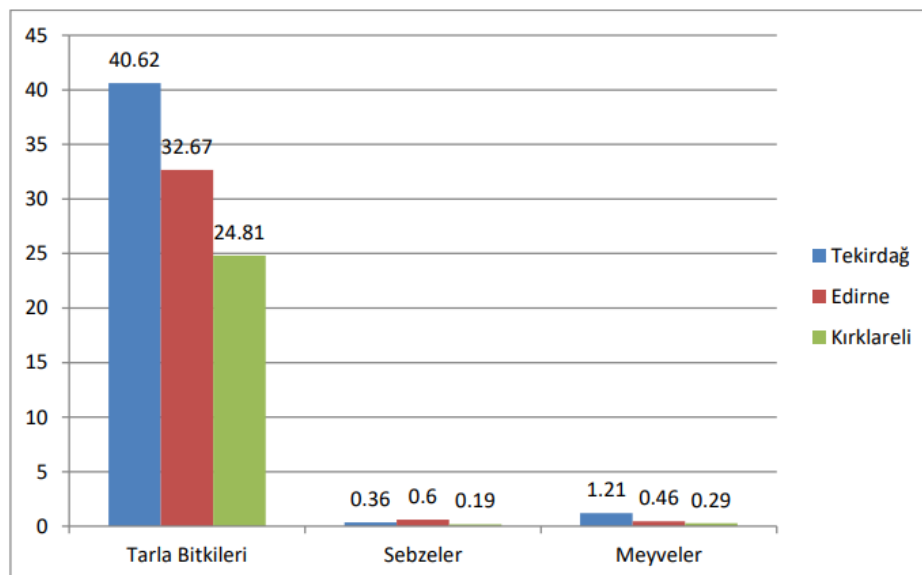
within the framework of the "Law No. 3039 on Paddy Cultivation" published in the Official Gazette dated 23.06.1936 and numbered 3337, depending on permission (TMO, 2016).

Turkey is a country with very suitable climatic conditions for the cultivation of paddy plant. Especially in the areas where this product is grown in the country, the average temperature in summer is around 25 °C. This temperature value is also very suitable for the cultivation of paddy. Therefore, paddy is grown in the country during the summer months. In terms of soil characteristics, Turkey is very suitable for the cultivation of this plant. For this reason, paddy cultivation is mostly carried out in the delta plains and valley floors of the rivers. Because the precipitation values are not sufficient for the paddy to grow. Therefore, paddy is grown with irrigation (TMO, 2016).

1.1. Herbal Production

The Thrace region is a region with fertile agricultural lands. It consists of wide plains and low hills. In general, most of the cultivated areas are farmed; In addition, viticulture, fruit growing and horticulture are also carried out. The most important agricultural products grown in the region are wheat, sunflower and paddy (Hurma, 2007). As seen in Figure 1, the superiority of field crops production in the region stands out in terms of production amount.

Figure 1: Ratio of Crop Areas in Provinces to Total Crop Area of Thrace Region.



Source: TURKSTAT, Database, Crop Production Statistics, 2018.

When the cultivation areas of field crops in the Thrace Region are examined in Figure 1, the highest rate is the province of Tekirdağ with 40.62%. In the cultivation area of field crops, Edirne comes with 32.67%, followed by Kırklareli with 24.81%. When the vegetable and fruit cultivation areas are examined, Tekirdağ is ahead in fruit cultivation areas with 1.21% and Edirne is leading in vegetable cultivation areas with 0,60% (Sekülü, 2019).

It is understood from many studies that the most important factor limiting paddy production in Turkey is irrigation water. Producers still engaged in paddy farming want to do paddy farming in more areas. Producers who plant paddy in their regions but do not have sufficient irrigation water in their own lands, make large investments and turn to paddy farming with underground drillings or works such as canals they make with their own means (Yılmaz, 2017).

Although paddy is produced in 31 provinces in the country, Edirne province takes the first place in paddy production (Arda et al., 2015). Although it varies according to the years, paddy is cultivated on an average of 400-450.000 decares in the province (Table 1). When it comes to plant production, besides wheat and sunflower, it is the first product that comes to mind. These three products are produced in 92% of the total field areas. Paddy is produced in irrigated areas especially in Meriç, Ergene and Tunca Basins. The most sowing is done in İpsala district (35%), followed by Meriç and Uzunköprü districts, respectively (Table 2) (Ocaklı, 2012). The main reason for the spread of paddy farming in Edirne and its persistence for many years is that the Meriç and Ergene rivers are an important water source in paddy (Şapaloğlu, 2015).

Table 1: Paddy Production for the Years 2006-2016.

Years	Sowing (Ha)	Production (Tonnes)	Yield (kg/Da)
2006	99.100	696.000	702
2007	93.900	648.000	690
2008	99.500	753.000	757
2009	96.754	750.000	775
2010	99.000	860.000	869
2011	99.400	900.000	905
2012	119.725	880.000	735
2013	110.592	900.000	814
2014	110.884	830.000	764
2015	115.856	920.000	794
2016	116.056	920.000	793

Source: URL 1.

However, these two rivers are significantly polluted. According to the measurements made, the Meriç River is in the 2nd class and the Ergene River is in the 4th class, that is, it is much polluted water. Of these, the Ergene River is of great importance for agriculture in terms of its basin width. Approximately half of the Edirne province area is located in the Ergene basin, and most of the lands in this basin are arable land (İnan, 2012; Şapaloğlu, 2015).

Table 2: Paddy Cultivation Areas in Edirne Center and Other Districts as of 2016.

District	Number of Villages	Number of Producers	Licensed Planting (da)	Production (Ton)	Average Operating Width (da)
Centre	18	743	45.686	38.833	61.5
Enez	8	224	18.451	14.761	82.4
Havsa	13	372	8.023	6.659	21.6
İpsala	21	2.467	187.937	159.662	76.2
Keşan	21	499	37.620	31.977	75.4
Meriç	21	2.048	76.852	67.630	37.5
Uzunköprü	34	1.437	55.745	47.383	38.8
TOTAL	136	7.790	430.314	366.904	55.2

Resource: URL 1.

1.2. Factors Polluting the Ergene River

The Ergene Basin covers most of the surface areas of Edirne, Tekirdağ and Kırklareli provinces. As a result of the overpopulation in Istanbul caused by industry, industrial facilities spread around Istanbul shifted to Çorlu and Çerkezköy lines. These industrial facilities, which did not have treatment at first, discharged their wastewater to the Ergene River and its tributaries, which feed the Ergene Basin, without treatment. Even if they have established treatment facilities in accordance with the legal regulations, these facilities are not operated regularly. When the urban and domestic wastes generated as a result of unplanned urbanization and the artificial fertilizers and pesticides used in agricultural activities are added to this, the Ergene River, which was once the lifeblood of Thrace, became extremely polluted and almost a dead river. The wastewater that the developing industry gives to rivers and lakes without treatment due to short-term profit targets, when combined with agricultural, urban and domestic wastewater, creates an inevitable pollution in the basin (Yılmaz, 2017). Due to the pollution of the Ergene River, it adversely affects human and animal health on all the routes it passes through, as well as negatively affecting agricultural lands and especially reducing the yield of paddy (Kocaman et al., 2011).

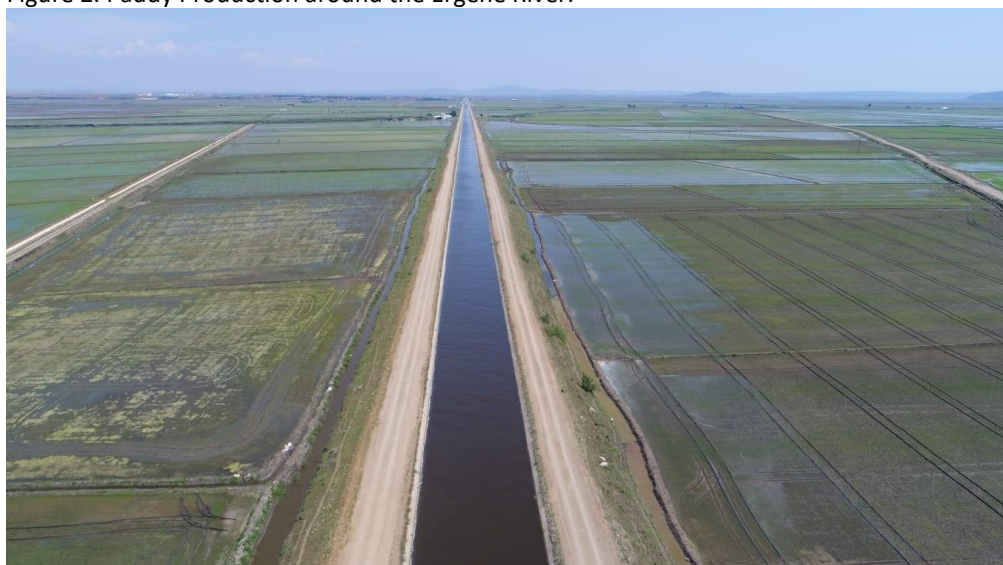
Due to the use of heavy metals in the manufacture of industrial products, human exposure to heavy metals has increased dramatically in the last 50 years. Due to mercury amalgam fillings, paints and lead in tap water, chemical residues in cosmetics, shampoos, hair products and toothpastes, people live with heavy metals all the time. In addition, significant amounts of toxic elements are left to the soil from fertilizers and pesticides used in agriculture. The most important of these toxic elements are cadmium, lead, nickel, arsenic and copper. The access of these heavy metals to the soil is mostly due to phosphorus fertilizers and the raw materials of these fertilizers. In the researches, the heavy metal contents of the raw phosphate rock imported from abroad to

produce phosphorus fertilizer were found to be significantly high. It was determined that phosphate rock had the highest Cd and As concentration compared to other fertilizers (Köleli & Kantar, 2006).

According to the analyzes carried out by Edirne Provincial Directorate of Environment and Forestry at the Ergene River Akarca Bridge Location (Provincial Entrance) quality observation station in 2009 and 2010 (T.R. Edirne Governorship Provincial Directorate of Environment and Forestry, 2010), the water of the Ergene River;

- In terms of physical and inorganic-chemical parameters; IV. Class (Heavily Contaminated Water),
- In terms of organic parameters; IV. Class (Heavily Contaminated Water),
- In terms of inorganic parameters; IV. It is evaluated as Class (Very Contaminated Water) and in all three groups IV. Class water (Very Contaminated Water) (Figure 2).

Figure 2. Paddy Production around the Ergene River.



Source: URL 2.

There is an increase in electrical conductivity and salt value in agricultural lands that are irrigated from the Ergene River or exposed to the polluted waters of the Ergene River as a result of floods. In addition, the Ergene River contains high amounts of chlorine and sodium, causing a serious accumulation of sodium and chlorine in the soil. This raises the problem of salinity and alkalinity. The high salinity ratio caused delay in germination and emergence, shortening in plant height, and reductions in leaf and stem diameter in the crops planted in the area (Sürek, 2003).

In agricultural lands near the Ergene River, there is an increase in the amount of seeds used per decare due to polluted river waters. The best example of this is paddy farming, which is directly affected by the pollution of the Ergene River. Namely; in the first months of paddy planting, due to pollution, paddy seeds lose their vitality significantly and when this is taken into account, 5-10 kg more paddy seeds should be planted per decare (Özkan & Kubaş, 2008).

1.3. Effective Human Activities in the Reaching of Heavy Metals to Waters

Heavy metals are the most important inorganic factors that pollute all aquatic and terrestrial ecosystems, especially in industrial wastes, fossil fuels, some pesticides, chemical fertilizers and domestic wastes. They pose a great risk because they can stay in the environment where they are discharged for a long time, cause toxic effects on living things and threaten human health by accumulating in the food chain (Wildi et al., 2004; Tokatlı et al., 2013; Köse et al., 2015).

As it is known, excessive and unconscious application of phosphorus fertilizers and pesticides used in agricultural activities significantly increases the toxic metal concentrations in the soil and therefore in the waters (Çalışkan, 2007).

Industrial wastes constitute an important group in the formation of heavy metal pollution as a result of human activity (Table 3). Because many heavy metals constitute an important waste group of most industries. As a result, the problem of heavy metal pollution in these industries comes to the fore. Heavy metals are harmful substances even in trace amounts. For this reason, their accumulation in living things should be constantly monitored and investigated (Kubaş & Hurma, 2005).

Table 3: Industries Using Heavy Metals.

Industry branch	Cd	Cr	Cu	Fe	Hg	Mn	Pb	Ni	Sn	Zn
Paper, cardboard and cellulose		+	+		+		+	+		+
Organic chemical, petrochemical	+	+			+		+		+	+
Alkali, chlorine, inorganic chemical	+	+		+	+		+		+	+
Chemical fertilizers		+	+	+		+				+
Oil refineries	+	+	+	+			+	+		+
Iron-steel foundries	+	+	+	+	+		+	+	+	+
Metal other than iron and steel	+	+	+	+	+		+			
Motor vehicle, aircraft coating	+	+	+		+			+		
Glass, cement, asbestos		+	+	+		+	+	+	+	
Textile	+	+		+	+		+	+		
Leather tanning										
Electric (steam powered)		+								

It has been determined that the irrigation water quality in İpsala District and its villages is quite low and the waters have “dirty (III. Class)” and “very dirty (IV. Class)” water quality in terms of many parameters. Agricultural practices with monoculture approach, especially in the İpsala District and its surrounding villages, impoverish the soil in terms of some minerals. In order to eliminate the mineral deficiency, inorganic and phosphate fertilizers are used intensively in all agricultural production areas. For this reason, it is thought that the most important sources of cadmium values, which are found to be quite high and well above the limit values, are phosphorus fertilizers and pesticides used in agricultural activities. As it is known, the most important source of nickel and chromium is industrial wastes, and it is thought that the most important source of the high nickel and chromium values detected is the Ergene River, which indirectly affects the system. Considering that the Meriç River is used in irrigation to a large extent, it can be said that the excessive pollution of the Ergene River has also affected the İpsala District and its surrounding villages to a large extent and is responsible for the manganese, iron, lead, chromium and nickel contents detected in high amounts in the irrigation waters (Arda et al., 2015).

The effect of industrial intensity on water pollution is much more than all other polluting factors. By giving the wastewater from industry to the receiving environment without treatment, the polluted water both disrupts the ecological balance and when used as irrigation water later, the pollutants in the water damage the soil and vegetation. As a result, both the water resources are polluted and depleted and the living life is in danger. Tekirdağ Province is the province where the industry is most developed in the Thrace Sub-Region. It is seen in the 1/100,000 Scale Thrace Sub-Region Ergene Basin Environmental Plan that the largest contribution to the Ergene River pollution comes from the textile sector. Ergene River and its tributaries have an important place in terms of surface water resources. Ergene River and its tributaries, which have become a waste water channel where industrial enterprises discharge their waste water, therefore carry an intense pollution load. The river has ceased to be a suitable environment for life in terms of its physical, chemical and biological properties (Özşahin, 2016).

It is observed that the river becomes the waste storage of many industrial establishments in the Çorlu-Çerkezköy and Çorlu-Edirne industrial zones and enters the much polluted water quality class (Table 4). Irrigation from the Ergene River to agricultural lands causes soil pollution and the harmful effects of this pollution are transmitted to agricultural products grown in the soil and reach humans and other living things through the food chain. Heavy metals, especially in the structure of water and soil, show carcinogenic effects on humans. It is observed from the visual media that there is an increase in cancer cases in Çorlu and its surroundings.

Table 4: Ergene River Pollution Status in 2004.

Parameters and Units, Temperature °C, without Ph Unit, Others mg/l	Chemical Formula	Ergene River Muhacırkadi Village 02.08.04	Class	Ergene River Çiftlikköy 02.08.04	Class	Ergene River Adasarhanlı Village	Class
Temperature		21	1.	20	1.	21	1.
pH		7.84	1.	7.46	1.	7.54	1.
Dissolved Oxygen	O ₂	4.7	1.	4.19	3.	8.0	1.
Sulfate	SO ₄ ⁻²	155	2.	175	2.	47	1.
Ammonium Nitrogen	NH ₄ ⁺ -N	-		-		-	
Nitrite Nitrogen	NO ₂ ⁻ -N	0.001	1.	0.003	2.	0.002	2.
Nitrate Nitrogen	NO ₃ ⁻ -N	6.7	2.	0.2	1.	0.3	1.
Total Phosphorus	PO ₄ ⁻³ -P	0.31	3.	0.36	3.	0.55	2.
Sodium	Na ⁺	62.05	1.	44.69	1.	49.03	1.
COD		98	4.	90	4.	66	3.
BOD		-		-		-	
Lead	Pb	-		-		-	
Copper	Cu	0.03	2.	0.01	1.	0.13	3
Chrome	Cr	0.03	4.	0.07	4.	0.08	4.
Cobalt	Co	0.32	4.	0.34	4.	0.63	4.
Nickel	Ni	0.117	3.	0.136	4.	0.095	3.
Zinc	Zn	0.00	1.	0.00	1.	0.00	1.
Iron	Fe	0.09	1.	0.15	1.	0.20	1.
Manganese	Mn	0.878	3.	0.552	3.	0.442	4.
Aluminum	Al	0.03	1.	0.01	1.	0	1.

Resource: Gökdemir, 2006.

1.4. Some Studies on Heavy Metals and Paddy Agriculture in Ergene River

Güneş et al. (2001) performed Pb, Fe, Cu and Zn analyzes of water samples taken from 8 selected sampling points on the Çorlu Stream, one of the tributaries of the Ergene River. Researchers, in order, the values of these elements; 0.096- 0.352; 0.896-3.68; they determined it between 0.244- 1.63 and 0.169- 0.349 ppm. They found that there is significant Pb and Fe pollution in the water of Çorlu Stream.

Tok et al. (2005) determined that Fe and Mn toxicity were found in the above-ground and root parts of the plants in a study they conducted in the paddy fields of Edirne province Uzunköprü and Meriç districts of the Thrace Region, where rice cultivation is intense. It was determined that Pb, Zn and Ni were at toxic levels in the roots. Researchers have revealed that this pollution originates from the Ergene River. They determined that the heavy metal pollution in the river was directly reflected on the paddy plant, and the heavy metal pollution reached the grain.

In heavy metal pollution studies conducted by DSI (2003) at the Ergene River Uzunköprü station, it was determined that the water is a 4th class irrigation water in terms of Pb and Cu concentrations, and a 3rd class irrigation water in terms of Cd concentration. The reason for such high pollution in the Ergene River has been shown that the domestic and industrial wastewater concentrated in Çorlu and Çerkezköy regions are discharged into the Ergene River without any pre-treatment.

Adiloglu et al. (2006) and Anbarcı (2010) conducted a study to determine the extent of heavy metal pollution in Ergene River, which is used for paddy irrigation in Uzunköprü and Meriç regions. According to the findings, it was determined that the Pb and Cd pollution in the river water was significant and exceeded the permissible limit values. No pollution was found in the river water in terms of Fe, Cu, Zn and Mn concentrations. It has been determined that the Ni concentration of the river water is within the permissible limit values, but should be carefully monitored for pollution. On the other hand, it is estimated that heavy metal pollution may have increased even more in the river in question today.

Arıcı et al. (2002) investigated heavy metal residues in rice of paddy irrigated by Ergene River by spectrophotometric method. In the research, 34 samples were studied and the lead rate was 0.04 – 1 mg/kg, the chromium rate 0.80 – 4.40 mg/kg and the copper rate 0.20 – 5.60 mg/kg in these samples. When evaluated in terms of the Turkish Food Codex, 13 samples were found to be above 0.3 mg/kg, which is considered the upper limit for lead.

Avşar et al. (1999) took samples from 5 different points, starting from the area where paddy cultivation began on the banks of the Ergene River, to the point where it reaches the Meriç River. These specimens belong to the plant's stem up, spike and maturation periods. She determined the amounts of iron (Fe), copper (Cu), zinc (Zn), manganese (Mn), cobalt (Co), nickel (Ni) and lead (Pb) in these samples. According to the results obtained, the Zn and Fe and Mn amounts of paddy irrigated from the Ergene River were found to be higher at some points compared to the plants irrigated from the surrounding dams and lakes. It has been determined that the Cu and Mn values are close to the levels that can have a toxic effect for plants. In rice grains, it was determined that the amount of Mn in the paddy samples irrigated in the Ergene River reached values close to twice that of dam and pond irrigation, and exceeded the average. Although there is no significant difference between the points irrigated from Ergene River and dams in terms of Co, Ni, Pb amounts of heavy metals, the highest values were found mostly at the points where irrigation from Ergene River was made.

According to the producers, although the Ergene River waters are diluted with clean water sources, they can contain foreign substances that can affect the rice production in various ways. Hurma et al. (2016) in their research, producers stated that river waters have an effect on production, especially during development periods, since they also carry substances that allow the plant to grow. Pollution in the Ergene River can affect product yields as well as change the pattern of products in the production area. Producers, who have to grow dry agricultural products on irrigable lands due to pollution, have to give up paddy production with high gross profit.

2. CONCLUSION AND DISCUSSION

When evaluated in terms of agricultural production, pollution in the river causes different problems. The first of these is the change of the product pattern. Although it is suitable for irrigable product production in agricultural lands close to the Ergene River, lower quality dry agricultural products are grown in terms of agricultural income and yield. In addition, another important problem is the decrease in product yields due to pollution. Both cause loss of agricultural income for the producers of the region, and welfare losses are experienced. Paddy farmers irrigate from the Ergene River and this causes yield and quality losses in paddy. Agricultural producers face economic damage due to water pollution that they are not caused by. According to the results of the analysis conducted with 34 rice samples collected from rice producers irrigating from the Ergene River in Uzunköprü district of Edirne, different levels of heavy metals (Cd, Pb, Cr and Cu) were detected in each of the 34 samples (Arıcı et al., 2000).

The river flows much more pollutedly in the summer months, causing an intense odor. While there is a serious increase in cancer cases in the region, the rice fields around the river are irrigated with deadly polluted water. There are many patients with Uzunköprü. Thousands of acres of agricultural land cannot be used in the Ergene Plain due to the pollution of the river. River water cannot be used in agriculture because it is class 4 polluted water. For this, it is necessary to have 2nd class water. The river that used to fish and swim is now poisonous. While melons and watermelons grow a lot around Kurtköy, they no longer grow, and those who want to buy rice ask where it is grown. It was observed that some of the landowners installed a water pump between the river and the adjacent field and irrigated the rice field without treating the incoming water. Polluted Ergene waters, heavy metal, cyanide and cadmium waters that mix with groundwater also threaten drinking water assets. A serious and vital threat in Thrace has unfortunately been carried to future generations by this pollution since 1970.

Approximately 95% of the paddy plots in the Ergene basin have the potential to be affected by the pollution in the Ergene River. This rate is quite low in wheat and sunflower planted plots. For this reason, paddy producers in the basin are trying to produce by using the water given to the Ergene River from the dams in Kırklareli province periodically (a kind of pollution level is reduced) or by flooding the paddy fields from relatively clean dams and ponds. Producers who do not use these opportunities have also turned to dry agriculture.

The gross profit obtained from paddy production affected by water pollution is about half of the rice production not affected by pollution. The main reason for this is the decrease in paddy yields due to pollution. In the study, the yield loss in areas affected by water pollution was found to be 16% compared to areas without pollution. It is very difficult to say that the main reason for the decrease in crop yields is river pollution. Although the retrospective 5-year yield average is taken in the study, when the negative effects of global climate change are taken into account, it can be thought that climatic factors are effective on yield. In order to demonstrate this clearly, it is necessary to collect long-term (at least 10 years) yield information from the field, regularly measure the pollution levels in the river, and clearly reveal the relationship between them (Hurma et al., 2016).

Today, the river no longer carries water but poison, and it scatters its poison all over the country through agriculture in the region. The products grown in the Ergene River floodplain areas should be examined in terms of heavy metals and chemicals. It is necessary to collect the product samples with scientific data, analyze them by independent laboratories, and then present the product to the public.

As a result, it should be ensured that there is coordination between all institutions and organizations operating in the basin, so that one planned or ongoing activity does not cause a problem for another. In addition, it should be taken into account that the protection of all natural resources in the basin can only be achieved through effective control of polluting sources. In this context, the provisions of the existing laws should be fully implemented in order for the institutions undertaking the audit task to fulfill their duties. In case of disruption of the audit due to legal inadequacies, it is deemed necessary to make the necessary arrangements in the relevant laws and regulations quickly.

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Evaluation of the Effects of Macro and Microplastic on Marine Organisms

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Abstract: Today, plastics, which are increasingly produced by humans, but have not yet discovered how to deal with both the production process and the wastes formed after consumption and the flow of these substances in nature, pose a threat to the ecosystem and human health. Macroplastics are transformed into smaller sized particles called microplastics in various ways in marine environments. While the effects of macroplastics on aquatic and terrestrial ecosystems can be observed, the effects of microplastics are not fully known. The aim here is to create a general awareness about the negative effects of macroplastics and microplastics on marine life. Most of the plastics produced today are in the seas, and almost half of the ocean areas contain waste plastics. These waste plastics are found both on the surface of the oceans and in the depths of the oceans that we do not see. Accumulation of plastic wastes in aquatic environments, which can be found all over the world from the poles to the deepest point of the oceans, is one of the most important environmental problems today. Innocent sea creatures, who do not know what plastic is and are not guilty of anything, often mistake it for food and consume these harmful plastic wastes. However, instead of connecting them to life, what they consume detaches them from life, and the plastic pieces they mistake for food bring the end of their lives. Birds, dolphins, various fish and many other sea creatures that try to survive in the sea are particularly affected by plastic waste. There is a fact that more than 100,000 marine mammals die each year. In this article, the effects of macro and microplastics on marine ecosystems are evaluated.

Key Words: Plastic Waste, Plastic Pollution, Sea Creatures

Makro ve Mikroplastığın Deniz Canlıları Üzerine Etkilerinin Değerlendirilmesi

Özet: Günümüzde insanın giderek daha fazla oranda ürettiği ancak hem üretim süreci hem de tüketiminden sonra oluşan atıklarıyla ve bu maddelerin doğada akışı ile nasıl baş edileceğini henüz tam olarak keşfedemediği plastikler, ekosistem ve insan sağlığı açısından tehdit oluşturmaktadır. Makroplastikler denizel ortamlarda çeşitli yollarla mikroplastikler olarak adlandırılan daha küçük boyuttaki parçacıklara dönüşürler. Makroplastiklerin sucul ve karasal ekosistemlerdeki canlı hayatına etkileri gözlemlenebilirken, mikroplastiklerin etkileri tam olarak bilinmemektedir. Burada amaç makroplastikler ve mikroplastiklerin deniz canlıları üzerine olumsuz etkileri ile ilgili genel bir farkındalık yaratmaktır. Günümüzde üretilen plastiklerin büyük bir bölümü denizlerde olup okyanus alanlarının neredeyse yarısında atık plastikler bulunmaktadır. Bu atık plastikler hem okyanusların yüzeyinde hem de okyanusların görmediğimiz derinliklerinde bulunmaktadır. Kutuplardan okyanusların en derin noktasına kadar dünyanın her yerinde rastlanan plastik atıkların sucul ortamlarda birikimi günümüzde en önemli çevre sorunları arasındadır. Plastik ne olduğundan haberi olmayan ve hiçbir suçu olmayan masum deniz canlıları, çoğu zaman besin zannederek bu zararlı plastik atıkları tüketmektedir. Ancak tükettikleri onları hayata bağlamak yerine, hayattan koparmakta ve besin zannettikleri plastik parçaları hayatlarının sonunu getirmektedir. Plastik atıklardan bilhassa denizde hayatını idame ettirmeye çalışan kuşlar, yunuslar, çeşitli balıklar ve daha birçok deniz canlısı yoğun şekilde etkilenmektedir. Her yıl 100,000'den fazla deniz memelisinin hayatını kaybettiği gerçeği bulunmaktadır. Bu makalede makro ve mikroplastiklerin deniz ekosistemlerinde neden olduğu etkiler değerlendirilmiştir.

Anahtar Kelimeler: Plastik Atıklar, Plastik Kirliliği, Deniz Canlıları

1. INTRODUCTION

The term "plastic" refers to any material discovered in the early 20th century that contains high polymer as its essential component. Plastics; they are synthetic materials consisting of organic polymer compounds and various elements including oxygen, hydrogen, sulphur, nitrogen and carbon (American Chemistry, 2005). It has been reported in various studies that it is cheap, light, durable and reusable (Laist, 1987; Andrady & Neal, 2009).

Plastics are used in many areas in our daily life. Some of these are kitchen utensils, plastic boxes, pipes, toys, coatings, insulating layers of cables, packaging film manufacturing, bags, bags and bags, plastic bottle making, food packaging, automobile fenders, jars, plastic film, microwave packaging, fiber (fiber), textile products, toothbrush bristles, fishing line and automotive sub-industry. The reason why plastics have so many uses is that they are light, flexible, easy to process, resistant to corrosion, have high electrical and heat insulation, easy to use and economical. As the source of microplastics, as shown in figure 1; Most of the synthetic textile fibers, microbeads found in cosmetics, detergents and toothpastes, plastic factory wastes, wear and tear particles

from automobile tires, and the transformation of plastics into small particles in the environment over time can be counted (Yurtsever, 2015).

Figure 1: Sources of Microplastics.



Resource: Yurtsever, 2015.

Today, there are islands in the Pacific Ocean, mostly consisting of plastic garbage and spreading over 1.6 million square kilometers, that is, three times the size of Turkey. These cover the surface and degrade the ocean quality. Even in the Mariana Trench, 12 thousand kilometers below the water, there is plastic garbage. By 2050, it is expected that there will be more plastic in the seas and oceans than fish (Figure 2) (URL 1).

Figure 2: By 2050, Our Oceans Will Have More Plastic Than Fish!



Resource: URL 1.

Accumulation of plastics in the ocean and sea is a global problem (Jahnke et al., 2017). Plastics are broken down by various effects, mixed with nature and consumed by living things. One of the most emphasized topics in recent years is microplastics. There is no clear internationally accepted definition of microplastic. Plastics smaller than 5 mm are called microplastics by the National Oceanic and Atmospheric Administration (NOAA) (NOAA, 2008). Microplastics contain particles of varying size and chemical composition. It is reported that microplastics are not colored, in transparent form and in very small size. It has been emphasized that due to these features, they cause serious problems with their passage to water resources (Yurtsever, 2015). It is possible to say that the main causes of microplastic contamination are the slow disintegration of plastic waste and the use of microbeads as exfoliants in beauty products, widespread and indiscriminate use in food packaging and beverage bottles, synthetic textile products, vehicle tires, paints, personal care products and electronic equipment (Nara, 2019).

Today, the presence of microplastics has been detected in all oceans, rivers, lakes, wastewater, drinking water, various foodstuffs, and even rain water. After mixing with the sea, microplastics can go to very far places because they are generally very light and do not sink in water. Microplastics have been found even in glaciers in the Arctic and Antarctic (Wetherbee et al., 2019).

It has been reported that one of the causes of plastic pollution in the seas is fishing (Lusher et al., 2017; Ostle et al., 2013). It has been emphasized in various studies (Lusher et al., 2017) that some of the materials used in fishing (plastic nets, fish storage boxes, gloves, fishing line, etc.) are left, lost and forgotten, and that many

fishing gears are plastic, causing pollution. It is stated that boats used for fishing and recreational purposes also cause plastic waste (Vlachogianni et al., 2017). It is stated by Hinojosa and Thiel (2009) that aquaculture also causes microplastic pollution.

It is estimated that the annual plastic production has increased greatly over the years (Wright et al., 2013; Brandts et al., 2021) and will be 540 million tons in 2020 (Berber, 2019). Even more worrying is; it is estimated that by the 2050s, the amount of plastic pollutants in the seas will exceed fish biomass (Eerkes-Medrano et al., 2015).

Humans have produced over 9 billion tons of plastic so far. By 2050, almost 38 billion tons of plastic will be produced, of which 13 billion tons will be waste. When the distribution of microplastics in the oceans is examined, more than 1 million parts can be found in 1 cubic meter, or less than 1 piece in 100 cubic meters. A single plastic product can break down into millions of microplastic particles and float passively in the seas (Yurtsever, 2015). These particles, which accumulate above and below the water surface, can deteriorate the quality of the water they are in, and can be swallowed by sea creatures and thus transferred to the human body through the food chain (Kayan & Küçük, 2020).

The environment contributes to the accumulation and transport of microplastics. In addition, due to absorption, microplastics keep micro pollutants and some heavy metals in the environment and cause them to spread. This means that microplastics are exponentially dangerous. Microplastic pollution is increasing day by day due to plastic waste thrown into environments such as the ocean and sea (Esmeray & Armutçu, 2020).

Aquatic organisms can become contaminated with microplastics (and nanoplastics) by consuming water contaminated with microplastics or by taking other organisms exposed to microplastics as food, causing human exposure to microplastics (Revel et al., 2017). Plastic particles have been detected to the lowest levels in invertebrates (Crustacea, molluscs, etc.) from the lowest food chain, such as zooplanktonic organisms, and in the highest vertebrates (fish) (Van Cauwenberghe et al., 2015). In a study on the detection of microplastics along the Mediterranean coast of Turkey, the stomach and intestines of 1322 fish samples were examined, and 1622 microplastic particles were detected, including fibers (70%) and hard plastics (20.8%) (Esmeray & Armutcu, 2020; Güven et al., 2017).

An example from Turkey can be given to understand the extent of the microplastic problem. Greenpeace Akdeniz examined the stomach and digestive system of many fish and mussels collected from the Aegean, Mediterranean and Marmara seas within the scope of the "Single-use plastics ban" project. According to the findings in the report and published on their website, microplastics were found in 64.8% of mullet, 63% of red mullet, 34.3% of blueberry, 32.8% of tabby and 26.7% of horse mackerel. This means that in general, 44.3% of all fish contain microplastics. That is, approximately 1 out of every 2 fish contains microplastics. The number of microplastics per fish is 2.5 in mullet, 1.1 in red mullet, 0.6 in purr, 0.4 in tabby and horse mackerel. Accordingly, the average number of microplastics per fish in 5 different commercial fish species is 1.08 (URL 2).

Plastic particles have been detected in the bodies of aquatic organisms, and it has been determined that they take plastic particles into their digestive systems by mouth or gills. 1822 microplastic particles, 70% fiber and 20.8% hard plastic, were extracted from the stomach and intestinal tissues of 1377 fish on the Mediterranean coast of Turkey (Güven et al., 2017).

In a study conducted in Norway, 3% of microplastics were detected in the stomach of Atlantic cod (*Godus morhua*) (Bråte et al., 2016). In a study conducted in coastal and freshwater fish (26 different fish species) in China, 55.9-92.3% of microplastics were detected (Jabeen et al., 2017). Microplastics were found to be 0.36 particles/g in mussels in Germany, and 0.2 particles/g in France, Belgium and the Netherlands (Cauwenberghe & Janssen, 2014). In addition to lethal effects, micro/nanoplastics ingested/ingested by aquatic organisms and added to the circulation can also cause sublethal effects such as impaired migration and mobility, decreased body weight, loss of hunger, and decreased food capture and digestion (Allsopp et al., 2006). Sussarelu et al. (2016) found that oysters exposed to 2-6 µm microplastic contamination during their reproductive cycle spend their energy on the protection and structural growth of the organism, and the change in this energy distribution causes reproductive disorders. In addition, it was determined that oysters had significant decreases in egg diameter/number and sperm speed, and offspring development was significantly reduced compared to the control.

Wang et al. (2019) that microplastics accumulate in the gill, intestinal and liver tissues of *Oryzias melastigma*, causing structural damage to the tissues; it causes disturbances in the reproductive behavior of fish depending on sex; It has been reported that it down-regulates the transcription of genes involved in the steroidogenesis

pathway in females and delays the development of offspring. Tang et al. (2018) reported that exposure to microplastics suppresses the immune system in aquatic organisms and upregulates the transcription of stress-related genes. In the study conducted with sea bream (*Sparus aurata*), it was stated that microplastics are perceived as stressors by fish, that microplastics significantly affect the immune system activation in fish, and that exposure to high concentrations of microplastics induces chronic stress and negatively affects fish physiology (Espinosa et al., 2017).

It has been reported in previous studies that micro/nanoplastics can enter the circulation from the digestive systems of aquatic organisms, pass through the cell membrane, blood-brain barrier and placenta, causing various physiological, neurological and behavioral changes (Vethaak & Leslie, 2016; Nelms et al., 2018).

Fish can swallow small plastic pieces due to their constant intake of water. When other animals eat fish that have ingested microplastics, microplastics can move up the food chain. In this way, microplastics can move to the top of the food chain (Nara, 2019). The physical properties of plastic materials can create a habitat for various microorganisms. Biofilms formed on the plastic surface can act as a vector and aid the growth of pathogenic microorganisms, fecal indicator microorganisms and algae. Studies on the presence of potentially harmful microorganisms that colonize microplastics are available in the literature (Atakan et al., 2021; De-la-Torre, 2020).

Clark et al. (2016) reported that microplastics consumed by sea creatures can cause health problems and fatal situations. It has been emphasized in studies that microplastics, which cause obstruction in the intestinal tract, prevent food intake by creating a feeling of satiety in living things because they are not digested (Browne et al., 2008; Wright et al., 2013). It has been reported in different studies (Watt et al., 2016; Smith et al., 2018; Carbery et al., 2018) that microplastics enter the body of living things through feeding route and gills.

The substances contained in microplastics that enter the body of sea creatures; negative effects on the liver and endocrine system have been reported (Rochman et al., 2014). In addition, it has been reported that micro and macro plastics are less common in fish found in open seas, and higher amounts are found in coastal species (Murphy et al., 2017).

According to the latest studies, traces of plastic were found in almost 100% of sea turtles, 59% of whales, 36% of manatees, 43% of marine mammals in general, and 40% of seabirds in samples taken from the digestive systems and blood of sea creatures. Every year 100,000 marine mammals and turtles and 1 million seabirds die from plastic pollution. The biggest reason why ocean creatures die is because they take plastics as food, but they can also die from suffocation, infection or entanglement (Figures 3, 4 and 5) (URL 3 and URL 4).

Figure 3: Turtle Wrapped in Old Fishing Nets (left).

Figure 4: Seahorse Carrying Ear Cleaning Litter (right).



Resource: URL 3.



Resource: URL 3.

Every plastic bag that cannot be recycled causes pollution in nature and in the seas. Water turtles, who mistook plastic bags for jellyfish, try to eat every plastic bag they see (Figure 6). Although disposable plastic straws seem small and innocent, they are one of the plastic products that cause the biggest pollution in the seas. It is estimated that more than 500 million plastic straws are used every day in the United States.

A sea turtle off the Mediterranean coast of Spain (Figure 2) was caught in an old plastic fishing net. The tortoise is able to stretch its neck and take air out of the water, but if the photographer had not set it free, it would have died. Fishing nets pose a great threat to turtles, among the largest creatures of the sea.

Figure 5: Turtle Who Thinks Plastic is Food and Wants to Eat It.



Resource: URL 4.

The shell of this hermit crab found on Okinawa Island in Japan was collected by people who came to the beach. In order to protect its soft belly area, the crab has made a plastic container home for herself, which she found on the shore (Figure 7).

Figure 6: A Turtle Who Mistook Plastic Bags for Jellyfish (left).

Figure 7: The House That the Crab Has Built for Himself from a Plastic Container That He Found on the Shore (right).



Resource URL 4.



Resource URL 4.

In the seas and oceans, mountains of plastic garbage form country-sized heaps. Their amount is increasing every year. Over 1 million sea creatures die and disappear every year due to the plastic waste problem. The fact that people are not aware of the gravity of the situation causes the danger to continue (URL 5).

The answer given to the question of what is the substance that is used every day and is in every aspect of life, but which causes the most damage to the ecosystem, is usually plastic. Whales with kilograms of plastic bags coming out of their stomachs, water turtles with plastic straws stuck in their noses, birds that make their nests with plastic pieces, animals that mistake colorful plastic particles for food and eat them deeply sadden us all, but our planet is under a greater danger day by day due to the lack of sensitive solutions to plastic pollution (URL 2).

Examining a beached whale on Norway's Sotra Island, experts removed multiple plastic bags and copious amounts of plastic waste from the whale's stomach. Experts state that this unfortunate whale most likely died due to plastics in its stomach. This plastic waste caused the whale to die before it could hold on to life any longer, as it made the digestive system very bad. Even worse, the whale's last moments were revealed to be

hungry. This sad and heartbreaking event is only a small example of the nature massacre in question and many others that we know or do not yet know (URL 6).

Since the 1990s, more than 140,000 marine animals have been reported to have died each year due to ingestion or wrapping of plastics (Valeria et al., 2012). Many of the studies are concerned with the accumulation and elimination of microplastics by aquatic organisms. In a review by Kögel et al. (2020), 66 out of 73 publications investigating nanomicroplastics below 10 μm suggested that they may have deleterious effects on aquatic and coastal organisms, and that particle size is a crucial factor in determining uptake, retention and effects.

It has been stated that plastic pieces (nanoplastic) smaller than one micrometer accumulate in many aquatic products from the larval stage to adulthood and are included in the food chain (Anonymous, 2019). It has been emphasized that plastic pollution in the seas causes physical injuries (Gassel et al., 2013), obstruction and damage in the digestive systems when swallowed by organisms living in the sea, and also negatively affects reproductive activities (Bulat & Kılınç, 2020; Rummel et al., 2016).

Birds, mammals, turtles and invertebrate species in the seas and fresh waters can lose their lives because they become entangled in plastic waste (Gall & Thompson, 2015). The presence of microplastics in fish with different nutrition types (omnivorous, herbivorous, and carnivorous) was investigated. It has been determined that the microplastic content is high in plant-feeding fish (Mizraji et al., 2017).

2. RESULT

Plastic is a material that we use in almost every aspect of our lives and that we cannot easily remove from our lives. Unconscious use of plastics by consumers and insufficient recycling can cause environmental problems. Microplastic pollution has been detected all over the planet, from Arctic snow and Alpine soils to the deepest oceans. Due to the size of microplastics, their potential for bioaccumulation is very high. Particles may contain toxic chemicals and harmful microbes and may harm some sea creatures (Atakan et al., 2021).

Oceans and seas have been polluted with plastics for nearly 60 years. The increase in plastic consumption all over the world, the fact that plastics remain in the environment for hundreds of years without deterioration, the decomposition of plastics into smaller pieces, the possibility of being detected in organisms at all levels of the marine food chain and the possibility of human exposure to microplastics through food increase the awareness on this issue day by day (Pekmezekmek, 2022).

Microplastics pose a danger to both human and environmental health. In the researches, it is seen that microplastics enter the food chain and accumulate in living bodies, and block the digestive tracts of small creatures (dairy flea, zooplankton, earthworm, etc.). Microplastics can be toxic due to the chemicals added to them while producing the plastic material (for flexibility, resistance to pressure, and resistance to high or low temperatures). Another danger is that harmful chemicals such as PCB and DDT, which can be absorbed on the surfaces of microplastics, can be taken into the living body together with microplastics (Esmeray & Armutcu, 2020).

The exposure of living things to plastics will also increase over the years. There is a prevailing view that acute toxicity or long-term exposure, such as sickness or death, will not yet have many effects in humans. However, it is not an undeniable result that it has been stated that more than 140,000 marine animals have died every year since the 1990s, due to the aquatic life, defined as bioindicator in nature, swallowing plastics or being wrapped in plastic. Scientists, who claim that plastic pollutants may exceed the mass of sea creatures in a few decades, also warn. As a result, it is clear that much more studies are needed to see the possible consequences of accumulation at the cell and tissue level, whether through the food chain or other long exposures (Pekmezekmek, 2022).

Although the effects of the consumption of micro/nanoplastic contaminated seafood on human health are ignored today, it is not known what kind of damage the consumption of these products together with other micro/nanoplastic contaminated food products will cause. The fact that micro/nanoplastics can cause behavioral and physiological changes in humans, similar to aquatic organisms, should be considered. The focus of research on micro/nanoplastic bioaccumulation factors and trophic interactions of aquatic organisms is important in determining which seafood can or should not be safely consumed by humans (Kocamaz, 2029).

Plastic pollution is a growing problem every day. If precautions are not taken, the species of sea creatures are endangered, and other living things that consume the affected creatures from this pollution cause many health problems. Since people are responsible for this problem, people should produce the solution.

In order to reduce the problem at its source, making recycling more widespread, raising awareness of consumers and making the necessary legal regulations on the subject are important for both food safety, human and animal health and ecological balance.

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Borsa İstanbul Özelinde Döviz Kurları ile Hisse Senetleri Arasındaki Doğrusal ve Doğrusal Olmayan Eş Bütünleşme İlişkisinin Analizi

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Özet: Çalışmada makroekonomik göstergeleri doğrudan etkileyen öEuro ve ABD Doları ile hisse senedi fiyat ilişkileri doğrusal ve doğrusal olmayan eşbütünleşme testleriyle analiz edilmektedir. Bu amaçla ARDL, NARDL ve Breitung (2001) testleri tercih edilmiştir. Ulaşılan sonuçlara göre Türkiye'de iki değişken arasında uzun ve kısa vadede eş bütünleşme ilişkisi olup geleneksel yaklaşım desteklenmektedir.

Anahtar Kelimeler: ARDL Eş Bütünleşme.

Abstract: In the study, the stock price relations with the euro and the US dollar, which directly affect the macroeconomic indicators, are analyzed with linear and non-linear cointegration tests. For this purpose, ARDL, NARDL and Breitung (2001) tests were preferred. According to the results, there is a long and short term cointegration relationship between the two variables in Turkey and the traditional approach is supported.

Key Words: Stock returns, Exchange, ARDL , Breitung

GİRİŞ

Çalışmada sektör bazlı borsa endeksleri ile kur arasındaki ilişkiyi ortaya koymayı amaçlamaktadır. Döviz kuru ile hisse senedi fiyatları arasındaki ilişkinin incelenmesi birçok açıdan önemlidir. Bunlardan ilki, para ve maliye politikası ile ilgili kararları etkileyebileceğidir. Bazı durumlarda, politika yapıcılar ihracatı teşvik etmek için daha ucuz yerel parayı savunmaktadırlar. Bu gibi durumlarda uygulanan politikanın borsa üzerinde baskı oluşturabileceği göz önünde bulundurulmalıdır. İkinci neden, borsa ve hisse senedi piyasası arasındaki ilişkide döviz kurunun rolünü tahmin etmek için kullanılabilmesidir. Söz konusu ilişkilerin bilinmesi yabancı sözleşmelere konu olan ve kazançlarını dengeleyen döviz kuru riskini yönetmede çok uluslu şirketlere faydalı olabilmektedir. Üçüncüsü, para birimi daha çok yatırım fonlarının portföylerine bir varlık olarak dahil edilmektedir. Bir portföydeki döviz kurları ile diğer varlıklar arasındaki bağlantı hakkında bilgi, fonun performansı için hayati önem taşır. Kur ile hisse fiyatları ile döviz kuru arasındaki ilişki konusunda teorik bir fikir birliği yoktur. Bununla birlikte borsa ve döviz kuru arasındaki ilişkiyi açıklayan iki yaklaşımdan ilki olan geleneksel yaklaşıma (mal piyasası teorisi) göre; kurdan hisse senedi fiyatlarına doğrudan bir nedensellik mevcuttur.

Döviz kurlarındaki değişimler ülkelerin rekabet gücünü etkilemekte ve dolayısıyla dış ticaret dengesi ve reel gelir etkilenmektedir (Dornbusch ve Fischer, 1980:966). Portföy dengesi yaklaşımında, döviz kurundan hisse senedi fiyatına doğru nedenselliğin varlığını iddia eder. Geleneksel yaklaşım, döviz kurlarının ülkelerin cari hesap bakiyeleri tarafından belirlendiğini ve döviz kurundaki değişimin sadece ticaret dengelerini değil ekonomik değişkenleri de etkilediğini iddia etmektedir. Teori, döviz kurundaki düşüşün (yerel para birimi değerindeki artış) ihracata yönelik bir ülkenin politika uygulayan ülkeleri ekonomisini olumsuz etkileyeceğini öngörmektedir. Dolayısıyla bu durum, borsayı olumsuz etkileyen ihracatçı firmaların hisse senetlerinin çekiciliğinin azalmasına neden olmaktadır. (Olumsuz etki).İthalatçı ülkeler için para birimlerindeki düşüşün borsayı olumlu etkilemesi beklenmektedir (Obben, Pech ve Shakur, 2006). Portföy dengesi teorisine göre, yükselen hisse senedi piyasaları sermayeyi ülkelere çeker. Bu, yerel para birimine olan talebi artırarak (döviz kurları düşerken) yerel para birimi değerinde bir artışa yol açacaktır. Türkiye ekonomisinde uzun süredir mevcut olan yüksek enflasyon, ve istikrarsız kur ortamı nedeniyle döviz kuru konusu daha da önem kazanmaktadır (Önal vd., 2002: 17). Döviz kuru politikalarının uygulanmasında gelişmekte olan hisse senedi piyasalarında gelişmiş hisse senedi piyasalarına göre daha temkinli olunması gerekmektedir. Döviz kurunda gelecekteki ayarlamalar, yabancı sermayenin ulusal hisse senetlerine akışını etkiler. Söz konusu iki değişken arasındaki ilişkinin zayıflığı veya eksikliği şu şekilde değerlendirilebilir: Cari döviz kurları, gelecekteki beklenen döviz kurları tarafından belirlenir. Döviz kurunun gelecekteki değerini etkileyen herhangi bir faktör, bugünkü döviz kurunu da etkiler. Döviz kurunun değişmesine neden olan faktörler, hisse senedi fiyatının değişmesine neden olan faktörlerden farklı olabilir. Bu durumda iki değişken arasında herhangi bir ilişki olmayacaktır (Muhammed ve Rasheed, 2004: 537).

Çalışmanın ana motivasyonunu Türkiye’de en çok kullanılan ve ticarete en fazla konu olan USD ve EURO özelinde döviz kuru ile hisse senedi fiyatları arasındaki ilişkinin Türkiye ekonomisi için analizi oluşturmaktadır. Doğrusal olan ve olmayan eş bütünleşme ve nedensellik analizleri ile gerçekleştirilecek analiz sonucunda ulaşılabacak sonuçların dış ticaret ve hisse senedi piyasası ilgilileri için faydalı olması amaçlanmaktadır. Analize konu olan dönemin farklı döviz kuru rejimlerinin geçerli olduğu yılları içermesi, benzer şekilde Rahip Bronson olayı ve ardından oluşan kur şokunu, covid 19 Salgını ve TCMB başkanı değişimi sonucunda meydana gelen ekonomik gelişmeleri kapsamı çalışmanın özgünlüğünü arttırabilecektir. Çalışmanın ilk bölümünü teorik alt yapıya değinilecek, ardından ulusal ve uluslararası literatür incelenecektir. Son bölümde ise ekonometrik analiz ile tahminlere geçilecektir.

Teorik Altyapı

Teorik anlamda kur hareketlerinin hisse senetlerini etkilemesi olağandır. Tüm işletmeler için bu değerlendirme geçerli olmasa da genel geçer bir ifadeyle kurdaki değerlenme (değer azalışı) ulusal firmaların yurtdışı pazardeki rekabet gücünü ve nakit döngüsünü azaltır (artırır) ve yurtiçi hisse senedi fiyatları düşer (artar). Benzer mantıkla hisse senedi fiyatlarındaki artış ya da azalışlar da uluslararası çeşitlendirilmiş portföylere ilave edilen yerli ve yabancı varlıkların arz ve talebini gidermek adına kur ayarlamalarını gideceği için döviz kurlarını etkiler (İlarslan,2018: 96). Bu bağlamda hisse senedi ile kur ilişkisinin anlaşılabilmesi, o ülkeye yatırım yapan yabancı yatırımcılar ve karar alıcılar için eşit derecede önemlidir (Reboredo vd., 2016: 76).

Döviz kurları ile hisse fiyatları arasındaki ilişki hisse tek taraflı olabileceği gibi çift taraflı da olabilmektedir. Bundan dolayı iki değişken arasındaki ilişkiye yönelik portföy dengesi yaklaşımı, diğeri ise geleneksel (Ticaret Dengesi) olmak üzere iki farklı teori geliştirilmiştir. Her iki teori de söz konusu değişkenler arasında nedensellik durumunu farklı şekilde yorumlamakta ve geleneksel yaklaşım ilişkilerde doğrusallığa odaklanırken portföy yaklaşımı negatif yönlü ilişkilere odaklanmaktadır.

Geleneksel (Ticaret Dengesi) yaklaşımında (Dornbusch ve Fischer,1980) hisse senedi fiyatları ile döviz kuru ilişkisinin, ulusal para biriminin değerlenmesinin dış ticaret dengesini ve uluslararası rekabeti etkileyebileceğini savunmaktadır. Değerli ulusal para ihracatçı firmalar bakımından uluslararası rekabet gücünü azaltıcı etki gösterecektir. Bu bağlamda ihracata konu olan üretimin azalması, hisse senedi fiyatlarının ve firmaların kârlarının düşmesine neden olabilecektir. Böylece hisse senedi fiyatlarıyla döviz kuru arasında pozitif bir korelasyon beklenmektedir. Dornbusch ve Fischer (1980)’e firmaların rekabet gücünü etkileyen etmenlerin başında döviz kuru oynaklıkları gelmektedir. Söz konusu dalgalanmalar neticesinde firmaların çoğu faaliyetlerine finansman sağlamak amacıyla borçlanacak, bu durum doğrudan firmaların kâr ve maliyetlerini etkileyecektir. Böyle bir durumda firmalara ait hisse senetleri de bu etkiden paylarını alacaklardır. Hisse senedi ve döviz kuru piyasaları arasındaki pozitif ilişki ve döviz kurundan hisse senedi fiyatlarına doğru nedensellik, değer kaybeden ulusal para durumunda, yerli firmaları daha avantajlı hale getirerek , ihracatın artmasına ve hisse senetlerinde artışa neden olabileceği şeklinde ifade edilebilir.

Portföy dengesi modelinde(Branson,1983; Frankel,1983) ise hisse senedi fiyatlarından kura nedensellik ilişkisi söz olup hisse senedinin parçası olan sermayenin para talebi kanalıyla döviz kurlarını etkileyebileceğini ifade etmektedir(Özmen,2007: 522). Hisse senedi fiyatlarındaki artış daha yüksek bir faiz oranını garantileyerek beklenenin üzerinde bir para talebine sebebiyet verebilecektir. Nisbi olarak yüksek faizli yabancı sermaye girişleri ulusal paranın değer kazanması ile sonuçlanacaktır. Bu durum döviz kurları ile hisse senedi fiyatlarının negatif korelasyon ilişkisinde olacağını ifade edecektir. Portföy dengesi teorisinin temeli yatırımcıların menkul kıymet getiri oranlarındaki değişimlere tepki olarak portföylerini ayarlama sürecine dayanmaktadır. Portföy dengesi modelinin temel varsayımı, risklerini düşürmeyi hedefleyen yatırımcılar için portföylerinde yerli ya da yabancı menkul kıymet bulundurma arasında risk bakımından fark bulunmadığı ve yatırımcının yabancı menkul kıymet bulundurmasından dolayı farklı risk primi talep etmeyeceği varsayımına dayanır (Cushman, 2006: 307-309, Khan ve Abbas, 2015: 137-139). Fakat, bu durum genel geçer olmayıp şartların değiştiği durumlarda yatırımcılar portföylerinde değişikliğe gitmektedirler.

Bilhassa gelişmekte olan ülkelerde yabancı ilgisini arttırmak ulusal paraya olan talebin de artmasını sağlayacaktır. Hisse senedi fiyatlarındaki düşüş, ileride oluşacak kayıplar nedeni ile yatırımcıların ihtiyatı olarak hisse senedi satmalarına ve ulusal parayı yabancı paralarla değiştirerek sermaye çıkışına neden olacaktır.

Literatür

Gavin (1989), çalışmasında keskin bir şekilde artan hisse senedi piyasasının toplam talep üzerinde olumlu bir etkisi olduğunu göstermiştir. Söz konusu etki yeterince büyükse, hedeflenen genişletici parasal veya daraltıcı maliye politikaları etkisiz hale gelecektir. Mukherjee ve Naka (1995), hisse senedi ile kur arasındaki ilişkiyi gelişmiş ülkeler için modelleyerek ABD ve Japonya özelinde analiz etmişlerdir. Çalışma sonucunda makroekonomik değişkenlerin uzun dönem esnekliklerinin yazarların savunduğu a priori hipotezleriyle uyumlu olduğu anlaşılmıştır. Doidge vd. (2000), 1975-1999 döneminde 18 ülkeden 17.929 finansal olmayan firmayı kullanarak firma değeri ile döviz kuru arasındaki ilişkiyi incelemiştir. Çalışmada, uluslararası satış şirketleri döviz kuru düşüşlerinde %0.72 daha iyi performans gösterdiği sonucuna ulaşılmıştır. Benzer şekilde, kur artışı durumunda %1,10 daha düşük performans göstermiştir. Sonuçlar portföy dengesi yaklaşımını desteklemektedir. Akbar, Iqbal ve Noor (2019) Pakistan ekonomisi için kur-hisse senedi fiyatı ilişkisini 2001-2014 yılları için VAR ve Bayesyen VAR modeliyle analiz ettikleri çalışmalarında değişkenler arasında uzun dönemli bir ilişkiye ulaşamamışlardır. Bununla birlikte döviz kurunda meydana gelen olumsuz dalgalanmalar hisse senedi fiyatlarında düşüşe neden olmaktadır. Tian ve Ma (2010), finansal serbestleşmenin Çin'deki döviz kuru ve hisse piyasası performansı etkileşimini ARDL eş bütünleşme yaklaşımıyla araştırdıkları çalışmalarında hem döviz kurunun hem de para arzının hisse senedi fiyatını olumlu yönde etkilediği sonucuna ulaşmışlardır. Doğru ve Receoğlu (2013) Türkiye ekonomisi için 1980-2013 yılları arasında hisse senedi fiyatları ile kur arasındaki ilişkileri doğrusal ve doğrusal olmayan eşbütünleşme analizleri ile inceledikleri çalışmalarında Türkiye'de "geleneksel yaklaşımın" geçerli olduğu sonucuna ulaşmışlardır. Şensoy ve Sobacı (2014), 2003-2013 yılları arasında Türkiye'de döviz kuru, faiz oranı ve hisse senedi fiyatları arasındaki dinamik ilişkiyi inceledikleri çalışmalarında oynaklık şoklarının dinamik korelasyonlarda ani değişiklikler yarattığını, ancak bu etkinin sadece kısa vadeli olduğunu ve ardışık yüksek oynaklık rejimleri arasında sürmediğini ortaya koymuşlardır. Belen ve Karamelikli (2016), döviz kuru ile hisse senedi arasındaki ilişkiyi Türkiye ekonomisi için inceledikleri çalışmalarında BİST-100 Endeksi ile ABD doları döviz kuru arasında eşbütünleşmenin var olduğu sonucuna ulaşmışlardır. Luqman ve Kouser (2019) Japonya, Almanya, Fransa, İngiltere, Japonya, ABD, Hindistan, Brezilya, Kanada, İtalya, Rusya, Çin, Hindistan, Meksika ve Güney Afrika'yı kapsayan ülkelerde kur-hisse senedi ilişkisini Johansen Eş bütünleşme testi ve Granger Nedensellik yöntemiyle analiz ettikleri çalışmalarında analize konu olan bütün ülkelerde değişkenler arası uzun dönemli ilişki tespit etmişlerdir. ABD, Hindistan ve Brezilya'da hisse hisseden kura tek yönlü nedensellik, Japonya'da kurdan senede nedensellik vardır. Diğer ülkelerde ise nedensellik ilişkisi tespit edilmemiştir.

Akdağ ve Yıldırım (2019) Türkiye için USD/TL kuru ile BIST Finans Endeksi ve BIST Sanayi Endeksi arasındaki ilişkiyi asimetrik nedensellik ve Granger nedensellik analizi ile test ettikleri çalışmalarında Hatemi-J nedensellik analizi USD/TL 'de negatif ve pozitif şoklardan hem her iki endekste pozitif ve negatif şoklara doğru nedenselliğin varlığına ulaşmışlardır. Granger nedensellik analizinde ise söz konusu değişkenler çift yönlü nedensellik ilişkisine sahiptir.

Uğur ve Bingöl (2020) Türkiye'de kur-hisse senedi fiyatı ilişkisini USD Dolar-Euro sepeti ile mali sektör endeksi, faktöring ve finansal kiralama endeksi, bankacılık endeksi, sigortacılık endeksi, gayri menkul yatırım ortaklığı endeksi, holding ve yatırım ortaklığı endeksi özelinde analiz etmişlerdir. 2000- 2017 yılları arasındaki döneme ait sonuçlara göre Ulaşılan sonuçlara göre hisse senedi fiyatları ve döviz kurları arasındaki ilişkinin hisse senetlerinden döviz kuruna doğru olduğu sonucuna ulaşılmıştır. Genç ve Öztürk (2021) Türkiye'de 2009-2020 dönemi için kur ile hisse senedi fiyatları arasındaki ilişkiyi asimetrik nedensellik ve markov rejim değişimi modeli ile analiz ettikleri çalışmalarında BIST100 pozitif ve negatif şoklardan döviz kurundaki pozitif ve negatif şoklara doğru nedenselliğin olduğu sonucuna ulaşmışlardır. Bunun yanında Markov Rejim Değişim Modeli sonuçlarına göre gerek daralma gerekse genişleme dönemlerinde iki değişken arasında anlamlı ilişkinin olduğu anlaşılmıştır.

3.Ekonometrik Analiz

3.1. Veri ve Metodoloji

Bu çalışmada Borsa İstanbul (BİST) 100 endeksinin kapanış fiyatı ile ulusal sanayi endeksi, finansal endeks ve hizmetler endeksinin kapanış fiyatları dikkate alınarak hisse senedi fiyatları ile döviz kuru arasındaki ilişki incelenmektedir. ABD doları ve Euro kuru TL cinsinden satış fiyatları olarak analize dahil edilecektir. Kiran (2009) ve Doğru, Recepoğlu (2013) çalışmalarında olduğu gibi, döviz kurları ile hisse senedi fiyatları arasındaki ilişkiyi açıklamak için kurulan modelde finansal derinlik de betimsel bir değişken olarak tanıtılmaktadır. Çalışmada Türkiye ekonomisi için önem arz eden kriz yılları olan 1994 Krizi, 2001 Krizi ve 2008 Küresel krizi yerleşik deterministik eğilim (t) ile modele eklenmektedir. Bu üç kukla değişken, BİST ve döviz kuru üzerindeki şok

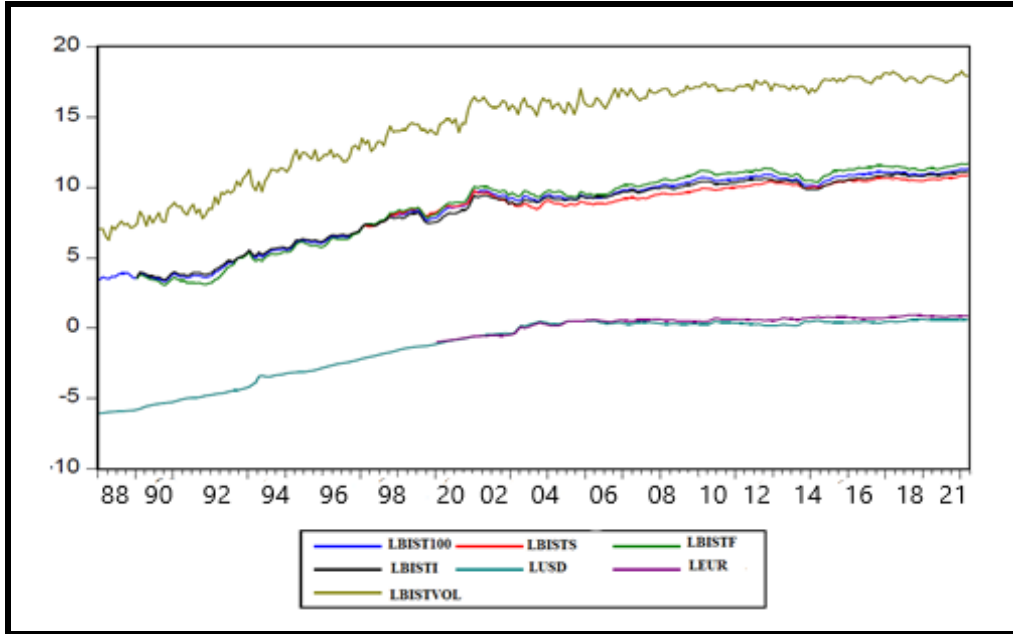
etkisini temsil etmek için analize dahil edilmiştir. Finansal kriz yılları 1 değerini alırken diğer yıllarda 0 değerini almaktadır. Ayrıca birim kök testlerinde anlamlı kılma tarihleri de kukla değişken olarak modele eklenecektir. Tercih edilen tüm veriler mevsimsel olarak düzeltilmiş ve 1988:01 ve 2021:10 döneminde analize aylık olarak eklenmiştir. Tüm veriler Türkiye Cumhuriyet Merkez Bankası ve Sermaye Piyasası Kurulu istatistiklerinden elde edilmiştir. Ayrıca çalışmada verilerin logaritmik dönüşümleri kullanılmıştır. Analize dahil edilen tüm değişkenler tablo 1'de gösterilmiştir.

Tablo 1: Değişkenler, Semboller ve Kaynaklar

Sembol	Değişken	Kaynak
LBIST100	BİST 100	BİST
LBISTS	BİST 100 Hizmet	BİST
LBISTF	BİST Finansal	BİST
LBISTI	BİST Sanayi	BİST
LUSD	Türk lirası / ABD Doları	TCMB
LEUR	Türk lirası / Euro	TCMB
LBISTVOL	Borsa İstanbul Hacmi	TCMB

Grafik (1) zaman serileri arasındaki basit ilişkiyi göstermektedir. Grafik (1)'ye göre döviz kuru ve hisse senedi fiyatlarının birlikte hareket ettiği açıkça görülmektedir. Grafik (1), Euro kuru ile fiyat endeksleri arasındaki ilişkinin derecesinin, incelenen dönemler için dolar ve fiyat endekslerinden daha yüksek olduğunu göstermektedir. BİST 100 Endeksi ile diğer endeksler (BİST Hizmet Endeksi, BİST Mali Endeksi ve BİST Sınai Endeksi) arasındaki yüksek korelasyon (yaklaşık %99) nedeniyle sadece BİST100 Endeksi analize dahil edilecektir. Diğer bir deyişle, BİST Hizmet Endeksi, BİST Mali Endeksi ve BİST Sanayi Endeksi, yüksek korelasyon nedeniyle modele dahil edilmemiştir. BİSTVOL değişkeni, BİST'in aktifleştirme değerinin toplam hisse senedine bölünmesi ile hesaplanacaktır.

Grafik 1: : Zaman Serilerinin Eğilimleri (1988-2021)



2001 krizinden sonra şekle göre bir eğilim değişikliği, yani yapısal bozulma olmuştur. Böylece, (2) ve (3) denklemi hem genel analiz döneminde hem de 2001: 02-2013: 03 dönemi için tahmin edilmektedir.

3.2. Birim Kök ve ARDL Sınır Testi

Ampirik analizlerde model belirleyebilmek ve verilerin sahte regresyon problemine yol açıp açmadığı anlayabilmek için birim kök analizleri yapılmalıdır. Zaman serilerinin durağanlığı, zamana göre varyansın ve ortalamasının sabitlenmesi anlamına gelmektedir (Altunöz, 2017:657). Diğer bir ifadeyle durağan bir zaman serisinde ortalama, varyans, otokorelasyon vb. gibi istatistiksel özellikler zaman içinde durağandır (Gujarati,

1999:712, 713). Durağan olmaması durumunda, seriler sahte regresyon problemiyle karşılaşabileceğimiz deterministik veya stokastik trendi içerir. Bu doğrultuda analizde kullanılacak ilk birim kök analizi Augmented Dickey Fuller (ADF) testidir.

ADF denklemi aşağıda gösterildiği gibidir:

$$\Delta Y_t = \alpha + \beta t + \gamma Y_{t-1} + c \sum \Delta Y_{t-1} + u_t \quad (1)$$

$$H_0: \gamma = 0$$

$$H_1: \gamma \neq 0$$

H_0 Hipotezi reddedilirse Y değişkeni 0 düzeyinde durağandır. H_0 Hipotezi reddedilmezse Y değişkeni durağan değildir ve fark alma işlem ile durağanlaştırması sağlanır. Tablo 2, ADF birim kök testinin sonucunu göstermektedir.

Tablo 2: Tablo 2: ADF Testi Sonuçları

Değişkenler	Gecikme Uzunluğu	ADF Değeri	Gecikme Uzunluğu	Birinci Farkı
LBIST	1	-1.69	1	-7.16 *
LUSD	3	-2.91 **	3	-
LEUR	3	-1.90	3	-11.10 *
LBISTVOL	3	-1.69	3	-11.10 *

Not: (*) değişkenlerin birinci farkındaki sıfır hipotezinin %1 düzeyinde reddedilmesini, (**) ise değişkenler düzeyinde %5 düzeyinde sıfır hipotezinin reddedildiğini göstermektedir. %1 düzeyinde ve %5 düzeyinde Mc Kinnon Critique değerleri sırasıyla -3.421 ve -2.312'dir.

ADF sonuçları, Türk lirası / ABD Doları (LUSD) değişkeninin %5 düzeyinde durağan olduğunu ve geriye kalan tüm değişkenlerin birinci farkta %1 düzeyinde durağan olduğunu göstermektedir.

Clemente, Montañés, Reyes (1998) birim kök testi bir ve iki kırılma altında değişkenlerin birim kök sınavasını ayrı ayrı yapmakta olup gibi kırılmalar içsel olarak analize dahil edilmektedir.

Clemente, Montañés, Reyes (CMR) testinde eşitlik (2) de yer alan boş hipotez eşitlik (3)'teki alternatif hipoteze karşı test edilmektedir.

$$H_0: y_t = y_{t-1} + \delta_1 DTB_{1t} + \delta_2 DTB_{2t} + u_t \quad (2)$$

$$H_A: y_t = \mu + d_1 DU_{1t} + d_2 DTB_{2t} + e_t \quad (3)$$

CMR (1998) testinde boş hipotez "serilerde yapısal kırılma durumunda birim kök vardır" şeklinde olup elde edilen sonuçlar Tablo 8'de izlenebilmektedir.

Tablo 3: CMR Birim Kök Testi Sonuçları

Değişkenler	AO Modeli		IO Modeli	
	t istatistiği	Kırılma Tarihleri	t istatistiği	Kırılma Tarihleri
LBIST	-3.11 (k=3)	2008, 2018	-2.66 (k=6)	2009, 2019
LUSD	-9.13(k=0)	2008, 2019	-4,54 (k=12)	2009, 2019
LEUR	-7.05 (k=8)	2008,2009	-9,47 (k=12)	2008, 2019
LBISTVOL	-7.77(k=7)	2008,2019		

Not: CMR için AO ve IO modellerinin her ikisinde de kritik değer: -6.1100 (%5). Parantez içi değerler gecikme uzunluklarını ifade etmektedir.

Tablo 3 'deki CMR Birim Kök Testi sonuçlarında da LUSD değişkeni seviyede birim kök içermektedir. Kırılma tarihleri anlamlıdır. Birim kök analizleri sonuçlarına göre değişkenlerin bütünleşme derecelerinin farklı olduğu anlaşılmıştır. Burada dikkat çekici nokta çalışmada kukla değişken eklenen kriz yılları dışında rahip bronson olayı ve covid 19 salgınında da kırılmaların izlenmesidir. Bu bağlamda çalışmaya sırasıyla bu tarihleri ifade eden K4 ve K5 kukla değişkenler ilave edilecektir.

Bu bağlamda aynı dereceden bütünleşik değişkenlere eş bütünleşme analizine izin veren Engle ve Granger (1987), Johansen (1988) ve Johansen ve Juselius (1990) yaklaşımlarının uygulanması olanaksızdır.

Değişkenler arasındaki eş bütünleşme ilişkilerini belirlemek için Pesaran, Shin & Smith (2001) Otoregresif Dağıtılmış Gecikme (ARDL) Sınırlama Testi Yöntemi uygulanacaktır. ARDL yönteminin seviye ilişkilerinin analizinde geleneksel ampirik tekniklere göre bir avantajı, ARDL'nin durağanlıkların I (1) veya I (0) olmasına

bakılmaksızın eş bütünleşme testine izin vermesidir. Bu amaçla euro ve dolar para birimini ayrı ayrı ele alan 2 farklı model aşağıda (4) ve (5) numaralı denklem olarak tahmin edilecektir.

Model 1 USD için

$$LBIST_i = \phi_{0i} + \sum_{j=1}^p \phi_{ji} LBISTS_{i,t-j} + \sum_{j=1}^p \beta_{ji} DLUSD_{n,t-j} + \phi_{1i} DLBIST_{i,t-1} + \phi_{2i} DLUSD_{n,t-1} + \phi_{3i} DLBISTVOL_t + \phi_{4i} kukla_{1994} + \phi_{5i} kukla_{2001} + \phi_{6i} kukla_{2008} + \phi_{7i} kukla_{2018} + \phi_{8i} kukla_{2019} + \phi_{9i} t \quad (4)$$

Model 2 EURO için

$$LBIST_i = \phi_{0i} + \sum_{j=1}^p \phi_{ji} LBISTS_{i,t-j} + \sum_{j=1}^p \beta_{ji} DLEUR_{n,t-j} + \phi_{1i} DLBIST_{i,t-1} + \phi_{2i} DLEUR_{n,t-1} + \phi_{3i} DLBISTVOL_t + \phi_{4i} kukla_{1994} + \phi_{5i} kukla_{2001} + \phi_{6i} kukla_{2008} + \phi_{7i} kukla_{2018} + \phi_{8i} kukla_{2019} + \phi_{9i} t \quad (5)$$

Eşitlik (4) ve (5)'de,

i= 1,2,3,4, ve n=1,2 ile D kriz periyodunu ifade etmektedir. Ayrıca;

LBIST, BIST 100 endeksini, LEUR, Euro/TL'nin logaritmik değerini, LUSD, USD/TL'nin logaritmik değerini ve LBISTVOL, finansal piyasaların derinleşmesinin logaritmik değerini temsil etmektedir. D, değişkenlerin farkı anlamına gelmekte olup t, trend anlamına gelmektedir. Kukla değişkenler *kukla*₁₉₉₄ ve *kukla*₂₀₀₁, *kukla*₂₀₀₈ şeklinde kriz yıllarını ifade ederken *kukla*₂₀₁₈, *kukla*₂₀₁₉ sırasıyla kırılmalı birim kök testinde ulaşılan Rahip Bronson olayı neticesinde yaşanan kur şokunu ve Covid 19 salgınına ifade etmektedir.

Model (1) ve Model (2)'nin sınır testi yaklaşımıyla tahmin edilebilmesi için uygun gecikme uzunluğunun belirlenmesi gerekir. Bu bağlamda gecikme uzunlukları Schwarz ve Akaike bilgi kriterlerine göre tahmin edilecektir. Breusch-Godfrey LM test istatistiğine göre seri otokorelasyon problemi olmayan en küçük AIC ve SC değerine sahip gecikme optimal gecikme değeri olarak seçilecektir.

Tablo 4: Gecikme Uzunluklarının Belirlenmesi

USD Para Birimi İçin Gecikme Süresinin Belirlenmesi						
1988-2021						
lag	6	5	4	3	2	1
AIC	-1.67	-1.68	-1.68	-1.64	-1.69	-1.68
SC	-1.39	-1.39	-1.39	-1.39	-1.43	-1.39
BG-LM Test	0.49*	0.18**	0.016**	1.8*	2.51	3.99***
2001-2021						
lag	6	5	4	3	2	1
AIC	-3.09	-3.07	-3.10	-3.20	-3.20	-3.26
SC	-1.79	-1.79	-1.88	-1.90	-1.93	-1.88
BG-LM Test	5.20**	3.71***	4.40**	6.71**	7.20	7.36***
EURO Para Birimi İçin Gecikme Süresinin Belirlenmesi						
1988-2021						
Lag	6	5	4	3	2	1
AIC	-1.80	-1.58	-1.80	-1.85	-1.86	-1.90
SC	-1.70	-1.68	-1.70	-1.80	-1.80	-1.81
BG-LM Test	7.30**	2.20	3.10**	4.22***	5.34**	3.39
2001-2021						
Lag	6	5	4	3	2	1
AIC	-2.20	-2.20	-2.29	-2.39	-2.42	-2.69
SC	-1.81	-1.89	-1.89	-1.90	-2.18	-2.21
BG-LM Test	7.20**	1.50	3.88***	4.88**	5.45**	2.30

Not: *, ** ve *** sırasıyla %1, %5 ve %10 anlamlı düzeyde oto korelasyonun varlığını göstermektedir.

Tablo (4)'e göre 1988-2021 ve 2001-2021 dönemlerinde döviz kuru olarak doların kullanıldığı modeller için en uygun gecikme uzunluğu s sırasıyla 2 ve 2'dir. Ayrıca döviz kuru olarak avronun kullanıldığı modeller için 1988-2021 ve 2001-2021 dönemleri için en uygun gecikme uzunluğu sırasıyla 1 ve 1'dir. Gecikme uzunluklarının anlamlılıkları F istatistiklerinin belirlenmesiyle hesaplanmaktadır. Değişkenler arasında eş bütünleşme ilişkisinin olup olmadığını ifade eden boş hipotez şu şekilde kurulur:

$$H_0 : \lambda_1 = \lambda_2 = 0$$

$$H_1 : \lambda_1 \neq 0, \text{ or } \lambda_2 \neq 0 \text{ (Pesaran et al. 2001: 8).}$$

Table 5: Model (1) ve Model (2) için F İstatistikleri

Model 1 için Kritik Sınır Değerler (1988-2021)						
	10%		5%		1%	
d	I(0)	I(1)	I (0)	I(1)	I(0)	I(1)
2	4.30	4.90	4.90	6.22	8.19	8.80
Hesaplanan F İstatistiği						
F_r 19.121						
F_{π} 1.677						
The critical limit value for Model 1 (2001-2021)						
	10%		5%		1%	
d	I(0)	I(1)	I (0)	I(1)	I(0)	I(1)
1	3.90	3.79	3.90	7.50	7.41	8.90
Hesaplanan F İstatistiği						
F_r 16.112						
F_{π} 1.761						
The critical limit value for Model 2 (1988 – 2021)						
	10%		5%		1%	
d	I(0)	I(1)	I (0)	I(1)	I(0)	I(1)
2	4.30	4.90	4.90	6.30	8.30	8.80
F statistic						
F_r 16.432						
F_{π} 1.661						
The critical limit value for Model 2 (2001-2021)						
	10%		5%		1%	
d	I(0)	I(1)	I (0)	I(1)	I(0)	I(1)
1	4.20	4.73	4.84	6.33	8.20	8.70
Calculated F statistic						
F_r 15.156						
F_{π} 1.761						

F istatistiğinin kritik üst sınırdan büyük olması durumunda, boş hipotez reddedilir. Yani değişkenler arasında uzun dönemli bir ilişki vardır. Elde edilen sonuca göre, her iki model için de hisse senedi fiyatları ile döviz kurları arasında uzun dönemli bir ilişki bulunmaktadır. ARDL (4,1,1,0) ile tahmin edilmiş ve Tablo 11'de sunulmuştur.

F istatistik testi belirlendikten sonra model (1) ve Model 2 tahmin edilmiş olup ARDL (4,1,1,0) gecikme değerleri ile tahmin edilmiştir. Elde edilen sonuçlar Tablo 6'da izlenebilmektedir.

Tablo 6 : Doğrusal Model İçin Tahmin Sonuçları

Dependent Variable (DLBIST)	MODEL 1 (4,1,1,0)				MODEL 2 (4,1,1,0)			
	1988-2021		2001-2021		1988-2021		2001-2021	
	Coefficient t	Probability	Coefficient t	Probability	Coefficient t	Probability	Coefficient t	Probability
$LBIST_{t-1}$	-0.87	0.008	-1.24	0.00	-0.771	0.00	-1.65	0.00
$LBIST_{t-2}$	0.15	0.41	-0.086	0.001	0.16	0.02	0.09	0.25
$LBIST_{t-3}$	-0.17	0.078	-0.16	0.000				
$LBIST_{t-4}$	-0.366	0.005	-1.02	0.00				
$LUSD_t$					-0.077	0.00	-0.78	0.00
$LUSD_{t-1}$	-0.13	0.411	-0.12	0.19				
$LEUR_t$	0.21	0.14	0.21	0.12				
$LEUR_{t-1}$	-0.06	0.005	-0.112	0.00	-0.061	0.00	-0.16	0.00
$LBISTVOL_t$	0.021	0.66	0.022	0.66				
TREND	0.00	0.18	0.00	0.11	0.00	0.06	0.00	0.11
$kukla_{1994}$	-0.04	0.16						
$kukla_{2001}$	-0.31	0.00						
$kukla_{2008}$	-0.55	0.00	-0.08	0.00	-0.35	0.08	-0.03	0.02
$kukla_{2018}$								
$kukla_{2019}$								

UZUN DÖNEM KATSAYILARI

$LUSD$	0,71	0,002	0,22	0,000	-	-	-	-
$LEUR_t$	-	-	-	-	1,20	0,000	0,60	0,001
$LBISTVOL$	0,74	0,001	0,81	0,000	0,74	0,001	0,81	0,000
$kukla_{1994}$	-0,50	0,000	-0,55	0,000	-0,38	0,000	-0,51	0,000
$kukla_{2001}$	-0,40	0,002	-0,46	0,002	-0,40	0,002	-0,41	0,002
$kukla_{2008}$	- 0,44	0,000	- 0,51	0,000	- 0,39	0,000	- 0,39	0,000
$kukla_{2018}$	-0,51	0,004	-0,59	0,004	-0,44	0,004	-0,42	0,004
$kukla_{2019}$	-0,42	0,008	-0,46	0,008	-0,20	0,008	-0,41	0,008
TREND	0.03	0.18	0.10	0.99	0.09	0.86	0.00	0.99

Dolar/TL kurunda meydana gelecek % 1 artış hisse senedi fiyatlarını 1988-2021 ve 2001- 2021 dönemlerinde sırasıyla % 0,71 ve % 0,22 arttıracaktır. Euro/TL kuruna % 1'lik artış ise hisse senedi fiyatlarını sırasıyla % 1,20 ve %0,60 arttıracaktır. İşlem hacmindeki artış da her iki modelde hisse senedi fiyatlarını sırasıyla %0,74 ve %81 birim arttıracaktır. Kukla değişkenlere ait katsayılara bakıldığında gerek model 1 gerek model 2'de kriz dönemlerinin yanında rahip Bronson olayı ve Covid salgının Borsa İstanbul hisse senetleri üzerinde olumsuz bir etki yaptığı anlaşılmaktadır. Uzun dönem sonuçlarına ait model 1 ve model 2 ile alakalı teşhis sonuçları Tablo 7'de izlenebilmektedir.

Tablo 7: Uzun Dönem Sonuçların Ait Teşhis Testleri

Teşhis Testleri	Model 1	Mode2
R^2	0.936	0.888
Düzeltilmiş R^2	0.921	0.905
F istatistiği	375.311(0.000)	341.411(0.000)
Breusch-Godfrey Testi	1.599(0.4000)	1.599(0.3000)
ARCH LM Testi	0.123 (0.321)	0.142 (0.715)
Jarque-Bera Normallik Testi	1.800(0.506)	1.300(0.306)

Ramsey Reset Testi	2.588 (0.298)	2.333 (0.199)

Teşhis sonuçlarına göre modelde fonksiyonel form , oto korelasyon ve değişen varyans sorununun olmadığı anlaşılmaktadır. Ayrıca hatalar normal dağılım göstermektedir. Bu sonuçların ardında ulaşılan kısa dönem sonuçlar Tablo 8’de izlenebilmektedir.

Tablo 8: Kısa Dönem Sonuçları

KISA DÖNEM KATSAYILARI								
<i>Değişkenler</i>	Coefficient	Probability	Coefficient	Probability	Coefficient	Probability	Coefficient	Probability
<i>LUSD</i>	-0,291	0,002	-1,101	0,000	-	-	-	-
<i>LEUR_t</i>	-	-	-	-	-0,55	0,000	-0,71	0,001
<i>LBISTVOL</i>	0,71	0,001	0,80	0,000	0,70	0,001	0,78	0,000
<i>kukla₁₉₉₄</i>	-0,35	0,000	-0,55	0,000	-0,38	0,000	-0,51	0,000
<i>kukla₂₀₀₁</i>	-0,39	0,002	-0,46	0,002	-0,40	0,002	-0,41	0,002
<i>kukla₂₀₀₈</i>	- 0.40	0,000	- 0.51	0,000	- 0.39	0,000	- 0.39	0,000
<i>kukla₂₀₁₈</i>	-0,47	0,004	-0,59	0,004	-0,44	0,004	-0,42	0,004
<i>kukla₂₀₁₉</i>	-0,39	0,008	-0,46	0,008	-0,20	0,008	-0,41	0,008
<i>ECT_{t-1}</i>	-0,25	0,041	-0,25	0,018	-0,23	0,011	-0,27	0,001
TREND	0.00	0.81	0.00	0.61	0.19	0.29	0.00	0.28

Kısa dönem sonuçları incelendiğinde uzun dönemin aksine kısa dönemde USD ve EURO para birimlerindeki artışların BIST 100’ü negatif etkeilediği izlenmektedir. Elde edilen sonuçlara göre 1 USD para biriminde %1 birimlik artış BIST 100 endeksini -0,29 ve -1,10 azaltırken EURO para birimindeki 1 birimlik artış BIST endeksini -0,55 ve -0,71 azaltmaktadır. Kısa dönem sonuçlarında kukla değişkenler uzun dönemli etkilerin aynısı olduğu izlenmektedir. Burada dikkat edilecek nokta etkinin gücünün kısa dönemde daha zayıfken süre uzadıkça daha güçlü hale gelmesidir. Hata düzeltme (ECT) katsayısı beklentiler dahilinde 0 ile 1 arasında ve eksi değer almış olup ortalama değer (-0,25) dir. Bunun anlamı kısa dönemli dengesizliklerin 4 dönemde uzun dönem dengesine ulaşacağıdır.

Tablo 9: Kısa Dönem Sonuçların Ait Teşhis Testleri

Teşhis Testleri	Model 1	Mode2
R^2	0.901	0.822
Düzeltilmiş R^2	0.934	0.911
F istatistiği	366.912(0.000)	351.400(0.000)
Breusch-Godfrey Testi	1.514(0.4112)	1.600(0.2231)
ARCH LM Testi	0.123 (0.321)	0.142 (0.715)
Jarque-Bera Normallik Testi	1.702(0.301)	1.311(0.306)
Ramsey Reset Testi	2.781 (0.210)	2.718 (0.212)

Kısa dönem teşhis sonuçlarına göre fonksiyonel form , oto korelasyon ve değişen varyans sorununun olmadığı anlaşılmaktadır. Hatalar normal dağılım göstermektedir. Bu sonuçların ardında ulaşılan kısa dönem sonuçlar Tablo – da izlenebilmektedir.

Değişkenlerin uzun dönemli ilişkisinin belirlenmesi (F Testi) ve değişkenin katsayılarının kısıtsız model ile tahmin edilmesinin ardından, Breitung (2001) tarafından önerilen doğrusal olmayan eş bütünleşme analizi ile değişkenlerin doğrusal olmayan eş bütünleşme ilişkileri test edilecektir. Breitung (2001) tarafından geliştirilen doğrusal olmayan eş bütünleşme analizinde (x_t^T) ve (y_t^T) ve ilişkisinde $y_t = f(x_t) + \varphi_t$ olacak şekilde doğrusal olmayan eş bütünleşme ilişkisinin varlığı için y_t ve $f(x_t)$ beraber bütünleşme seviyeleri eşit, diğer bir ifadeyle $\sim I(1)$ ve φ_t nin $\sim I(1)$ olduğunu iddia eden boş hipotezin ret edilmesi gereklidir. Breitung (2001), $f(x_t)$ in doğrusal olmadığı koşullarda zaman dizisi tabanlı rank testi geliştirmiş ve bunu $R_T(x_t) = Rank(X_t, \dots, X_T)$ olarak ifade etmiştir. Benzer şekilde $R_T(y_t) = Rank(Y_t, \dots, Y_T)$ dir. İkisi arasındaki farkın ölçülmesi amacıyla iki farklı ölçüm önerilmiş olup eşitlik (6) ve eşitlik (7)’de izlenebilmektedir.

$$k_T^* = \frac{T^{-1} \sup |d_t|}{\partial_{\lambda, d}} \quad (6)$$

$$\xi_T^* = \frac{T^{-3} \sum_t^T d_t^2}{\partial_{\Delta d}^2} \quad (7)$$

Eşitlik (6) ve (7)'de t gözlemi, T ise gözlem sayısını ifade etmektedir. $\partial_{\Delta d}^2 = T^{-2} \sum_{t=2}^T (\ddot{u}_t^R - \ddot{u}_{t-1}^R)^2$ dir.

Breitung (2001) çok değişkenli rank istatistiğini eşitlik (8) gibi ifade etmektedir.

$$\mathfrak{B}_t(k) = T^{-3} \sum_{t=1}^T \left(\frac{\ddot{u}_t^R}{\xi_{\Delta u}^2} \right)^2 \quad (8)$$

Eşitlik (8) için kritik seviyeler Monte Carlo simülasyonuna baz alınarak oluşturulmuştur. Elde edilen test istatistiği kritik seviyelerden düşük ise bütünleşme ilişkisi olduğunu savunan alternatif hipotez kabul edilmektedir. Ulaşılan sonuçlar Tablo (10) da izlenebilmektedir.

Tablo 10: Breitung non-parametrik Olmayan (Doğrusal Olmayan) Eş Bütünleşme Testi

Model 1	BİST 100	Model 2	BİST 100
LUSD	0.00158**	LEUR	0.00145**

Not: Kritik değerler, Breitung (2001) tablosu 1'den alınmıştır.

Tablo 10, Breitung'un (2001) parametrik olmayan (doğrusal olmayan) eş bütünleşme testinin sonuçlarını göstermektedir. Breitung'un ikili sıra testi sonuçlarına göre, eş bütünleşmenin olmadığını öne süren temel hipotez reddedilmektedir. Diğer bir ifadeyle Breitung testi hisse senetleri ile döviz kuru arasında eş bütünleşme olduğunu göstermektedir.

ARDL modelinde bağımlı ve bağımsız değişkenler arasında uzun dönemli simetrik bir ilişkinin olmaması durumunda; Shin vd. (2013) tarafından geliştirilen NARDL modeli ile asimetrik ilişkiler araştırılır.

Bağımlı ve açıklayıcı değişkenler arasındaki uzun dönemli doğrusal olmayan ilişkileri araştıran NL-ARDL modeli, açıklayıcı değişkenlerdeki olumlu ve olumsuz değişimlerin bağımlı değişken üzerindeki etkilerinin belirlenmesine olanak sağlar. NARDL modeli de aşağıdaki (9) ve (10) nolu eşitlikten hareketle türetilir:

$$y_t = \beta^+ x_t^+ + \beta^- x_t^- + u_t \quad (9)$$

$$x_t = x_0 + x_t^+ + x_t^- \quad (10)$$

Denklem (..) ve (...)’de , (β^+) ve (β^-) sırasıyla (x_t^+) ve (x_t^-) ile ilgili uzun periyodik asimetrik parametreleri göstermektedir. Ayrıca (u_t) uzun vadeli dengeden sapmaları gösterir. Bu bağlamda (y_t) ve (x_t) gibi iki zaman serisi değişkeni arasındaki kısa ve uzun vadeli asimetrik ilişkileri araştıran NARDL (p, q) modeli UECM formatında eşitlik (11) olarak aşağıdaki gibi ifade edilebilir.

$$\Delta y_t = \phi(y_{t-1} - \theta_1' x_t^- - \theta_2' x_t^-) + \sum_{i=1}^{p-1} \lambda_i \Delta y_{t-i} + \sum_{i=0}^{q-1} \delta_i \Delta y_{t-i} \quad (11)$$

Tablo 11’de NARDL uzun dönem sonuçları izlenebilmektedir.

Tablo 11: NARDL Uzun Dönem Katsayıları

Dependent Variable (DLBIST)	NARDL MODEL 1				NARDL MODEL 2			
	1988-2021		2001-2021		1988-2021		2001-2021	
	Coefficien t	Probabilit y	Coefficien t	Probabilit y	Coefficien t	Probabilit y	Coefficien t	Probabilit y
$LUSD_{t-1}^+$	0.80	0.008	1.24	0.00	-	-	-	-
$LLUSD_{t-1}^-$	-0.15	0.41	-0.08	0.001	-	-	-	-
$LEURO_{t-1}^+$	-	-	-	-	-0.54	0.008	-1.01	0.00
$LEURO_{t-1}^-$	-	-	-	-	-0.15	0.41	-0.086	0.001
$LBISTVOL_{t-1}^+$	0,11	0,00	0,14	0,02	0,17	0,00	0,12	000
$LBISTVOL_{t-1}^-$	-0.13	0.002	-0.12	0.19	-0,15	0,00	-0,12	0,03
TREND	0.00	0.18	0.00	0.11	0.00	0.06	0.00	0.11
$kukla_{1994}$	-0.04	0.16	-0,22	0,00	-0,12	0,00	-0.31	0,04
$kukla_{2001}$	-0.31	0.00	-0,11	0,02	-0,11	0.03	-0,09	0.04

<i>kukla</i> ₂₀₀₈	-0.55	0.00	-0.08	0.00	-0.04	0.08	-0.03	0.02
<i>kukla</i> ₂₀₁₈	-0,22	0.00	-0.04	0.00	-0.31	0.00	-0,11	0.00
<i>kukla</i> ₂₀₁₉	-0,11	0.00	-0.31	0.00	-0,09	0.00	-0,02	0.00

Not: Not: "+" ve "-" üst simgeleri pozitif ve negatif kısmı toplamı gösterir, L^+ and L^- ilgili değişkenin pozitif ve negatif değişiklikleriyle ilişkili tahmini uzun dönem katsayılarıdır, $L^+ = \frac{\theta^+}{p} = L^- = -\frac{\theta^-}{p}$ Parantez içindeki sayılar olasılık değerleridir.

Tablo 11'egöre $LUSD_{t-1}^+$ ve $LUSD_{t-1}^-$ dolar kurunda meydana gelen pozitif ve negatif şoklarla ilişkili uzun dönem elastikiyet katsayılarını göstermektedir. Katsayıların istatistiksel anlamlılık düzeylerine bakıldığında hem negatif hem de pozitif şoklara ilişkin katsayının anlamlı olduğu görülmektedir. Pozitif ve negatif şoklara katsayılar sırasıyla 1988-2021 dönemi için sırasıyla (-0.80) ve (-0.15) ve 2001-2021 dönemi için (-1,24) ve (-0,08) olarak hesaplanmıştır. Buna göre USD kurunda meydana gelen %1 lik pozitif şokun (artışın) uzun dönemde BİST100 endeks üzerinde 1988-2021 dönemi için (0.80) azalışa ve 2001-2021 dönemi için (1,24) azalışa neden olmaktadır. Negatif şokta(azalışta) ise aynı dönemde BİST 100 endeksi sırasıyla (-0,15) ve (- 0,08) azalmaktadır. Benzer şekilde

$LEURO_{t-1}^+$ ve $LEURO_{t-1}^-$ Euro kurunda meydana gelen pozitif ve negatif şoklarla ilişkili uzun dönem elastikiyet katsayılarını göstermektedir. Katsayıların istatistiksel anlamlılık düzeylerine bakıldığında hem negatif hem de pozitif şoklara ilişkin katsayının anlamlı olduğu görülmektedir. Pozitif ve negatif şoklara katsayılar sırasıyla 1988-2021 dönemi için sırasıyla (-0,54) ve (-0,15) 2001-2021 dönemi için (-1,01) ve (-0,08) olarak hesaplanmıştır.

Buna göre Euro kurunda meydana gelen %1 lik pozitif şokun (artışın) uzun dönemde BİST100 endeks üzerinde 1988-2021 dönemi için (0.54) azalışa ve 2001-2021 dönemi için (1,01) azalışa neden olmaktadır. Negatif şokta(azalışta) ise aynı dönemde BİST 100 endeksi sırasıyla (0,15) ve (0,08) azalmaktadır.

Çalışmanın bu bölümünde, değişkenlerin nedenselliğinin yönü Granger Nedensellik Testi kullanılarak analiz edilecektir. Böylece hisse senedi ve döviz kurları arasında var olan "portföy dengesi yaklaşımı" ve "geleneksel yaklaşım" tezlerinden hangisinin Türkiye için geçerli olduğu ortaya konacaktır. Analize konu olan değişkenlerin birbirleri ile olan nedensellik durumlarının analiz edilebilmesi için serilerin kovaryans durağan olmaları gerekmektedir. Aynı seviyeden durağanlığın aranmadığı nedensellik testinde gecikme uzunluğunun belirlenmesinde, nedeni araştırılan değişkenin durağan hali ve bu değişkenin gecikmeli değerleriyle farklı modeller kurularak tahmin edilir.

Ekonometrik analizlerde değişkenlerin arasındaki ilişki incelenirken genelde bu ilişkilerin negatif-pozitif ya da güçlü-zayıf olup olmadığı araştırılmaktadır. Bu nedenle değişkenler arasındaki nedensellik ilişkisi konusunda bilgi elde edilememektedir. Bu bağlamda geliştirilen nedensellik testlerinden biri Granger (1969) nedensellik testi olup söz konusu testin yapılabilmesi için serilerin durağanlıklarının sağlanması zorunludur. Bununla birlikte Granger nedensellik testi için aynı dereceden durağanlık zorunlu değildir (Tarı,2015:437). Granger testi için eşitlik (12) ve (13)'daki VAR denkleminden yararlanılmaktadır.

$$p_t = \alpha_0 + \sum_{i=1}^m \alpha_i p_{t-i} + \sum_{i=1}^m b_i I_{t-i} + u_i \quad (12)$$

$$I_t = b_0 + \sum_{i=1}^m b_i I_{t-i} + \sum_{i=1}^m \alpha_i p_{t-i} + u_i \quad (13)$$

Eşitlik (12)'de **I dan P ye nedensellik** analizi yapılırken eşitlik (13)'de **P den I ya nedensellik** analizi yapılmaktadır. Ayrıca nedensellik testi için ulaşılan f değeri tablodan ulaşılan f değerinden daha küçükse ise I, P'nin nedeni değildir hipotezi kabul edilir; büyük ise hipotez reddedilerek, I, P'nin nedenidir şeklindeki alternatif hipotezi kabul edilir. Granger nedensellik sonuçları tablo (10)'da görülmektedir.

Tablo 12: Granger Nedensellik Testi Sonuçları

Granger Nedensellik testi		
Dönem	Nedensellik Yönü	Nedensellik Yönü
1988-2021	LBIST'den LUSD'ye yok	LUSD'den LBIST'e yok
F İstatistiği	5.12 *	0.423*
2001-2021	LBIST'den LUSD'ye yok	LUSD'den LBIST'e yok
F İstatistiği	3.11*	0.56
Term	Nedensellik Yönü	Nedensellik Yönü
1988-2021	LBIST'den LEUR'ye yok	LEUR'den LBIST'e yok
F İstatistiği	3.55 *	5.25
2001-2021	LBIST'den LEUR'ya yok	LEUR'den LBIST'e yok
F İstatistiği	2.66**	1.66

Not: Granger nedensellik testi 3 gecikme için uygulanmıştır. *, ** ve *** sırasıyla %1, %5 ve %10 anlamlı düzeyde oto korelasyonun varlığını ifade etmektedir.

Tablo (12)'deki Granger Nedensellik Testi sonucunda, Türkiye'de sadece 1988-2021 döneminde Dolar döviz kuru ile hisse senedi fiyatları arasında çift yönlü bir ilişki bulunmaktadır. Hem 1988-2021 hem de 2001-2021 yıllarında Euro ile hisse senedi arasında tek yönlü bir ilişki vardır ve bu ilişki Euro'dan hisse senedi fiyatına doğrudur. 2001-2021 döneminde dolar için de aynı ilişkiler var. Türkiye'de hisse senedi fiyatları ile döviz kurları arasındaki ilişkiyi tanımlayan geleneksel yaklaşım” mevcuttur.

SONUÇ

Bu çalışmada doğrusal ve doğrusal olmayan eş bütünleşme ve nedensellik analizleri ile Türkiye’de kur ile hisse senedi fiyatları arasındaki ilişkinin analizi amaçlanmıştır. Bu amaçla değişken olarak Türkiye’de en çok tercih edilen iki yabancı para USD doları ve Euro tercih edilirken hisse senedi fiyatları için Ulusal sanayi endeksi, mali endeks ve hizmetler endeksi tercih edilmiştir. USD kurunda meydana gelen %1 lik pozitif şokun (artışın) uzun dönemde BİST100 endeks üzerinde 1988-2021 dönemi için (0.80) azalışa ve 2001-2021 dönemi için (1,24) azalışa neden olmaktadır. Negatif şokta(azalışa) ise aynı dönemde BİST 100 endeksi sırasıyla (-0,15) ve (- 0,08) azalmaktadır. Benzer şekilde Euro kurunda meydana gelen %1 lik pozitif şokun (artışın) uzun dönemde BİST100 endeks üzerinde 1988-2021 dönemi için (0.54) azalışa ve 2001-2021 dönemi için (1,01) azalışa neden olmaktadır. Negatif şokta(azalışa) ise aynı dönemde BİST 100 endeksi sırasıyla (0,15) ve (0,08) azalmaktadır. ARDL, NARDL ve Breitung (2001) testleri tercih edilmiştir. ulaşılan sonuçlara göre Türkiye’de iki değişken arasında uzun ve kısa vadede eş bütünleşme ilişkisi olup geleneksel yaklaşım desteklenmektedir.

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Hazır Giyim İşletmelerinin Sosyal Medya Kullanımlarının İncelenmesi

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Özet: Günümüzde hazır giyim pazarında rekabet kaliteden pazarlama faaliyetleri üzerinden yapılmaktadır. Pazarlama faaliyetleri ise uzman personel, para ve zaman gerektiren faaliyetlerdir. Fakat hazır giyim işletmelerinin büyük çoğunluğu, KOBİ niteliğinde olduklarından, pazarlama için gereken kaynaklara (özellikle uzman personel, para gibi) yeterli miktarda sahip değildir. Hazır giyim işletmelerinin pazarlama sorununa günümüz teknolojilerinin getirmiş olduğu pek çok çözüm mevcuttur. Bu çözümlerden birisi ise sosyal medyadır. Sosyal medya, günümüz pazarlama stratejileri arasında gittikçe önem kazanan ve her büyüklükteki işletmenin potansiyel müşterilere ulaşmasını sağlayan bir internet pazarlama biçimidir. Bu çalışmanın amacı, Türk hazır giyim işletmelerinin sosyal medya kullanımlarını incelemektir. Bu amaca ulaşmak için yarı yapılandırılmış görüşme formu tasarlanmıştır. İlgili görüşme formu vasıtasıyla sosyal medya kullanan dört hazır giyim işletmesinden veri toplanmıştır. Bu verilerin analizinden; işletmeleri sosyal medya kullanmaya teşvik eden birincil sebeplerin; pazarlama, marka tanıtımı, marka bilinirliği ve geniş kitlelere ulaşmak olduğu tespit edilmiştir. İşletmelerin sosyal medya kullanmaya başlarken ki beklentilerinin; marka bilinirliği, marka tanıtımı, ürünlerin özgünlüğünü göstermek ve müşteri kitlesini oluşturmak olduğu sonucuna ulaşılmıştır. İşletmelerin mevcut sosyal medya kullanım düzeyine ulaşmak için gerçekleştirdikleri ilk faaliyetin sosyal medya hesabı açmak olduğu tespit edilmiştir. İşletmelerin sosyal medya kullanımının; müşteri ilişkilerini olumlu etkilediği, satışları, yeni ürün geliştirme sayısını ve marka değerini artırdığı tespit edilmiştir. Sosyal medya kullanmakta olan hazır giyim işletmelerinin sosyal medya kullanmaya istekli hazır giyim işletmelerine önerileri ise, müşteri ile interaktif iletişim kurmaları, sosyal medya paylaşımları için bir strateji belirlemeleri, sosyal medyalarını profesyonel yönetmelerini ve sosyal medya ile iletişimde kurumsal bir dil kullanmaları şeklinde olmuştur.

Anahtar Kelimeler: Sosyal Medya, Hazır Giyim, Yarı Yapılandırılmış Görüşme

Review of Social Media use of Ready-for-wear businesses

Abstract: Nowadays competition in the ready-made clothing market is based on quality and marketing activities. Marketing activities, on the other hand are activities that require specialized personnel, money and time. However, since the majority of ready-made clothing businesses are SMEs, they do not have sufficient resources (especially expert personnel, money) for marketing. There are many solutions brought by today's technologies to the marketing problem of ready-made clothing companies. One of these solutions is social media. Social media is a form of internet marketing that is becoming increasingly important among today's marketing strategies and enables businesses of all sizes to reach potential customers. The aim of this study is to examine the social media usage of Turkish ready-made clothing businesses. To achieve this aim, a semi-structured interview form was designed. Data were collected from four ready-made clothing businesses using social media through the relevant interview form. From the analysis of these data; primary reasons that encourage businesses to use social media; marketing, brand promotion, brand awareness and reaching large audiences. Expectations of businesses when starting to use social media; It has been concluded that brand awareness, brand promotion, showing the originality of reputations and creating a customer base. It has been determined that the first activity of businesses to reach the current level of social media usage is to open a social media account. The use of social media by businesses; It has been determined that it affects customer relations positively, increases sales, the number of new product developments and brand value. The suggestions of the ready-made clothing businesses that use social media to the ready-made clothing businesses that are willing to use social media are to communicate interactively with their customers, to determine a strategy for social media sharing, to professionally manage their social media and to use a corporate language in communication with social media.

Key Words: Social Media, Ready- Made Clothing, Semi-Structured Interview

1. GİRİŞ

Hazır giyim üretiminde hemen hemen tüm işletmeler belirli kaliteye ulaşmış olduklarından günümüzde kalite en önemli rekabet unsuru olmaktan çıkmıştır. Günümüzde hazır giyim işletmeleri arasındaki rekabet pazarlama faaliyetleri üzerinden yapılmaya başlanmıştır. Pazarlama faaliyetleri ise uzman personel, para ve zaman gerektiren faaliyetlerdir. Fakat hazır giyim işletmelerinin büyük çoğunluğu, KOBİ olduklarından, pazarlama için gereken kaynaklara (özellikle uzman personel, para gibi) yeterli miktarda sahip değildir. Fakat günümüz bilgi ve iletişim teknolojileri hazır giyim işletmelerine pazarlama açısından başka imkanlar sunmaktadır. Bu imkanlardan birisi ise sosyal medyadır.

Sosyal medya, günümüzde yöneticilerden danışmanlara, internet liderlerinden reklamcılara, eğitimcilerden gazetecilere kadar geniş bir kitlenin, fikir alışverişi yaptığı bir ortamı sunmaktadır [1]. Basitçe sosyal medyayı, interneti kullanarak kişiler arası konuşma ve iletişime olanak sağlayan bir ortam olarak tanımlayabiliriz [2].

İşletmeler pazarlama alanında; hedef kitle seçebilme, müşterileriyle iletişim kurma, kullanıcılarla etkileşim kurmak, yeni müşteriler kazanmak, müşteri güveni oluşturmak, marka imajını korumak, marka bilinci ve değeri oluşturmak, marka algısını iyileştirmek, sadık müşteri sayısını artırmak [3-7] gibi amaçlar için sosyal medyayı kullanabilmektedir. Ayrıca işletmelerin pazarlama için sosyal medyayı kullanmaları diğer yöntemlere kıyasla da daha ekonomiktir [8]. İşletmelere pazarlama faaliyetleri açısından sağladığı avantajlar nedeniyle bu çalışmanın konusu hazır giyim işletmelerinin sosyal medya kullanımının incelenmesi olarak belirlenmiştir.

2. LİTERATÜR ÖZETİ

Hazır giyim firmalarının sosyal medya pazarlaması kapsamında yapılan literatür taraması sonucunda aşağıdaki çalışmalara ulaşılmıştır.

Fetais vd., (2022) sosyal medya pazarlama faaliyetlerinin marka sadakati üzerindeki etkisini araştırmayı amaçlamışlardır. Bu amaçla lüks giyim markalarını takip eden 464 kadın katılımcıdan; Facebook, Twitter, Instagram ve Snapchat gibi büyük sosyal ağlar üzerinden anket yardımıyla veri toplamış ve şu sonuçlara ulaşmışlardır. Sosyal medya pazarlaması, markanın toplum katılımı ile etkileşimini ve lovemark kavramını olumlu etkilediği, ancak sosyal medya pazarlamasının marka sadakatini doğrudan etkilemediği sonucuna ulaşmışlardır [9].

Půstová (2021) Zara, H&M ve Fashion Nova markalarının sosyal medya kullanımını incelemiş, sosyal medyanın moda endüstrisini nasıl etkilediğini araştırmıştır. Araştırma sonucunda; sosyal medyanın tüketici-marka arasındaki ilişkiyi güçlendirdiği, moda endüstrisi üzerinde olumlu bir etkisi olduğunu, hızlı modaı desteklediğini ve yayılmasına yardımcı olduğuna ulaşmıştır. Ancak hızlı moda sektörü işçilerin düşük ücretleri gibi sosyal konular ve tekstil atıkları gibi çevresel konuları da beraberinde getirdiği için bir yandan da olumsuz bir etkisi olduğu sonucuna ulaşmıştır [10].

Başkale (2021) Türkiye'nin marka değeri en yüksek 100 firması içindeki ilk 3 hazır giyim markası olan; Koton, Mavi ve Vakko markalarının Instagram hesaplarını önceden belirlenen araştırma soruları doğrultusunda incelemiştir. Elde ettiği verilerin analizinden; işletme/markaların sosyal medya pazarlaması faaliyetleri; marka imajlarına ve satışlarına olumlu etkisi olduğunu tespit etmiştir. Ayrıca işletmelere, Instagram özelinde stratejiler belirleyerek hedef kitlelerine uygun, özel, yaratıcı, merak uyandıran paylaşımlar yapmayı önermiştir [11].

Akgün (2020) sosyal medya pazarlama aktivitelerinin hızlı moda endüstrisinde; marka değeri, tüketici yanıtları ve satın alma niyeti üzerindeki etkisini ölçmek amacı ile 353 kişiden anket yöntemiyle veri toplamıştır. Elde ettiği verilerin analizinden; sosyal medya pazarlama aktivitelerinin tüketici yanıtlarını anlamlı ve olumlu etkilediğini tespit etmiştir. Özellikle marka tercihinde sosyal medyanın güçlü bir uyarıcı olduğu bu nedenle markaların sosyal medyayı kullanarak müşteriyle ilişkilerini geliştirebileceğini önermiştir [12].

Uyanık (2019) sosyal medya pazarlaması ile marka sadakati arasındaki ilişkiyi araştırmak amacı ile tüketicilerden anket yoluyla veri toplamıştır. Elde edilen verilerden; markayla ilişkili sosyal medya bağlılığının marka sadakatini olumlu etkilediği ayrıca markaların sosyal medyada kullanıcılarını; paylaşım yapma, katılma ve beğenmeye teşvik etmesinin marka sadakati oluşturmada önemli bir unsur olduğu sonucuna ulaşmıştır [13].

Karakuş (2019) dijital pazarlamanın marka sadakati oluşturma çabasında önemini incelemek amacıyla, Zara ve H&M markalarının hedef kitlelerinden anket yöntemiyle veri toplamıştır. Elde edilen verilerden; her iki markanın da dijital pazarlama çalışmalarına önem verdiği, dijital pazarlama bağlamında marka sadakati oluşturma çabaları her iki markada da hissedildiği ayrıca ZARA markasının hem dijital pazarlama hem de marka sadakati oluşturma konusunda H&M markasına kıyasla daha başarılı olduğu sonucuna ulaşmıştır [14].

Khan vd., (2019) giyim markalarının, sosyal medya pazarlama faaliyetlerinin; marka değeri ve müşteri tepkisi üzerindeki etkilerini araştırmak amacı ile Pakistanlı müşterilerden anket yöntemi ile veri toplamışlardır. Elde edilen verilerin analizinden; sosyal medya pazarlama faaliyetlerinin müşteri sadakatini direkt olarak olumlu etkilediği, sosyal medya kullanımının marka bilinirliği ve marka imajını arttırdığı sonuçlarına ulaşmışlardır [15].

İnceli (2018) lüks moda markalarının sosyal medya pazarlamasının marka değeri üzerindeki etkisini ölçmek amacı Vakko markası özelinde bir araştırma yapmıştır. Araştırma da veri toplama yöntemi olarak anket kullanmıştır. Elde ettiği verilerin analizinden; markayı sosyal medya üzerinden takip ederek paylaşımlarına

maruz kalan tüketicilerin marka sadakati, marka farkındalık/çağırışı, algılanan kalite algılarının arttığını ayrıca sosyal medyaya herkesin ulaşabilmesinin, lüks markaları sıradanlaştırmadığı ve kalite algısında negatif değişlik yerine pozitif bir etki yaptığını ulaştırmıştır [16].

Bose (2018), Nike'in sosyal medya kullanımı ve pazarlama stratejilerini araştırmıştır. Elde ettiği verilerden; sosyal medya kullanımının Nike'ı dünyanın en iyi 10 markasından biri haline getirdiği sonucuna ulaşmıştır. Ayrıca Nike, en yüksek etkileşim sayısını Instagram ve Youtube üzerinden, en düşük etkileşim sayısını Facebook üzerinden aldığı için; daha yüksek etkileşim sayısına ulaşmak amacı ile şirketin Facebook'taki etkinliğini arttırmasını, izleyiciler için uygun içerikler oluşturmalarını önermiştir [17].

Ceviz vd., (2018) hazır giyim firmaların pazarlama faaliyetlerinde sosyal ağları ne kadar benimsediğini, ne kadar kullandıklarını ve gelişimine ne kadar önem verdiklerini tespit edebilmek amacı ile İstanbul'da bulunan hazır giyim firmalarından yüz yüze anket tekniği ile veriler toplamış ve şu sonuçlara ulaşmışlardır. Firmalar arasında sadece sosyal paylaşım sitelerinde varolanların sayısı %4.2 olarak görülmektedir. Ayrıca firmaların sadece %18,30'u kendisini sosyal ağlarda ileri seviye olarak nitelendirmekte, %30.98'i ise başlangıç seviyesinde olduklarını belirtmektedir. Bu bağlamda firmaların sosyal paylaşım sitelerini kuvvetlendirmeleri gerektiği, şahısların ilgisini çekecek paylaşımlar yapılmasını ve bu konuda gerekirse uzman kişi ve kurumlardan destek alınmasını önermişlerdir [18].

Yeşildal (2017) hazır giyim ürünlerinin sosyal medya üzerinden satın alınmasında tüketici algısının rolünü araştırmıştır. Bu amaçla Instagram'dan hazır giyim alışverişi yapan katılımcılardan 692'si (% 41,5) her ortamda kolayca alışveriş yapmakta olduğu, 534 kişi (% 32,0) mağaza ortamından rahatsız olduğu için Instagram'dan alışveriş yapmakta olduğunu tespit etmiştir. Ayrıca sosyal medya kullanıcılarının kısa sürede birçok mağaza ve ürünleri inceleyebilmeleri, ürün ve Instagram butiği hakkında bilgi toplayabilmeleri, tüketicilere sağlanan kargo ücretinin uygunluğu, iade seçeneğinin olması, teslimat süresinin kısıtlılığı gibi avantajlar ve diğer kullanıcı görüşleri doğrultusunda alternatifleri değerlendirerek Instagram üzerinden hazır giyim alışverişi yaptıklarını tespit etmiştir [19].

Sabancı (2016) markaların sosyal medya tutumlarının tüketicilerin marka bağlılığı üzerindeki etkisinin tespit etmek amacıyla Mavi Jeans'in 150 Facebook takipçisinden anket yöntemi ile veri toplamıştır. Verilerin analizinden; marka bağlılığı yaratmada sosyal medyanın rolünün oldukça büyük olduğu ve sosyal medyayı iyi kullanan markaların piyasada önemli avantajlar elde ettiği sonuçlarına varılmıştır [20].

Ananda vd., (2015) farklı firma boyutlarına sahip, lüks İtalyan moda markaları Gucci ve The Bridge'in sosyal medya pazarlamalarını araştırmak amacı ile ilgili firmaların Facebook ve Twitter gönderilerinin içerik analizini yapmışlardır. Elde ettikleri verilerin analizinden; iki markanın da satış, promosyon ve halkla ilişkiler gibi geleneksel pazarlama yaklaşımları üzerinde durduğu, The Bridge e-ticaret üzerine vurgu yaparken, Gucci ürün tanıtımı ve farkındalığına vurgu yaptığı ve her iki markanın da sosyal medya etkileşimleri sonucu kar ettiği sonucuna ulaşmışlardır [21].

Yukarıdaki çalışmalar incelendiğinde hazır giyim firmalarının sosyal medya pazarlaması konusunda yapılan çalışmaların; dijital pazarlamanın marka sadakati ile ilişkisi, sosyal medya pazarlama faaliyetlerinin satışlara olan etkisi konuları üzerine odaklandığı sonucuna varılmıştır. Bu çalışmanın amacı ise; Türk hazır giyim markalarının sosyal medya pazarlamasının incelemek ve sosyal medya pazarlamasına yeni başlayacak işletmelere rehberlik yapmaktır.

3. MATERYAL VE YÖNTEM

Bu çalışmada Türk hazır giyim markalarının (Soontobeannounced, Bashaques, Atelier Minerva, Sagaza); sosyal medya kullanımına karar verme nedenleri, sosyal medyaya adaptasyon süreçleri ve sosyal medya performanslarını incelemek amacıyla yarı yapılandırılmış görüşme formu aracılığıyla veri toplanmıştır. Görüşme formu e-görüşme tekniği vasıtasıyla uygulanmıştır. İlgili görüşme formu iki bölümden oluşmaktadır. Birinci bölüm görüşmecinin özelliklerini ve konu hakkındaki uzmanlığını tespit etmek amacıyla dört sorudan oluşturulmuştur. İkinci bölüm işletmelerin sosyal medya kullanımlarını derinlemesine incelemek amacıyla üç tanesi çoktan seçmeli ve altı tanesi açık uçlu olmak üzere toplan dokuz adet sorudan oluşmaktadır. Görüşmecilerin verdikleri cevaplar aşağıdaki gibidir.

Araştırma kapsamında dört farklı hazır giyim işletmesinin marka sorumlusuyla görüşme gerçekleştirilmiştir. Görüşme gerçekleştirilen işletme personelinin işletmelerindeki görevleri ve sosyal medya deneyimleri Tablo 1'de verilmiştir.

Tablo 1: İşletme Yetkililerinin İşletmedeki Konum ve Sosyal Medya Deneyim Dağılımı

İşletmenin İsmi	Görüşmecinin İşletmedeki Görevi	Görüşmecinin Sosyal Medya Deneyimi (yıl)
1. İşletme	Ortak ve Genel Müdür	10
2. İşletme	Firma Sahibi	1,5
3. İşletme	Firma Sahibi, Tasarımcı	9
4. İşletme	Firma Sahibi	5

Tablo 1 incelendiğinde görüşme gerçekleştirilen kişilerin işletme sahibi veya ortağı oldukları görülmektedir. Ayrıca görüşme gerçekleştirilen işletme yetkililerinin sosyal medya deneyimleri en düşük 1,5 yıl, en yüksek 10 yıl ve ortalama olarak 6,3 yıldır. İşletmeleri sosyal medya kullanmaya teşvik eden sebepler Tablo 2’de verilmiştir.

Tablo 2: İşletmeleri Sosyal Medya Kullanmaya Teşvik Eden Sebeplerin Dağılımı

İşletmenin İsmi	1. Sebep	2. Sebep	3. Sebep	4. Sebep
1. İşletme	Pazarlama	Halkla ilişkiler	Reklam	Personel tedariki
2. İşletme	Marka tanıtımı	Reklam	Satış	Pazarlama
3. İşletme	Marka bilinirliği	Satış ve Pazarlama	Markanın sürdürülebilirliği	Sosyal medyada bulunmak
4. İşletme	Geniş kitlelere ulaşmak	Bilgi paylaşımının kolay ve hızlı yapmak	Reklam maliyetlerini düşürmek	Hedef kitlenin sosyal medyayı aktif kullanması

Tablo 2’ye göre işletmelerin sosyal medya kullanmalarının birinci sebebi; pazarlama, marka tanıtımı, Marka bilinirliği ve geniş kitlelere ulaşmaktır. İşletmelerin kullanmakta olduğu sosyal medya platformları Tablo 3’te verilmiştir.

Tablo 3: İşletmelerin kullanmakta Olduğu Sosyal Medya Platformlarının Dağılımı

İşletmenin İsmi	1. Tercih	2. Tercih	3. Tercih	4. Tercih	5. Tercih
1. İşletme	Instagram	Facebook	Twitter	Youtube	Linkedin
2. İşletme	Instagram	Youtube	Facebook		
3. İşletme	Instagram	Facebook	Youtube		
4. İşletme	Instagram	Tiktok	Whatsapp		

Tablo 3’e göre işletmelerin birinci tercih olarak en çok kullandığı sosyal medya platformunun Instagram, ikinci tercih olarak en çok kullandığı platformun Facebook, üçüncü tercih olarak en çok kullandığı platformun Youtube olduğu görülmektedir. İşletmelerin en az kullandığı sosyal medya platformları ise Tiktok, Twitter ve LinkedIn’dir. İşletmelerin sosyal medya kullanmaya başlatan beklentiler Tablo 4’te görülmektedir.

Tablo 4: İşletmelerin Sosyal Medya Kullanmaya Başlatan Beklentilerin Dağılımı

İşletmenin İsmi	1. Beklenti	2. Beklenti	3. Beklenti	4. Beklenti	5. Beklenti
1. İşletme	Marka Bilinirliği	Reklam	Müşteri ile iletişim	Raporlama ve analiz	Hedef kitle belirleme
2. İşletme	Marka tanıtımı	Satış yapmak			
3. İşletme	Ürünlerin özgünlüğünü göstermek	Satış yapmak			
4. İşletme	Müşteri kitlesini oluşturmak	Kolay şekilde reklam verebilmek	Markanın paylaşılmasını sağlamak	Müşterilerle iletişim kurmak	

Tablo 4’e göre; marka bilinirliği, marka tanıtımı, ürünlerin özgünlüğünü göstermek ve müşteri kitlesini oluşturmak işletmelerin sosyal medya kullanmaya başlarken önde gelen beklentileri olduğu görülmektedir. Bu beklentileri ise, reklam ve satış izlemektedir. İşletmelerin mevcut bulundukları sosyal medya düzeyine ulaşmak için gerçekleştirdiği faaliyetlerin öncelik sırasına göre dağılımı Tablo 5’te verilmiştir.

Tablo 5: İşletmelerin Mevcut Sosyal Medya Kullanım Düzeyine Ulaşmak İçin Gerçekleştirdiği Faaliyetlerin Dağılımı

İşletmenin İsmi	1. İşletme	2. İşletme	3. İşletme	4. İşletme
1. Faaliyet	Sosyal medya hesabı oluşturma	Sosyal medya hesabı oluşturma	Sosyal medya hesabı oluşturma	Sosyal medya hesabı oluşturma
2. Faaliyet	Marka dilinin belirlenmesi	Fotoğraf çekimi	Hesap yönetimi	Tanıdık çevre tarafından hesabın paylaşılması
3. Faaliyet	Ürün ve diğer görsellerinin paylaşımı	Ürün ve diğer görsellerinin stratejik paylaşımı	Reklam eğitimi alınarak reklamlara başlandı	Ürün ve diğer görsellerinin paylaşımı
4. Faaliyet	Doğru reklam unsurlarının seçimi	Sosyal medya üzerinden reklam verilmesi		Online reklamların yapılması
5. Faaliyet	Marka yüzünün seçilmesi	Verilen reklamların sonuçlarının analizi		Müşteri ilişkilerinin kurulması

Tablo 5'e göre, işletmelerin mevcut sosyal medya kullanım düzeyine ulaşmak için ilk yaptıkları faaliyet, sosyal medya hesabı oluşturmaktır. İkinci faaliyet ise işletmeden işletmeye farklılaşmaktadır. İşletmenin sosyal medya kullanımının müşteri ilişkilerine katkısı Tablo 6'da verilmiştir.

Tablo 6: İşletmenin sosyal medya kullanımının müşteri ilişkilerine katkısının dağılımı

İşletmenin İsmi	Artış Oranı (%)
1. İşletme	Evet katkı sağladı.
2. İşletme	Evet katkı sağladı.
3. İşletme	Evet katkı sağladı.
4. İşletme	Evet katkı sağladı.

Tablo 6'ya göre, işletmelerin tamamının sosyal medya kullanımından katkı elde ettiğini görülmektedir. İşletmelerin sosyal medya kullanımının müşteri ilişkilerine katkısı Tablo 7'de verilmiştir.

Tablo 7: İşletmenin sosyal medya kullanımının müşteri ilişkilerine katkısının dağılımı

İşletmenin İsmi	Sosyal medya kullanımının Müşteri İlişkilerine Katkı
1. İşletme	Müşteri geri bildirimleri üretimi geliştirmek için kullanıldı.
2. İşletme	Marka bilinirliğini arttırdı. Markanın kredibilitesi arttı. Marka vizyonunu yansıtmak.
3. İşletme	Satış arttırıldı. Ürünlerin tanıtımı sağlandı. Defile ve event bilinirliği sağlandı. Marka bilinirliği arttı.
4. İşletme	İletişim kolaylaştı. Ürünlerin paylaşılması ve insanlara ulaşması. Tanıtım ve reklamların kitlemi geliştirmesi. Geri dönüşlerin daha kolay yapılabilmesi.

Tablo 7'ye göre işletmeler müşteri ilişkilerinde sosyal medya kullanarak; ürün geliştirme, marka tanıtımı, reklam, satış, bilinirlik, iletişim, yeni müşteri edinme gibi avantajlar elde etmişlerdir. Tablo 8'de işletmenin sosyal medya kullanımının satışlara etkisi incelenmiştir.

Tablo 8: İşletmenin sosyal medya kullanımının satışlara etkisinin dağılımı

İşletmenin İsmi	Artış Oranı (%)
1. İşletme	%41-50 artırdı.
2. İşletme	%51 ve daha fazla artırdı.
3. İşletme	%51 ve daha fazla artırdı.
4. İşletme	%51 ve daha fazla artırdı.

Tablo 8'e göre, işletmelerin sosyal medya kullanımının satışlar artırdığını göstermektedir. Bu artışın ise genel olarak %50 ve üzerinde olduğu görülmektedir. İşletmelerin sosyal medya kullanımının yeni ürün geliştirme sayısına etkisi Tablo 9'da verilmiştir.

Tablo 9: İşletmenin sosyal medya kullanımının yeni ürün geliştirme sayısına etkisinin dağılımı

İşletmenin İsmi	Artış Oranı (%)
1. İşletme	%41-50 artırdı.
2. İşletme	%51 ve daha fazla artırdı.
3. İşletme	%21-30 artırdı.
4. İşletme	%51 ve daha fazla artırdı.

Tablo 9'a göre işletmelerin sosyal medya kullanımı yeni ürün geliştirme sayısını arttırmaktadır. Bu artışın en az olduğu işletmede %21-30 aralığında iken en fazla olduğu işletmede %51 ve daha fazladır. Tablo 10'da işletmelerin sosyal medya kullanımının marka değerine katkısı incelenmiştir.

Tablo 10: İşletmenin sosyal medya kullanımının marka değerine katkısının dağılımı

İşletmenin İsmi	Artış Oranı (%)
1. İşletme	%41-50 artırdı.
2. İşletme	%51 ve daha fazla artırdı.
3. İşletme	%51 ve daha fazla artırdı.
4. İşletme	%51 ve daha fazla artırdı.

Tablo 10'a göre, işletmelerin sosyal medya kullanımının marka değerini artırdığı görülmektedir. Bu artışın en az olduğu işletmede %41-50 iken, diğer üç işletme %51 ve daha fazla bir artış söz konusudur.

Tablo 11. İşletmelerin Sosyal medya kullanmaya yeni başlayan hazır giyim işletmelerine önerilerinin Dağılımı

1. İşletme	Öneriler
1. Öneri	Müşteri ile interaktif iletişim kurmak.
2. Öneri	Marka dilinin belirlenmesi.
3. Öneri	Müşteri öneri ve şikayetlerinin dikkate alınması.
4. Öneri	Her daim ulaşılabilir olmak.
5. Öneri	Doğru marka konumlandırması.
2. İşletme	Öneriler
1. Öneri	Sosyal medya paylaşımları için bir strateji belirlemek.
2. Öneri	Etkileşim yaratılması için doğru kişilere ulaşmak.
3. Öneri	Çok sık paylaşım yaparak insanlara markayı unutturmamak.
3. İşletme	Öneriler
1. Öneri	Sosyal medyanın profesyonel yönetilmesi.
2. Öneri	Sosyal medya yönetiminin profesyonel işletmeye devredilmesi.
3. Öneri	Reklamı Facebook üzerinden vermek.
4. Öneri	Reklam verirken A/B testi uygulamak.
5. Öneri	Reklam vermek için aracı kullanmamak.
4. İşletme	Öneriler
1. Öneri	Sosyal medya ile iletişimde kurumsal bir dil kullanmak
2. Öneri	Görsellerde kalite standardını korumak
3. Öneri	Sık sorulan soruların cevaplarını web sitesinde hazır bulundurmak.

Tablo 11'de hali hazırda sosyal medya kullanan hazır giyim işletmelerinin sosyal medya kullanmaya istekli hazır giyim işletmelerine önerileri verilmektedir. Sosyal medya kullanmakta olan hazır giyim işletmelerinin sosyal medya kullanmaya istekli hazır giyim işletmelerine önerilerin ilkleri; birinci işletme için "Müşteri ile interaktif iletişim kurmak", ikinci işletme için "Sosyal medya paylaşımları için bir strateji belirlemek." üçüncü işletme için "Sosyal medyanın profesyonel yönetilmesi." ve dördüncü işletme için "Sosyal medya ile iletişimde kurumsal bir dil kullanmak" şeklindedir.

4. SONUÇ

İşletmeler için, teknolojik gelişmelerle birlikte değişen tüketici istek ve beklentilerini karşılayabilmek, pazar rekabet ortamında üstünlük sağlamak önemli bir hale gelmektedir. İnternetin hızla gelişmesi nedeniyle birçok hazır giyim işletmesi sosyal medyayı artık bir iş stratejisi olarak kullanmaktadır. Hazır giyim işletmelerinin sosyal medya kullanımlarını incelemek amacıyla yapılan bu çalışma kapsamında, aktif olarak sosyal medya platformlarını kullanan ve sosyal medya pazarlama stratejileriyle ilerleyen dört marka ile görüşme yapılmıştır. Dört markanın sosyal medya pazarlama stratejileri incelenerek, marka unsurlarına etkisi irdelenmiştir.

Araştırma sonucunda sosyal medya pazarlama stratejilerinin tüketici-marka arasındaki ilişkiyi güçlendirdiği, işletmeler ve markalar için yeni ürün geliştirme sayısını artırdığı ve marka değerine pozitif bir katkısı olduğu görülmüştür. Sonuç olarak sosyal medya pazarlama stratejilerinin genel anlamda hazır giyim işletmelerine pozitif bir geri dönüş sağladığı görülmüştür. Sonuç, literatür taramasında incelenen Başkale ve Khan'ın elde ettiği verileri desteklemektedir.

Araştırma bulgularına göre; satışlarını artırmak ve marka değeri yaratmak isteyen işletmelerin sosyal medya kullanımını artırması yararlı olacaktır.

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TR21 Bölgesinde Tarım İşletmelerinin Tipolojilerinin Belirlenmesi*

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Özet: Dünya genelinde kaynak kullanımındaki etkinlik arayışı çerçevesinde, Türkiye’de tarım sektöründe faaliyet gösteren tarım işletmelerinde de etkinlik sağlayabilmesi için girdi ve çıktı kayıtlarının tutulması ve analizinin yapılması gerekmektedir. AB ülkeleri uygulanan politikaların etkisini gözlemek ve ileriye dönük planlama amacıyla, tarım işletmelerine yönelik olarak 1965 yılında Çiftlik Muhasebe Veri Ağı (FADN) Sistemini oluşturmuşlardır. Tarım sektörünün geliştirilmesine yönelik politikaların oluşturulması için sektöre ilgili ayrıntılı, güvenilir ve güncel bilgilerin toplanması gerekmektedir. Doğru bilgiyi zamanında ve tam olarak ulaşmak önemlidir. Çiftlik Muhasebesi Veri Ağı (FADN) sistemi sayesinde toplanan ve işlenen bilgiler ile tarım işletmeleri daha etkin yönetilmekte ve geleceğe yönelik doğru kararlar alınması sağlanmaktadır. Bu çalışmanın temel amacı, TR21 Bölgesinde FADN sistemine göre işletme tipolojilerini belirlemektir. Çalışmanın materyalini, Edirne-Kırklareli-Tekirdağ (TR21) bölgelerinde faaliyet gösteren tarım işletmelerinden tabakalı örnekleme yöntemi ile belirlenen 334 tarım işletmesi ile anket yoluyla sağlanan veriler oluşturmuştur. Bu çalışmada, söz konusu işletmelerin tipolojileri belirlenmiş ve tipolojilere göre demografik yapıları, ESU’ları hesaplanmıştır.

Anahtar Kelimeler: FADN, Tarım İşletmeleri, Tipoloji, ESU

1. GİRİŞ

Dünya genelinde kaynak kullanımındaki etkinlik arayışı çerçevesinde, Türkiye’de tarım sektöründe faaliyet gösteren tarım işletmelerinde de etkinlik sağlayabilmesi için girdi ve çıktı kayıtlarının tutulması ve analizinin yapılması gerekmektedir.

AB ülkeleri kuruluş aşamasından günümüze kadar geline süreçte birlik düzeyinde ekonomik sektörleri geliştirmek ve ülkeler arasındaki yapısal farklılıkları gidermek amacıyla yatırım ve entegrasyon çalışmaları yürütmektedirler. Bu kapsamda, tarım sektörüne yönelik çalışmalarda Ortak Tarım Politikası (OTP) ekonomik ve politik entegrasyon sürecinin temelinde yer almaktadır. AB ülkeleri uygulanan politikaların etkisini gözlemek ve ileriye dönük planlama amacıyla, tarım işletmelerine yönelik olarak 1965 yılında Çiftlik Muhasebe Veri Ağı (FADN) Sistemini oluşturmuşlardır. Çiftlik Muhasebe Veri Ağı sayesinde tarım işletmelerinden toplanan verilerle işletmelerin yıllık tarımsal gelirleri ve finansal performansları belirlenmekte ve tarım sektörüne olan etkisi izlenmektedir (Yıldırım Korkmaz, 2014: 1). FADN’in kuruluşundaki ilk amaç, AB’de tarım sektörünün durumu hakkında veri sağlamaktır. Bu verilerden hazırlanan yıllık raporlar sayesinde tarım politikaları gözden geçirilmektedir (Külekçi, 2006: 2).

Türkiye’de, AB Ortak Tarım Politikasına (OTP) uyum yükümlülüğü, mevcut tarımsal yapıyı geliştirme isteği ve dünya tarımındaki gelişmeler dikkate alınarak, 2000 yılından itibaren tarımda yeniden yapılanma ve reform için kapsamlı çalışmalar başlatılmıştır.

Sektörlerde gelecekte meydana gelmesi muhtemel olan değişimlerin önceden tahmin edilmesi ve bu tahminler doğrultusunda kararlar alınması büyük önem taşımaktadır. Tarım sektörünün geliştirilmesine yönelik politikaların oluşturulması için sektöre ilgili ayrıntılı, güvenilir ve güncel bilgilerin toplanması gerekmektedir. Doğru bilgiyi zamanında ve tam olarak ulaşmak önemlidir. Çiftlik Muhasebesi Veri Ağı (FADN) sistemi sayesinde toplanan ve işlenen bilgiler ile tarım işletmeleri daha etkin yönetilmekte ve geleceğe yönelik doğru kararlar alınması sağlanmaktadır.

FADN ile tarımsal üreticilerin faaliyetleri, gelirleri ve performansları hakkında sistematik bilgiler elde edilerek çeşitli analizlerden geçirildikten sonra yayınlanmaktadır. Sistemden elde edilen sonuçları, tarım sektörüne yönelik olarak alınacak kararlarda yol gösterici olmaktadır.

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İşletme tipolojilerinin belirlenme aşamasında AB Çiftlik Muhasebe Veri Ağı (FADN) sistemi kullanılmıştır. FADN sistemine göre tipolojileri belirlerken tarım işletmelerinin standart brüt karları kullanılarak belirlenmektedir. Toplam standart karın 2/3'ünün bir üretim faaliyetinden kazanan işletmeler o üretim faaliyetinin adında bir tipoloji adı almaktadır. Bu sistem AB ülkelerinde yaygın olarak kullanılmaktadır (Bayramoğlu vd., 2014: 2).

Bu çalışmanın temel amacı, TR21 Bölgesinde FADN sistemine göre işletme tipolojilerinin belirlenmesidir. Çalışmanın ana amacı doğrultusunda alt amaçları ise AB FADN sistemine göre TR21 Bölgesinde faaliyet gösteren tarım işletmelerinin, demografik yapıları, işletme tipleri ve işletme tiplerine göre faaliyet sonuçlarını hesaplayarak bölge için karlı işletme tipini belirlemek, işletme tiplerine göre işletmelerin başarı kriteri olan brüt işletme karı ve ESU'ları hesaplanmıştır.

2. MATERYAL ve YÖNTEM

Çalışmada kullanılan veriler, Edirne-Kırklareli-Tekirdağ (TR21) bölgelerinde faaliyet gösteren tarım işletmelerinden tabakalı örnekleme yöntemi ile belirlenen 334 tarım işletmesi ile anket yoluyla sağlanan veriler oluşturmuştur. Araştırmanın amacına uygun olarak hazırlanmış anket formları yüzyüze doldurulmuştur. Böylece analiz için gerekli olan birincil veriler üreticilerden elde edilmiştir. Ayrıca konu ile ilgili daha önce yapılmış çalışmalar, Edirne, Kırklareli ve Tekirdağ İl Tarım ve Orman İl Müdürlüklerinden, bölgede faaliyet gösteren çeşitli kooperatiflerden, Türkiye İstatistik Kurumu'ndan ve diğer ilgili kurum ve kuruluşlardan elde edilen ikincil veriler de çalışmada kullanılmıştır.

Çalışmada tarım işletmelerinin tipolojileri belirlenirken anketlerden elde edilen veriler kullanılarak tarım işletmelerinin yıllık faaliyet sonuçları hesaplanarak bulunmuştur. FADN sisteminde tarım işletmesinin tipolojisini belirlerken, o işletmenin toplam standart brüt karı (SBK) baz alınmaktadır. Standart brüt kar bulunurken işletmede yer alan tarımsal faaliyetlerin, standart brüt üretim (BÜD) değerinden, ürüne ait olan özel değişken masrafların çıkarılması ile bulunur. Tarım işletmesinin toplam standart brüt karı, işletmede üretilen bitkisel ve hayvansal ürünlerin standart brüt karları toplamından meydana gelir. Tarım işletmesindeki bir üretim faaliyetinin standart brüt karı, toplam işletmenin standart brüt karının 2/3 ve üzeri ise işletme o üretim faaliyeti ile ilgili ihtisaslaşmış işletme olarak tanımlanır. Eğer işletmede bulunan üretim faaliyetinin standart brüt karı 2/3'ün altında ise o işletme için karma bitkisel veya hayvansal işletme olarak gösterilir.

İşletmelerin ekonomik büyüklük gruplarını belirken standart brüt karları ilk önce TL olarak hesaplanır sonra AB param birimi olan Euro'ya çevrilmektedir. Çevrilen değer 1 ekonomik büyüklük ünitesi olan 1.200 Euro'ya bölünmüş ve işletmelerin ekonomik büyüklük grupları (ESU) belirlenmiştir (Yıldırım Korkmaz, 2014:61).

3. BULGULAR

Etkili ve doğru kararların alınabilmesi ve uygulanan politikaların etkilerinin analiz edilmesi, için doğru ve düzenli tarımsal verilere ihtiyaç duyulmaktadır. Bu nedenle, Çiftlik Muhasebe Veri Ağı (FADN) sistemi oluşturulmuştur.

İşletmelerin büyüklük grupları itibarıyla hesaplanarak Tablo 3.1'de verilmiştir. İşletmelerin %30,24'ü 1.Grup (1-5 ha), %44,61 2.Grup (5-15 ha) ve %25,15'i ise 3.Grup (15 ha+) şeklinde sınıflandırılmıştır.

Tablo 3.1. İşletme büyüklük grupları şeklinde sınıflandırılması

İşletme Grupları	İşletme Sayısı	%
1. Grup (1-5 ha)	101	30,24
2. Grup (5-15 ha)	149	44,61
3. Grup (15 ha+)	84	25,15
Toplam	334	100,00

FADN'a göre tarım işletmelerinin standart brüt kar esasına göre işletme tiplerinin genel olarak 9 ve temel olarak 17 sınıflandırılma şekli bulunmaktadır (Rehber vd. 2002).

Söz konusu işletmelerin tipolojileri belirlenerek sınıflandırılmış Tablo 3.2'de verilmiştir. İşletmeler 4 temel sınıfa göre sınıflandırılmıştır. İşletmelerin %63,77'si ihtisaslaşmış tarla bitkileri, %25,45'i karma hayvancılık ve bitkisel üretim, %7,49'u ihtisaslaşmış otlak hayvancılığı ve %3,29'u ihtisaslaşmış daimi bitki yetiştiriciliği grubunda yer almıştır. Bayramoğlu vd. (2015) çalışmalarında da benzer şekilde en yüksek tipoloji (%75,51) uzmanlaşmış tarla ürünleri yetiştiriciliği işletme tipolojisi olduğunu tespit etmişlerdir.

Tablo 3.2. İşletmelerin tipolojilerine göre sınıflandırılması

Tipoloji Grubu	İşletme Sayısı	%

İhtisaslaşmış Tarla Bitkileri	213	63,77
Karma Hayvancılık ve Bitkisel Üretim	85	25,45
İhtisaslaşmış Otlak Hayvancılığı	25	7,49
İhtisaslaşmış Daimi Bitki (Meyvecilik)	11	3,29
Toplam	334	100,00

İncelenen işletmelerde, işletme tipolojileri itibarıyla, nüfusun yaş, cinsiyet ve miktar olarak durumu Tablo 3.3'te verilmiştir. Tarla bitkileri yetiştiriciliği işletme tipolojisinde nüfus miktarının 5,39 kişi olduğu tespit edilmiştir. Toplam nüfus içinde erkek nüfusun oranının (%53,43) kadın nüfusun oranından (%46,57) daha yüksek olduğu belirlenmiştir.

Karma bitkisel ve hayvancılık işletme tipolojisinde nüfus miktarının 5,39 kişi olduğu tespit edilmiştir. Toplam nüfus içinde erkek nüfusun oranının (%53,43) kadın nüfusun oranından (%46,57) daha yüksek olduğu belirlenmiştir. İhtisaslaşmış otlak hayvancılığı işletme tipolojisinde nüfus miktarının 5,39 kişi olduğu tespit edilmiştir. Toplam nüfus içinde erkek nüfusun oranının (%53,43) kadın nüfusun oranından (%46,57) daha yüksek olduğu belirlenmiştir. İhtisaslaşmış daimi bitki yetiştiriciliği işletme tipolojisinde nüfus miktarının 5,39 kişi olduğu tespit edilmiştir. Toplam nüfus içinde erkek nüfusun oranının (%53,43) kadın nüfusun oranından (%46,57) daha yüksek olduğu belirlenmiştir.

İşletmeler ortalamasında ise nüfus miktarının 5,39 kişi olduğu tespit edilmiştir. Toplam nüfus içinde erkek nüfusun oranının (%53,43) kadın nüfusun oranından (%46,57) daha yüksek olduğu belirlenmiştir.

Tablo 3.3. İşletmelerde nüfusun yaş grupları ve cinsiyete göre dağılımı

Tipoloji	Grubu	0-6		7-14		15-49		50+		Toplam		Toplam
		E	K	E	K	E	K	E	K	E	K	
TBY	Adet	0,04	0,07	0,15	0,11	1,01	0,80	1,68	1,53	2,88	2,51	5,39
	%	0,74	1,30	2,78	2,04	18,74	14,84	31,17	28,39	53,43	46,57	100,00
KBH	Adet	0,08	0,07	0,17	0,05	1,71	0,91	1,78	1,36	3,74	2,39	6,13
	%	1,30	1,14	2,77	0,81	27,89	14,84	29,03	22,18	61,01	38,99	100,00
OH	Adet	0,05	0,05	0,05	0,35	1,65	0,75	1,65	1,30	3,40	2,45	5,85
	%	0,85	0,85	0,85	5,98	28,20	12,82	28,20	22,22	58,11	41,89	100,00
DBY	Adet	0,00	0,20	0,40	0,20	0,90	0,57	1,60	1,43	2,90	2,40	5,30
	%	0,00	3,77	7,54	3,77	16,98	10,75	30,18	26,98	54,71	45,29	100,00
İşl. Ort.	Adet	0,04	0,10	0,19	0,18	1,32	0,75	1,67	1,40	3,23	2,43	5,65
	%	0,70	1,76	3,36	3,18	23,36	13,27	29,55	24,77	57,16	42,84	100,00

TBY: Tarla bitkileri yetiştiriciliği, OH: Otlak hayvancılığı, KBH: Karma bitkisel-hayvancılık, DBY: Daimi bitki yetiştiriciliği

İncelenen işletmelerde, hanehalkının eğitim durumları (7+ yaş) incelendiğinde, işletmeler ortalaması itibarıyla %61,15'i ilköğretim mezunu veya ilk, %19,87'si lise mezunu veya lise okuyan, %9,54'ü ortaokul mezunu veya ortaokulda okuyan, %8,10'u üniversite mezunu veya üniversitede okuyan ve %1,33 okuyamaz nüfustan oluşmaktadır (Tablo 3.4) .

Demirel 2019 yılında Çanakkale çalışmasında nüfusun %15,55'inin ilköğretim, %9,66 ortaokul, %17,44 lise ve %8,61 üniversite mezunu olarak bulmuştur. Korkmaz'ın 2014 yılında Tokat'ta yaptığı çalışmasında, nüfusun %0,99'unun okur yazar olmayan, %49,14'ünün ilköğretim, %13,83'ünün ortaokul, %18,02'sinin lise ve %6,17'sinin üniversite mezunu olduğunu tespit etmiştir.

Tablo 3.4. İşletmelerde nüfusun eğitim durumu (7+ yaş)

Tipoloji	Okuryazar		İlkokul		Ortaokul		Lise		Üniversite		Toplam	
Grubu	Adet	%	Adet	%	Adet	%	Adet	%	Adet	%	Adet	%
TBY	10	1,78	333	59,25	57	10,14	116	20,64	46	8,19	562	100,00
KBH	2	0,83	158	65,56	20	8,30	42	17,43	19	7,88	241	100,00
OH	0	0,00	41	58,57	8	11,43	14	20,00	7	10,00	70	100,00
DBY	0	0,00	19	67,86	1	3,57	7	25,00	1	3,57	28	100,00
İşl. Ort.	12	1,33	551	61,15	86	9,54	179	19,87	73	8,10	901	100,00

TBY: Tarla bitkileri yetiştiriciliği, OH: Otlak hayvancılığı, KBH: Karma bitkisel-hayvancılık, DBY: Daimi bitki yetiştiriciliği

İncelenen işletmelerde, işletme yöneticilerinin yaş gruplarına göre dağılımı Tablo 3.5'te verilmiştir. Tarla bitkileri yetiştiriciliği işletmelerinde, 20-30 yaş grubundaki işletme yöneticilerinin oranı %3,29, 31-40 yaş grubunda olanların oranı %7,04, 41-50 yaş grubunda olanların oranı %17,84, 51 ve üzeri yaş grubunda olanların oranı ise %71,83 olarak belirlenmiştir. İşletme yöneticilerinin ortalama yaşı 56,96 olarak bulunmuştur.

Karma bitkisel ürün ve hayvan yetiştiriciliği işletmelerinde, 20-30 yaş grubundaki işletme yöneticilerinin oranı %1,18, 31-40 yaş grubunda olanların oranı %8,24, 41-50 yaş grubunda olanların oranı %21,18, 51 ve üzeri yaş grubunda olanların oranı ise %60,41 olarak belirlenmiştir. İşletme yöneticilerinin ortalama yaşı 55,60 olarak bulunmuştur.

İhtisaslaşmış otlak hayvancılığı işletmelerinde, 20-30 yaş grubundaki işletme yöneticilerinin oranı %0,00, 31-40 yaş grubunda olanların oranı %12,00, 41-50 yaş grubunda olanların oranı %20,00, 51 ve üzeri yaş grubunda olanların oranı ise %68,00 olarak belirlenmiştir. İşletme yöneticilerinin ortalama yaşı 53,20 olarak bulunmuştur.

İhtisaslaşmış daimi bitkiyetiştiriciliği işletmelerinde, 20-30 yaş grubundaki işletme yöneticilerinin oranı %0,00, 31-40 yaş grubunda olanların oranı %9,09, 41-50 yaş grubunda olanların oranı %18,18, 51 ve üzeri yaş grubunda olanların oranı ise %72,73 olarak belirlenmiştir. İşletme yöneticilerinin ortalama yaşı 59,64 olarak bulunmuştur.

İşletmeler ortalamasında, 20-30 yaş grubundaki işletme yöneticilerinin oranı %2,40, 31-40 yaş grubunda olanların oranı %7,78, 41-50 yaş grubunda olanların oranı %18,86, 51 ve üzeri yaş grubunda olanların oranı ise %70,96 olarak belirlenmiştir. İşletme yöneticilerinin ortalama yaşı 56,42 olarak bulunmuştur.

Tablo 3.5. İşletme yöneticilerinin yaş gruplarına göre dağılımı

Tipoloji Grubu	Yaş Grupları										Ort. Yaş
	20-30		31-40		41-50		50+		Toplam		
	Adet	%	Adet	%	Adet	%	Adet	%	Adet	%	
TBY	7	3,29	15	7,04	38	17,84	153	71,83	213	100,00	56,96
KBH	1	1,18	7	8,24	18	21,18	59	69,41	85	100,00	55,60
OH	0	0,00	3	12,00	5	20,00	17	68,00	25	100,00	53,20
DBY	0	0,00	1	9,09	2	18,18	8	72,73	11	100,00	59,64
İşl. Ort.	8	2,40	26	7,78	63	18,86	237	70,96	334	100,00	56,42

TBY: Tarla bitkileri yetiştiriciliği, OH: Otlak hayvancılığı, KBH: Karma bitkisel-hayvancılık, DBY: Daimi bitki yetiştiriciliği

İncelenen işletmelerde, işletme yöneticilerinin eğitim düzeylerine göre dağılımı Tablo 3.6'da verilmiştir.İhtisaslaşmış tarla bitkileri yetiştiriciliği grubunda işletme yöneticilerinin %55,87'si ilköğretim mezunu, %16,43'ü ortaokul mezunu, %22,07'si lise mezunu ve %5,63'ü ise üniversite mezunudur. İşletme yöneticilerinin ortalama eğitim süresi 7,38 yıl olarak bulunmuştur.

İhtisaslaşmış karma bitkisel ürün-hayvan yetiştiriciliği grubunda işletme yöneticilerinin %68,24'ü ilköğretim mezunu, %10,59'u ortaokul mezunu, %17,65'i lise mezunu ve %3,53'ü ise üniversite mezunudur. İşletme yöneticilerinin ortalama eğitim süresi 6,73 yıl olarak bulunmuştur.

İhtisaslaşmış otlak hayvancılığı grubunda işletme yöneticilerinin %48,00'ü ilkökul mezunu, %24,00'ü ortaokul mezunu, %24,00'ü lise mezunu ve %4,00'ü ise üniversite mezunudur. İşletme yöneticilerinin ortalama eğitim süresi 7,56 yıl olarak bulunmuştur.

İhtisaslaşmış daimi bitki yetiştiriciliği grubunda işletme yöneticilerinin %54,55'i ilkökul mezunu, %0,00'ü ortaokul mezunu, %36,36'sı lise mezunu ve %9,09'u ise üniversite mezunudur. İşletme yöneticilerinin ortalama eğitim süresi 8,09 yıl olarak bulunmuştur.

İşletmeler ortalaması itibarıyla işletme yöneticilerinin %58,38'si ilkökul mezunu, %14,97'si ortaokul mezunu, %22,56'sı lise mezunu ve %5,09'u ise üniversite mezunudur. İşletme yöneticilerinin ortalama eğitim süresi 7,25 yıl olarak bulunmuştur.

İşletme yöneticilerinden ilkökul mezunu (%68,24) olanların en yüksek olduğu işletme tipi karma bitkisel ürün-hayvan yetiştiriciliği işletme grubunda yer almaktadır. Üniversite mezunu en yüksek olan işletme tipi ise %9,09 oran ile ihtisaslaşmış daimi bitki yetiştiriciliği (meyvecilik) işletme tipindedir.

Tablo 3.6. İşletme yöneticilerinin eğitim düzeylerine göre dağılımı

Tipoloji Grubu	Eğitim Düzeyi										Ortalama
	İlkokul		Ortaokul		Lise		Üniversite		Toplam		Eğitim
	Adet	%	Adet	%	Adet	%	Adet	%	Adet	%	Süresi
TBY	119	55,87	35	16,43	47	22,07	12	5,63	213	100,00	7,38
KBH	58	68,24	9	10,59	15	17,65	3	3,53	85	100,00	6,73
OH	12	48,00	6	24,00	6	24,00	1	4,00	25	100,00	7,56
DBY	6	54,55	0	0,00	4	36,36	1	9,09	11	100,00	8,09
İşl. Ort.	195	58,38	50	14,97	72	21,56	17	5,09	334	100,00	7,25

TBY: Tarla bitkileri yetiştiriciliği, OH: Otlak hayvancılığı, KBH: Karma bitkisel-hayvancılık, DBY: Daimi bitki yetiştiriciliği

İşletmelerin işgünü ortaya koyabilmek için erkek iş gücü birimi katsayısına (EİB) göre erkek iş günü (EİG) hesaplanarak, incelenen işletmelerde, işletme işgücü kullanım durumu Tablo 3.7'de verilmiştir.

En yüksek yabancı işgücünün oranının otlak hayvancılığı işletme tipolojisinde ve ihtisaslaşmış karma bitkisel ürün-hayvab yetiştiriciliği işletme tipolojisinde olduğu görülmektedir. Otlak hayvancılığı işletme tipolojisinde daimi işgücü kullanım oranının diğer işletme gruplarına göre daha yüksek olduğu dikkat çekmektedir. İşletmeler ortalaması itibarıyla toplam işgücü içerisinde yabancı işgücünün oranı %1,02 (geçici işgücü) ve %4,19 (daimi işgücü) olarak tespit edilmiştir.

Tablo 3.7. İşletme işgücü kullanım durumu (EİG)

Tipoloji Grubu		Aile İşgücü Kullanımı			İşletmede Kullanılan		Toplam
		İşletmede	İşletme dışı tarımda	Tarım dışında	Geçici işgücü	Daimi işgücü	
TBY	Adet	313,72	2,80	161,77	13,02	21,35	512,66
	%	61,19	0,54	31,55	2,53	4,16	100,00
KBH	Adet	889,85	9,90	165,64	5,18	34,18	1.104,75
	%	80,55	0,89	14,99	0,46	3,09	100,00
OH	Adet	757,49	0,00	185,45	4,65	73,00	1.020,59
	%	74,22	0,00	18,17	0,45	7,15	100,00
DBY	Adet	353,44	4,33	60,00	8,64	0,00	426,41
	%	82,88	1,01	14,07	2,02	0,00	100,00
İşl. Ort.	Adet	578,62	4,26	143,21	7,87	32,13	766,09

%	75,52	0,55	18,69	1,02	4,19	100,00

TBY: Tarla bitkileri yetiştiriciliği, OH: Otlak hayvancılığı, KBH: Karma bitkisel-hayvancılık, DBY: Daimi bitki yetiştiriciliği

İncelenen işletmelerde, işletme yöneticilerinin tarımsal deneyimleri göre dağılımı Tablo 3.8’de verilmiştir. İhtisaslaşmış tarla bitkileri yetiştiriciliği tipoloji grubunda işletme yöneticilerinin ortalama tarımsal deneyimleri 34,80 yıl olarak bulunmuştur. Karışık bitkisel ürün- hayvan yetiştiriciliği tipoloji grubunda işletme yöneticilerinin ortalama tarımsal deneyimleri 33,68 yıl olarak bulunmuştur. Daimi bitki yetiştiriciliği tipoloji grubunda ise işletme yöneticilerinin tarımla uğraşma süreleri ortalama 34,36 yıl olarak bulunmuştur. En düşük tarımsal faaliyetlerle uğraşma süresi otlak hayvancılığı tipoloji grubunda olup, 32,92 yıldır.

Tablo 3.8. İşletme yöneticilerinin tarımsal deneyimleri göre dağılımı

Tipoloji Grubu	Tarımsal Deneyim												Ort. Yıl
	1-10 yıl		11-20 yıl		21-30 yıl		31-40 yıl		40- +		Toplam		
	Adet	%	Adet	%	Adet	%	Adet	%	Adet	%	Adet	%	
TBY	24	11,27	28	13,15	40	18,78	38	17,84	83	38,97	213	100,00	34,80
KBH	7	8,24	9	10,59	23	27,06	26	30,59	20	23,53	85	100,00	33,68
OH	1	4,00	4	16,00	4	16,00	12	48,00	4	16,00	25	100,00	32,92
DBY	1	9,09	1	9,09	3	27,27	3	27,27	3	27,27	11	100,00	34,36
İşl. Ort.	33	9,88	42	12,57	70	20,96	79	23,65	110	32,93	334	100,00	34,36

TBY: Tarla bitkileri yetiştiriciliği, OH: Otlak hayvancılığı, KBH: Karma bitkisel-hayvancılık, DBY: Daimi bitki yetiştiriciliği

İşletme yöneticilerinin sosyal güvenceleri incelendiğinde, tarla bitkileri yetiştiriciliği tipoloji grubunda %69,48’i BAĞ-KUR, %26,76’sı SSK ve %3,76’sı emekli sandığı, Karma bitkisel ürün-hayvan yetiştiriciliği tipoloji grubunda %83,53’ü BAĞ-KUR ve %16,47’si SSK, İhtisaslaşmış otlak hayvancılığı tipoloji grubunda %72,00’i BAĞ-KUR ve %28,00’i SSK, İhtisaslaşmış daimi bitki yetiştiriciliği tipoloji grubunda %81,82’si BAĞ-KUR, %9,09’u SSK ve %9,09’u emekli sandığı ve işletmeler ortalamasında ise %73,65’i BAĞ-KUR, %23,65’si SSK ve %2,69’u emekli sandığı olarak bulunmuştur. Ayrıca Karma bitkisel ürün-hayvan yetiştiriciliği ve İhtisaslaşmış otlak hayvancılığı tipoloji gruplarında emekli sandığına kayıtlı üreticilerine rastlanmamıştır (Tablo 3.9).

Tablo 3.9. İşletme yöneticilerinin sosyal güvence durumlarına göre dağılımı

Tipoloji Grubu	Sosyal Güvence							
	BAĞ-KUR		SSK		Emekli Sandığı		Toplam	
	Adet	%	Adet	%	Adet	%	Adet	%
TBY	148	69,48	57	26,76	8	3,76	213	100,00
KBH	71	83,53	14	16,47	0	0,00	85	100,00
OH	18	72,00	7	28,00	0	0,00	25	100,00
DBY	9	81,82	1	9,09	1	9,09	11	100,00
İşl. Ort.	246	73,65	79	23,65	9	2,69	334	100,00

TBY: Tarla bitkileri yetiştiriciliği, OH: Otlak hayvancılığı, KBH: Karma bitkisel-hayvancılık, DBY: Daimi bitki yetiştiriciliği

Tarım işletmelerinin sahip olduğu araziler ve mülkiyet durumları işletme başarılarını etkileyen faktörlerden birisidir. İncelenen işletmelerde, işletmelerin arazi tasarruf şekli Tablo 3.10’da verilmiştir. Tarla bitkileri yetiştiriciliği tipoloji grubunda %70,49’u mülk ve %29,51’i kira, Karma bitkisel ürün-hayvan yetiştiriciliği tipoloji grubunda %72,30’u mülk ve %27,70’i kira, İhtisaslaşmış otlak hayvancılığı tipoloji grubunda %70,53’ü mülk ve %29,47’si kira, İhtisaslaşmış daimi bitki yetiştiriciliği tipoloji grubunda %60,12’si mülk ve %37,88’i kira ve işletmeler ortalamasında ise %68,99’u mülk ve %31,01’i kira olarak bulunmuştur. Emre’nin 2010 yılında Isparta’da yaptığı çalışmada arazilerin %86,05’ini mülk arazileri ve 13,95’ini kiraya ve ortağa tutulan arazilerin oluşturduğunu saptamıştır.

Tablo 3.10. İşletmelerde arazi tasarruf şekli

Tipoloji Grubu	Arazi Tasarruf Şekli					
	Mülk		Kira		Toplam	
	Ha	%	Ha	%	Ha	%
TBY	22,46	70,49	9,40	29,51	31,86	100,00
KBH	21,69	72,30	8,31	27,70	30	100,00
OH	22,12	70,53	9,24	29,47	31,36	100,00
DBY	13,45	60,12	8,92	37,88	22,37	100,00
İşl. Ort.	19,93	68,99	8,96	31,01	28,89	100,00

TBY: Tarla bitkileri yetiştiriciliği, OH: Otlak hayvancılığı, KBH: Karma bitkisel-hayvancılık, DBY: Daimi bitki yetiştiriciliği

İşletmelerin yıllık faaliyet sonuçlarından olan bitkisel üretim değeri ve hayvansal üretim değerlerinin toplamı işletmelerin toplam üretim değerlerini oluşturmaktadır. Söz konusu işletmelerin üretim değerleri Tablo 3.11’de verilmiştir.

Tarla bitkileri yetiştiriciliği tipoloji grubunda bitkisel üretim değeri 63.983,08 TL (%94,33), hayvansal üretim değeri 3.846,10 TL (%5,67) olarak hesaplanmıştır. Toplam üretim değeri ise 67.829,18 TL olarak bulunmuştur. Karma bitkisel ürün - hayvan yetiştiriciliği tipoloji grubunda bitkisel üretim değeri 77.854,57 TL (%52,30), hayvansal üretim değeri 70.990,08 TL (%47,70) olarak hesaplanmıştır. Toplam üretim değeri ise 148.844,65 TL olarak bulunmuştur. İhtisaslaşmış otlak hayvancılığı tipoloji grubunda bitkisel üretim değeri 43.992,34 TL (%31,72), hayvansal üretim değeri 94.708,15 TL (%68,28) olarak hesaplanmıştır. Toplam üretim değeri ise 138.700,49 TL olarak bulunmuştur. İhtisaslaşmış daimi bitki yetiştiriciliği tipoloji grubunda bitkisel üretim değeri 232.274,10 TL (%99,77), hayvansal üretim değeri 549,42 TL (%0,23) olarak hesaplanmıştır. Toplam üretim değeri ise 232.823,53 TL olarak bulunmuştur.

İşletmeler ortalaması itibarıyla bitkisel üretim değeri 104.526,10 TL (%71,08), hayvansal üretim değeri 42.523,43 TL (%28,92) olarak hesaplanmıştır. Toplam üretim değeri ise 147.049,46 TL olarak bulunmuştur. En çok üretim değerinde bulunan tipoloji grubu ihtisaslaşmış daimi bitki yetiştiriciliğidir. Üretim değerinin %99,77 bitkisel üretim değerinden elde etmiştir.

Tablo 3.11. İşletmelerde elde edilen üretim değerleri

Tipoloji Grubu	Bitkisel Üretim Değeri		Hayvansal Üretim Değeri		Toplam Üretim Değeri	
	TL	%	TL	%	TL	%
TBY	63.983,08	94,33	3.846,10	5,67	67.829,18	100,00
KBH	77.854,57	52,30	70.990,08	47,70	148.844,65	100,00
OH	43.992,34	31,72	94.708,15	68,28	138.700,49	100,00
DBY	232.274,10	99,77	549,42	0,23	232.823,52	100,00
İşl. Ort.	104.526,10	71,08	42.523,43	28,92	147.049,46	100,00

TBY: Tarla bitkileri yetiştiriciliği, OH: Otlak hayvancılığı, KBH: Karma bitkisel-hayvancılık, DBY: Daimi bitki yetiştiriciliği

İncelenen işletmelerde, bitkisel üretimin, hayvansal üretimin ve bunların toplamından oluşan toplam özel masraflar Tablo 3.12’de verilmiştir.

Tarla bitkileri yetiştiriciliği tipoloji grubunda bitkisel özel masraf değeri 14.086,39 TL (%87,61), hayvansal özel masraf değeri 1.992,13 TL (%12,39) olarak hesaplanmıştır. Toplam özel masraf değeri ise 16.078,52 TL olarak bulunmuştur. Karma bitkisel ürün - hayvan yetiştiriciliği tipoloji grubunda bitkisel özel masraf değeri 15.996,96 TL (%38,41), hayvansal özel masraf değeri 25.647,07 TL (%61,59) olarak hesaplanmıştır. Toplam özel masraf değeri ise 41.644,03 TL olarak bulunmuştur.

İhtisaslaşmış otlak hayvancılığı tipoloji grubunda bitkisel özel masraf değeri 11.051,38 TL (%30,89), hayvansal özel masraf değeri 24.729,63 TL (%69,11) olarak hesaplanmıştır. Toplam özel masraf değeri ise 35.781,01 TL olarak bulunmuştur.

İhtisaslaşmış daimi bitki yetiştiriciliği tipoloji grubunda bitkisel özel masraf değeri 34.163,06 TL (%98,90), hayvansal özel masraf değeri 380,69 TL (%1,10) olarak hesaplanmıştır. Toplam özel masraf değeri ise 34.543,75 TL olarak bulunmuştur.

İşletmeler ortalaması itibarıyla bitkisel özel masraf değeri 18.824,44 TL (%58,80), hayvansal özel masraf değeri 13.187,38 TL (%41,20) olarak hesaplanmıştır. Toplam özel masraf değeri ise 32.011,82 TL olarak bulunmuştur.

Tablo 3.12. İşletmelerde toplam özel masraflar

Tipoloji Grubu	Bitkisel Özel Masraflar		Hayvansal Özel Masraflar		Toplam Özel Masraflar	
	TL	%	TL	%	TL	%
TBY	14.086,39	87,61	1.992,13	12,39	16.078,52	100,00
KBH	15.996,96	38,41	25.647,07	61,59	41.644,03	100,00
OH	11.051,38	30,89	24.729,63	69,11	35.781,01	100,00
DBY	34.163,06	98,90	380,69	1,10	34.543,75	100,00
İşl. Ort.	18.824,44	58,80	13.187,38	41,20	32.011,82	100,00

TBY: Tarla bitkileri yetiştiriciliği, OH: Otlak hayvancılığı, KBH: Karma bitkisel-hayvancılık, DBY: Daimi bitki yetiştiriciliği

İşletmelerin FADN'a göre ekonomik büyüklük sınıflarının tespit edilmesi amacıyla hesaplanan standart brüt kârlar, incelenen işletmelerin 2020-2021 yılı üretim dönemlerinde ortaya çıkan Euro/TL değeri olan 7,69 TL'ye bölünerek işletmelerin standart brüt kârları Avrupa Para Birimi ESU'ya çevrilmiştir. Daha sonra, işletmelerin ECU cinsinden hesaplanan standart brüt kârları, 1 ekonomik büyüklük ünitesi olan 1200 Euro'ya bölünerek işletme büyüklük sınıflarında yer alan işletmelerin ortalama ekonomik büyüklük sınıfları tespit edilmiştir. İncelenen işletmelerde, işletmelerin standart brüt kârları ve ekonomik büyüklük grupları Tablo 3.13'de verilmiştir. Tablo 3.13'den de görüldüğü gibi işletme tipoloji gruplarında, işletmelerin ortalama ESU değerleri 2,81 ile 10,63 ESU arasında değişmektedir.

Tarla bitkileri yetiştiriciliği tipoloji grubunda brüt marjın ECU değeri 6.729,60, işletmelerin ekonomik büyüklük değeri (ESU) 2,81 ve ekonomik büyüklük sınıfı II olarak bulunmuştur. Karışık bitkisel ürün-hayvan yetiştiriciliği tipoloji grubunda brüt marjın ECU değeri 13.940,26, işletmelerin ekonomik büyüklük değeri (ESU) 5,81 ve ekonomik büyüklük sınıfı III olarak bulunmuştur.

İhtisaslaşmış otlak hayvancılığı tipoloji grubunda brüt marjın ECU değeri 13.282,54, işletmelerin ekonomik büyüklük değeri (ESU) 5,55 ve ekonomik büyüklük sınıfı III olarak bulunmuştur.

İhtisaslaşmış daimi bitki yetiştiriciliği tipoloji grubunda brüt marjın ECU değeri 25.784,11, işletmelerin ekonomik büyüklük değeri (ESU) 10,63 ve ekonomik büyüklük sınıfı V olarak bulunmuştur.

İşletmeler ortalamasında ise brüt marjın ECU değeri 14.959,37, işletmelerin ekonomik büyüklük değeri (ESU) 6,20 ve ekonomik büyüklük sınıfı III olarak bulunmuştur.

Demirel, (2019) çalışmasında tarım işletmelerinin ekonomik büyüklüklere göre sınıflandırılması 5 gruba göre yapılmıştır. İşletmelerin %32,20'si I. ekonomik büyüklük sınıfı, %15,25'i II. ekonomik sınıfı, %18,64'ü III. ekonomik büyüklük sınıfı, %16,95'i IV. ekonomik büyüklük sınıfı ve %16,96'sı V. ekonomik büyüklük sınıfında bulunduğu tespit etmiştir. Ayrıca çalışmada bulunan tarım işletmelerden elde edilen sonuçlarına göre, ekonomik büyüklükleri 2,14 ve 98,86 ESU değeri arasında değişmektedir. İşletmeler ortalaması ise 24,03 ESU'dur.

Tablo 3.13. İşletmelerin standart brüt kârları ve ekonomik büyüklük grupları

Tipoloji Grubu	Toplam Üretim Değeri	Toplam Özel Masraflar	Toplam Standart Brüt Marj	Brüt Marjın ECU Değeri	İşletmenin Ekonomik Büyüklüğü (ESU)	Ekonomik Büyüklük Sınıfı

TBY	67.829,18	16.078,52	51.750,66	6.729,60	2,81	II
KBH	148.844,65	41.644,03	107.200,62	13.940,26	5,81	III
OH	138.700,49	35.781,01	102.919,48	13.383,54	5,55	III
DBY	232.823,60	34.543,75	198.279,77	25.784,11	10,63	V
İşl. Ort.	147.049,48	32.011,82	115.037,63	14.959,37	6,20	III

TBY: Tarla bitkileri yetiştiriciliği, OH: Otlak hayvancılığı, KBH: Karma bitkisel-hayvancılık, DBY: Daimi bitki yetiştiriciliği

4. SONUÇ

Tarım işletmelerinin tipolojilerinin belirlenmesinde Çiftlik Muhasebe Veri Ağı metodolojisi kullanılmıştır. İşletme başarılarının belirlenmesinde yıllık faaliyet sonuçları analiz edilmiştir. İncelenen işletmeler tipoloji gruplarına göre sınıflandırılmıştır. TR21 Bölgesini temsilen belirlenen 334 işletmenin %63,77'si ihtisaslaşmış tarla bitkileri, %25,45'i karma hayvancılık ve bitkisel üretim, %7,49'u ihtisaslaşmış otlak hayvancılığı ve %3,29'u ihtisaslaşmış daimi bitki yetiştiriciliği grubunda yer almıştır.

Çalışma kapsamında yer alan işletmelerin nüfus yapısı incelenmiştir. Tarımsal üretim emek yoğun bir üretim faaliyeti olmakla birlikte ihtiyaç duyduğu işgücünün önemli bir kısmını işletme nüfusundan karşılamaktadır. Bu nedenle işletmede barınan nüfusun varlığı, yaş gruplarına göre dağılımı, işgücüne katılımı ve eğitim seviyesi önemlidir.

İncelenen işletmelerde işletme başına nüfus varlığı 5,65 olarak belirlenmiştir. Bu durum işletme tipolojilerine göre değişmekte olup, karışık bitkisel ve hayvansal üretim yapan işletmelerde (6,13) fazla iken, ihtisaslaşmış daimi bitki yetiştiren işletmelerde (5,30) düşüktür.

İncelenen işletmelerde, hanehalkının eğitim durumları (7+ yaş) incelendiğinde, işletmeler ortalaması itibarıyla %61,15'i ilkokul mezunu veya ilk, %19,87'si lise mezunu veya lise okuyan, %9,54'ü ortaokul mezunu veya ortaokulda okuyan, %8,10'u üniversite mezunu veya üniversitede okuyan ve %1,33 okuyamaz nüfustan oluşmaktadır.

İşletme yöneticilerinden ilkokul mezunu (%68,24) olanların en yüksek olduğu işletme tipi karma bitkisel ürün-hayvan yetiştiriciliği işletme grubunda yer almaktadır. Üniversite mezunu en yüksek olan işletme tipi ise %9,09 oran ile ihtisaslaşmış daimi bitki yetiştiriciliği (meyvecilik) işletme tipindedir.

En yüksek yabancı işgücünün oranının otlak hayvancılığı işletme tipolojisinde ve ihtisaslaşmış karma bitkisel ürün-hayvan yetiştiriciliği işletme tipolojisinde olduğu görülmektedir. Otlak hayvancılığı işletme tipolojisinde daimi işgücü kullanım oranının diğer işletme gruplarına göre daha yüksek olduğu dikkat çekmektedir. İşletmeler ortalaması itibarıyla toplam işgücü içerisinde yabancı işgücünün oranı %1,02 (geçici işgücü) ve %4,19 (daimi işgücü) olarak tespit edilmiştir.

İşletme yöneticilerinin özellikleri de etkin işletme planlaması ve işletme başarısı üzerine etkilidir. Bu amaca yönelik olarak incelenen işletmelerde yöneticilerin yaş, eğitim, tarımsal deneyim ve sosyal güvence durumları incelenmiştir.

İşletme ortalamasına göre yönetici yaşı 56,42 olarak belirlenmiştir. İşletme tipolojilerine göre de yaş ortalaması fazla değişiklik göstermemekte olup, en yüksek yönetici yaşı ortalaması (59,64) daimi bitki üretimi yapan işletmelerde, en düşük yaş ortalaması ise (53,20) ihtisaslaşmış otlak hayvancılığı yapan işletmelerdir. İşletme yöneticilerinin %70,96'sı 51 yaş ve üzerinde olup, %18,86'sı 41-50 yaş aralığında, %7,78'i 31-40 yaş aralığında ve %2,40'ı 20-30 yaş aralığındadır. İşletme yöneticilerinin %56,58'inin tarımsal deneyimi 30 yılın üzerinde, %20,96'sının 21-30 yıl, %12,57'sinin 11-20 yıl ve %9,88'inin 1-10 yıl arasında olduğu belirlenmiş olup, ortalama tarımsal deneyimin 34,36 yıl olduğu tespit edilmiştir. İşletme yöneticilerinin %73,65'i BAĞ-KUR'a, %23,65'i SSK'ya ve %2,69'u Emekli Sandığı'na kayıtlıdır.

En fazla arazi varlığı 31,86 ha ile ihtisaslaşmış tarla bitkileri yetiştiriciliği yapan işletmelerde ve en az 22,37 ha ile daimi bitki yetiştiriciliği yapan işletmelerdedir. Ortalama arazi varlığı 28,89 Ha bulunmuştur. TR21 bölgesindeki ortalama arazi varlığı Türkiye ortalamasının üzerinde olduğu tespit edilmiştir. Ortalama arazi varlığının %68,99'u mülk ve %31,01'i kira ile işlenen arazilerdir. İşletmeler ortalamasında işletme tipleri itibarıyla ihtisaslaşmış tarla bitkileri yetiştiriciliği ve daimi bitki yetiştiriciliği yapan işletmelerde kiraya tutulan arazi oranının daha yüksek olduğu, hayvancılığın yoğun olduğu diğer iki işletme tipinde ise nispeten daha düşük olduğu görülmektedir.

İşletmeler ortalaması itibarıyla bitkisel üretim değeri 104.526,10 TL (%71,08), hayvansal üretim değeri 42.523,43 TL (%28,92) olarak hesaplanmıştır. Toplam üretim değeri ise 147.049,46 TL olarak bulunmuştur. En çok üretim değerinde bulunan tipoloji grubu İhtisaslaşmış daimi bitki yetiştiriciliğidir. Üretim değerinin %99,77 bitkisel üretim değerinden elde etmiştir.

İşletmeler ortalaması itibarıyla bitkisel özel masraf değeri 18.824,44 TL (%58,80), hayvansal özel masraf değeri 13.187,38 TL (%41,20) olarak hesaplanmıştır. Toplam özel masraf değeri ise 32.011,82 TL olarak bulunmuştur. En çok özel masraf değeri bulunan tipoloji grubu İhtisaslaşmış daimi bitki yetiştiriciliğidir. Özel masrafların toplamı 34.163,06 TL (%98,90)'dır.

İşletmeler ortalaması ise brüt marjın ECU değeri 14.959,37, işletmelerin ekonomik büyüklük değeri (ESU) 6,20 ve ekonomik büyüklük sınıfı III olarak bulunmuştur. En fazla ekonomik büyüklük değeri (ESU) 10,63 ile daimi bitki yetiştiriciliği tipoloji gurubu olduğu belirlenmiştir. Bölgedeki tarımsal işletmeler 2,81 ile 10,63 ESU değerleri arasında değişmekte ve II. ve V. ekonomik büyüklük sınıfları arasında bulunmuştur.

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Tarım Sektöründe Kırsal Kadının Rolü ve Türkiye İçin Kırsal Kadın Özneli Organizasyonların Önemi

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Özet: Kırsal alanda yaşayan kadınlar, toplumsal cinsiyet ayrımcılığını etkileyen gelenekler gibi bazı kısıtlara rağmen, özellikle emek yoğun faaliyetler açısından kırsal ekonomi ve kırsal kalkınma için temel unsurlar arasında sayılmaktadır. Bununla birlikte, toplumsal rolleri ve kırsal alandaki ekonomik faaliyetlerin niteliği, kırsal alanda yaşayan kadınların ekonomik faaliyetlere geçişini sınırlamakta ve yavaşlatmaktadır. Kırsal kadınların sosyo-ekonomik varlıklarını devam ettirebilmeleri hatta artırabilmeleri için, hemen her ülkede farklı kapsamlarda çalışmalar yapılmaktadır. Kırsal kadınların kooperatif gibi organizasyonlar aracılığıyla ekonomik süreçlere bağlanıp sağlanması ve toplumsal rollerini ekonomik güçleriyle daha etkin geliştirmeleri bu çabalar arasındadır. Türkiye’de de kırsal kadınların çeşitli organizasyonlar kapsamında üretim süreçlerine aktif katılımı yönünde kurumsal ve bireysel faaliyetler sürmektedir. Nitekim, sosyo-ekonomik politikalar çerçevesindeki eylem ve planların yanı sıra STK’lar aracılığıyla da sürdürülen çabalar giderek artmaktadır. İşte bu çalışmanın amacı, tarım sektöründe kırsal kadının rolü kapsamında Türkiye için, kırsal kadın özneli organizasyonların önemini örnekler aracılığıyla incelemek ve konu ile ilgili öneriler sunmaktır.

Anahtar Kelimeler: Kırsal Kadın, Kadın Kooperatifi, Toplumsal Cinsiyet, Türkiye

The Role of Rural Woman in the Agriculture Sector and the Importance of Rural Woman-Subject Organizations for Turkey

Abstract: Women living in rural areas are considered among the basic elements for rural economy and rural development, especially in terms of labor-intensive activities, despite some constraints such as traditions affecting gender discrimination. However, their social roles and the nature of economic activities in rural areas limit and slow down the transition of women living in rural areas to economic activities. In almost every country, studies are carried out in different scopes so that rural women can maintain and even increase their socio-economic existence. These efforts include linking rural women to economic processes through organizations such as cooperatives and improving their social roles more effectively with their economic power. In Turkey, institutional and individual efforts continue for the active participation of rural women in production processes within the scope of various organizations. In addition to the actions and plans within the framework of socio-economic policies, studies carried out through NGOs are increasing. The aim of this study is to examine the importance of rural women's organizations for Turkey within the scope of the role of rural women in the agricultural sector, through examples, and to offer suggestions on the subject.

Keywords: Rural Woman, Women's Cooperative, Gender, Turkey

1.GİRİŞ

Kırsal alanın ulusal ve uluslararası kurum ve kuruluşlar tarafından yapılmış hemen hemen benzer kriter ve kapsamlarda farklı tanımları olmasına rağmen, “kırsal kadın” kavramının kabul edilmiş bir tanımı bulunmamaktadır (Shortall and Bock, 2015). Kadınların yaşadığı coğrafi alana göre kırsal ya da kentli olarak ayırma tabi tutulmaması gerektiğini tartışan çalışmalar bulunmakta, ancak, ana ekonomik faaliyetin tarım olduğu kırsal alanlarda kadınların cinsiyet rolünün daha zor koşulları getirdiği de vurgulanmaktadır. Nitekim kırsal kesimde yaşayan kadınlar tarımsal faaliyette toprağın hazırlanmasından hasada, hasattan sonra ise depolama, bakım ve satış işlerinin tamamında çalışmaktadır. Dolayısıyla kırsal kadın tarımda üreten, değerlendiren, pazarlayan ve evdeki rolü sebebiyle tükettiğini üreten birey olarak tanımlanabilmektedir. Özellikle birçok gelişmekte olan ülkede, gıdaların %60-80’i kırsal alanda yaşayan kadınlar tarafından üretilmektedir (Ülker, 2013; OECD, 2022; Worldometer, 2022).

Üretimin hemen her aşamasında aktif olarak yer alan kırsal kadınlar, insanların sağlıklı ve yeterli gıdaya ulaşabilmesi için toprağın korunması, veriminin artırılması ve zenginleştirilmesi için nadas, dönüşümlü ekim ve serpme gibi yöntemlere ve çeşitli tekniklere başvurarak üretimin sağlanmasına katkıda bulunmaktadır. Özellikle hayvancılık faaliyetinde hijyenin sağlanması ve hayvansal ürün üretiminde önemli rolleri vardır. Aynı zamanda evde gıda üretimi yapmakta ve gıda alışverişlerinde belirleyici rol oynamaktadır (Uzunöz ve ark., 2008; STGM, 2010). Kırsal kadınlar ayrıca, gıda ürünlerinin güvenilirliği, çevrenin korunması ve toprağın sürdürülebilirliğinin sağlanmasına da katkıda bulunmaktadır.

Kırsal kadınların ekonomik rolleri ve işlevleri oldukça önemli olmasına rağmen birçok alanda ücretsiz aile işçisi olarak çalışmaktadırlar. Kırsal alanda yaşayan kadınlar ev işlerini çoğunlukla tek başlarına yaparlarken, aynı zamanda el sanatları, bitkisel ve hayvansal hammaddelerin katma değerli ürüne dönüştürülmesi (reçel, kurutma, konserve, peynir, yoğurt, yağ vs.) gibi gelir getirici işler yaparak aile bütçesine de katkı sağlamaktadır (Yılmaz ve ark., 2019).

Az gelişmiş ve gelişmekte olan ülkelerde kırsal kadınların tarımsal üretim faaliyetlerine yoğun bir biçimde katılımı, kırsal ekonomi ve kırsal kalkınmanın temel gücünü oluşturmaktadır. Ülkelerin gelişmişlik seviyesine göre kırsal kadınların tarımsal üretime katılım oranı farklılık göstermektedir. Bu farklılığın temelinde kültür, inançlar ve sosyo-ekonomik faktörlerin etkili olduğu ifade edilmektedir (Ataseven, 2018). Ancak bu ülkelerde kırsal kadınların sağladığı katkıların ve tarımsal üretim içindeki rollerinin sürdürülebilirliği için tehlike yaratan ve toplumsal cinsiyet eşitsizliği temelinde ortaya çıkan bazı sorunlar da önemli düzeydedir. Toplumsal cinsiyet ilişkileri, hayatın birçok alanında erkeklerin daha baskın olduğu, kadınların genellikle ikinci plana itildiği, eşit olmayan güç ilişkisi içermektedir. Erkekler ve erkeklere atfedilen işlevlere ve görevlere verilen değer, birçok açıdan kadınlara ve kadınlara atfedilen işlevlere ve görevlere verilen değerden daha büyüktür (Adak, 2010).

Tarım sektöründe kadın istihdamı ve kadınların tarımsal üretime verdiği katkılar son derece önemli olmakla birlikte, küresel olarak tarım sektöründe çalışan kadın sayısı azalmaktadır. 1991 yılında dünyada tarım sektöründe istihdam edilen kadınların oranı % 44 iken, bu oran 2017 yılında % 27'ye gerilemiştir. 2017 yılı itibarıyla tarım sektöründe kadın istihdam oranları gelişmiş, gelişmekte olan ve az gelişmiş ülkelerde sırasıyla % 2, % 34 ve % 70 düzeyindedir (World Bank, 2018). Bu oranlar doğrultusunda birçok ülkede ve bu arada Türkiye'de de bulunabilir, erişilebilir, kullanılabilir ve sürdürülebilir gıda arzı için tarım sektöründe kırsal kadının önemli bir role sahip olduğundan söz edilebilir. Bu öneme istinaden kırsal kesimde yaşayan kadınların sosyo-ekonomik varlıklarını devam ettirebilmeleri ve arttırabilmeleri için hemen her ülkede farklı kurum ve kuruluşlar tarafından farklı kapsamlarda çalışmalar yapılmaktadır. Bu çalışmanın amacı ise, tarım sektöründe kırsal kadınların rolü kapsamında Türkiye için kırsal kadın organizasyonlarının önemini çeşitli örneklerle incelemektir.

2. KADIN İŞGÜCÜNÜN TARIM SEKTÖRÜNE KATKILARI

Tarım sektöründeki kadınların üretime katılım düzeyleri, ailenin sahip olduğu arazi ve hayvan varlığına, gelire ve üretim desenine göre değişmektedir. Kadınlar mevsimlik işçilik başta olmak üzere bitkisel ve hayvansal üretimin her aşamasında üretime fiili olarak katkıda bulunmaktadır. Dünyada olduğu gibi, Türkiye'de de tarım sektöründe büyük bir bölümü küçük aile işletmesi olarak faaliyetlerini sürdüren tarım işletmelerinin tamamında hâlâ en çok kadınlar çalışmaktadır. Bu nedenle kırsalda yaşayan kadınların tarımsal üretimin birçok aşamasında ücretsiz aile işgücü olarak görev aldığı ve aile gelirinin oluşmasına önemli katkıda bulunduğu belirtilebilir (TURKTOB, 2007; FAO, 2011; Yavuz ve ark., 2018).

Kırsal alanda temel geçim kaynağı çoğunlukla bitkisel ve hayvansal üretim ile mevsimlik göçten oluşmaktadır. Tarımsal işletme eğer düşük mekanizasyon düzeyine sahipse; kadınlar, tarımsal faaliyetlerde özellikle hasat ve hasat sonrası faaliyetler ile hayvansal faaliyete önemli işgücü katkısı sağlamaktadır. Bitkisel üretim faaliyetinin yaygın ve yoğun olduğu bölgelerde kadın işgücü üretimin satış hariç her aşamasında yer almaktadır. Hayvancılık faaliyetlerinde yine sağım, süt ürünlerinin değerlendirilmesi, ahır temizliği ve ot toplama işleri kadınlar tarafından yapılmaktadır. Ayrıca kadınlar, hayvansal ürünlerden yağ, yoğurt ve peynir üretimini satış amacının yanı sıra ailenin öztüketimi için de yapmaktadır (Özçatalbaş, 2001; Kızılaslan ve Yamanoglu, 2010; Ülker, 2013; Yılmaz ve ark., 2019).

Kırsal alanda yaşayan kadınların tarımsal üretime, hem bitkisel hem de hayvansal üretim yönüyle aktif katılımına rağmen tarım sektöründe kadın emeği, aile içinde kayıt dışı, güvencesiz çalışan, üretimde de ücretsiz aile işçisi olduğundan gelir getirici bir faaliyet olarak görülmemekte ve genellikle istatistiklere de pek yansımamaktadır. Özellikle gelişmekte olan ve az gelişmiş ülkelere özgü bir problem olarak ortaya çıkan kayıt dışı istihdam, Türkiye için de bir sorun olarak değerlendirilebilmektedir. Nitekim Sosyal Güvenlik Kurumu istatistiklerine göre, Türkiye'de kayıt dışı istihdamın en yoğun olduğu sektör tarım sektörüdür. 2017 yılında tarım sektöründe kayıt dışı istihdam %83.3 olarak belirlenmiştir. Kayıt dışı istihdamın cinsiyete göre dağılımı açısından da önemli bir farklılık söz konusudur. Sektörde %94.2 oranında kadın kayıt dışı çalıştırılırken, erkeklerde bu oran %77.7 olarak belirlenmiştir (Öçal ve Şenel, 2021; TÜİK, 2022).

Kayıt dışı ekonomi ve kayıt dışı istihdam, bu soruna sahip olan ülkelerin sosyal ve ekonomi politikalarının eş güdümlü bir şekilde yürütülmediğinin ve ekonomik sistemin ciddi yapısal problemlerinin varlığı ile açıklanmaktadır. İşverenleri kayıt dışı çalıştırmaya iten nedenler ise ücret ve ücret dışı sosyal maliyetlerin

yüksekliği, ekonomik krizler, vergi politikaları, yetersiz denetimler, işgücünün yapısı ve hızlı kentleşme şeklinde sıralanabilmektedir (Öçal ve Şenel, 2021). Tarım sektöründe kayıt dışı ekonomi ve kayıt dışı istihdamın sebepleri de benzerlik göstermektedir.

3. TÜRKİYE’DE KIRSAL KADIN KONULU ORGANİZASYONLAR

Görece düşük gelir seviyeleri nedeniyle kırsal alanda hane geliri açısından kadınların ekonomik faaliyete katılımı önemlidir. Gelişmişlik düzeyi itibarıyla ülke ayırımına gidilmeden, tüm dünyada kadınların iş yaşamı ve işgücüne katılımı bakımından dezavantajlı oldukları kabul edilmektedir. Kadınların ekonomik faaliyette ve sosyal yaşamda daha etkin olmasını sağlayacak en fonksiyonel yöntemlerden biri de kooperatifçiliktir.

Kooperatif çatısı altında birleşme ve ekonomik faaliyetlerin motivasyonu çoğu zaman önder bireyler aracılığıyla olduğu gibi, bazen de STK’lar aracılığıyla olabilmektedir (Soysal, 2013). Özellikle son yıllarda yerel yönetimler ve Vakıfların (Kadın Emekini Değerlendirme Vakfı gibi) kırsal kadınların kooperatif organizasyon çatısı altında birleşmesini (Kadın Kooperatifleri Birliği ve iletişim ağı SİMURG gibi) ve e-ticaret gibi çabalarını (NAHİL gibi) desteklediği görülmektedir. Türkiye’de de konuya en kapsamlı şekilde, Türkiye Kooperatifçilik Stratejisi ve Eylem Planı’nda kadınların girişimcilik kabiliyetlerinin artırılması ve ekonomide bir aktör olarak yer almalarının sağlanması için kooperatif çatısı altında örgütlenmeleri yönünde çalışmalarda bulunulması hedefiyle yaklaşmıştır. Hedefe ulaşabilmek için başka bir işte çalışma olanağı olmayan kadınların kooperatif çatısı altında örgütlenmeleri teşvik edilerek, çalışma, üretme ve pazarlama imkânlarının artırılması, sosyal ve kültürel ihtiyaçlarının giderilmesi konusunda çalışmalar yapılması gibi tedbirlere yer verilmiştir (Gümrük ve Ticaret Bakanlığı, 2019).

Yine, Kooperatiflerin Desteklenmesi Programı (KOOP-DES); kooperatif ve üst kuruluşlarının üretim ve istihdama katkısı olacak yatırım projelerinin desteklenmesi, faaliyetlerinde etkinlik ve verimliliğin sağlanması, teknoloji ve yeni üretim tekniklerinden yararlanmalarına katkıda bulunulması ve bireysel tasarrufların uygun kooperatif girişimcilik modelleri ile ekonomiye kazandırılması amacıyla, Ticaret Bakanlığı tarafından 2020 yılında ilan edilmiş bir projedir. Projeye sadece kuruluş, işleyiş ve denetimleri Ticaret Bakanlığınca gerçekleştirilen, ortaklarının çoğunluğunu kadınların oluşturduğu ve kadın emekini değerlendirme amacı güden kooperatifler ve üst kuruluşları başvurabilmektedir (Sanayi ve Teknoloji Bakanlığı, 2021). Proje kapsamında verilen destekler büyük oranda makine ve ekipman alımına yöneliktir. Bu kapsamda Tokat’tan on dört; Adana, Antalya ve Isparta’dan yedi; Hatay’dan beş, Eskişehir’den dört, İstanbul ve İzmir’den üç, Ankara’dan iki, Nevşehir ve Bolu’dan birer olmak üzere ortaklarının çoğunluğunu kadınların oluşturduğu ve kadın emekini değerlendirme amacı güden kooperatiflerin, faaliyet konularına uygun üretim ve istihdama katkı sağlayacak projeleri hibe desteği almıştır (Çakır, 2020).

Türkiye’de Kooperatif Bilgi Sistemi’ne kayıtlı olan ve ‘Kadın Girişimi Üretim ve İşletme Kooperatifi’ türünde yaklaşık 800 kuruluş bulunmaktadır. Ancak bu kuruluşlarla ilgili detaylı ve sistematik bilgiye ulaşılamamakta ve genel bir değerlendirme yapılamamaktadır. Bununla birlikte, bu çalışmada, kadın konulu organizasyonlar ve üretim kooperatiflerinin örnekleri ile konuya ışık tutulmaya çalışılmıştır. Bu örneklerden biri olan Defne Kadın Kooperatifi Hatay’ın Defne ilçesinde 2010 yılında kurulmuştur. Kooperatif zeytin, zeytinyağı, nar ekşisi, çökelek, turşu, elma, portakal, kurutulmuş meyveler, biber ve domates salçası, doğadan toplanan tıbbi ve aromatik bitkiler gibi yöresel ürünler üretmektedir. Ürünler organik ürün işleme belgesine sahip tesiste işlenmekte, paketlenip; kendi markaları ile satışa sunulmaktadır. Kadınlar ürettikleri ürünleri kooperatife satarak, aldıkları saatlik ücretle kendilerine ekonomik katkı sağlamaktadır. Bu şekilde kooperatif, kırsal alandaki dar gelirli kadınları üretime dahil ederek ekonomik açıdan güçlenmelerine katkı sağlamaktadır (Defne Kadın, 2022).

Antalya ili Kaş ilçesinde bulunan Ahatlı Kadın Kooperatifi ise 2018 yılında kurulmuştur. Kooperatif yereldeki kadın üreticilerle dayanışma ve işbirliği içinde çalışmaktadır. Adrese teslim gıda pazarlaması yapılan kooperatifte ürünlerin tamamı civar köylerde yaşayan kadınlar tarafından üretilmektedir. Bu kapsamda ev yapımı bulgur, tarhana, kekik, sebze kuruları, nohut, erişte, badem ve keçiyoynuzu gibi ürünler pazarlanmaktadır (Yıldırım, 2020; Ahatlı Kadın Kooperatifi, 2022).

Yine, Hatay ilinin Samandağ ilçesinde, 2019 yılında, 25 girişimci kadın tarafından kurulan Kadın Üretim ve İşletme Kooperatifi’nde tereyağı, zeytinyağı, nar ekşisi, kurutulmuş meyve ve sebzeler, salça, baharatlar ve turşu gibi katma değerli ürünler üretilerek pazarlanmakta ve kırsal kadınların gelir elde etmeleri sağlanmaktadır (Ticaret Bakanlığı, 2022; Samandağ Kadın Kooperatifi, 2022).

Mersin Kadın Girişimi Üretim ve İşletme Kooperatifi kadın istihdamını artırarak aile ve ülke ekonomisine katkı sağlamak, kadınların toplum içindeki değerini artırmak, kadınlar arasındaki birlikteliği güçlendirmek ve yöresel

ürünlerin markalaşmasını sağlamak amacıyla sekiz kurucu ortak tarafından 2019 yılında kurulmuştur. Kooperatif tarım, turizm, tekstil ve hediyeelik eşyaya uzanan genişlikte bir proje ağıyla çalışmaktadır. Atalık Sarı Buğday Projesi ile ilaçsız hububat üretimi, Silifke Çileği ile yapılan doğal ve katkısız reçel üretimi, Süs Bitkisi Yetiştiriciliği Projesi ile verilen teorik ve pratik eğitimlerle kırsal kadınları ekonomik olarak da destekleyen faaliyetler sürdürülmektedir (Şenyurt, 2020).

Başarılı örneklerle ve kırsal kadınların yüksek oranda üretici örgütleri hakkında bilgi sahibi olmalarına rağmen, kooperatiflere ortak olma düzeyinin oldukça düşük olduğu da bilinmektedir. Nitekim Trakya Bölgesi (Edirne, Kırklareli, Tekirdağ) illerinin köylerinde yaşayan kadınlar ile yapılmış ve 323 tarımsal işletmenin kapsama alındığı bir araştırmada, kadınların en düşük oranda ortak/üye oldukları tarımsal örgütlerin Tarımsal Kalkınma Kooperatifleri ile Ziraat Odası olduğu belirlenmiştir. Yine görüşülen kadınların yarısından fazlası ekonomik amaçlı kurulacak bir örgütte aktif olarak yer almak istememiştir. Bu yaklaşımın başlıca sebepleri ise eş veya aile izninin olmaması, sağlık sorunu ve ihtiyaç duymaması şeklinde sıralanmaktadır (Özdemir ve ark., 2019).

4. KIRSAL KADINLARIN EKONOMİK FAALİYETLERE KATILIMININ SAĞLANMASI İÇİN ÖNERİLER

Kırsal kadınların tarımsal faaliyetlere katkısının karşılığını cinsiyet eşitliğine dayalı olarak alabildiği bir sistemde ekonomik ve sosyal denkleğin sağlanması kaçınılmazdır. Kırsal kadınların bağlayıcı ev işlerinin azaltılmasına yönelik planlanan çalışmaların uygulanması, dönemin tarımsal değişimlerine uygun mesleki gelişim eğitimlerine katılımının artırılması, bildiklerini uygulayabildikleri istihdam alanlarının genişlemesi, örgütlenme bilincinin kooperatifçilik hedefleri doğrultusunda geliştirilmesi tarımsal üretimin kalitesini ve kırsal alanda yaşayan kadınların alım gücünü artırması açısından güçlü bir anahtar role sahiptir (Gökdemir ve Ergün, 2012; Gıda Tarım ve Hayvancılık Bakanlığı, 2012). Yine yemek pişirme, toprağı işleme, ısınma ve atıkların bertaraf edilmesi gibi işlerde aktif rolü olan kırsal kadınlar, alternatif yöntemler konusunda yerel düzeyde yörenin koşullarına uygun olarak bilgilendirilmelidir. Kırsal kadınları güçlendirmek ve tarımsal üretimde verimliliği artırmak için üretici kadınlara gerçekleştirdikleri üretime uygun teknolojilerin sunulması ve bunların eğitimlerinin verilmesi son derece önemlidir. Eğitimde ve teknoloji geliştirilmesinde toplumsal cinsiyete duyarlı bir planlama yalnızca bugün için üretim artışı sağlamakla kalmayıp, aynı zamanda gelecek için çevrenin korunmasına da katkı sağlayabilecektir (STGM, 2010; Özdemir ve ark., 2017; Patil and Babus, 2018).

Tarım sektöründe çalışan kadınların hayatın birçok detayına dair (ekonomi, üretim, eğitim, sağlık vs.) çeşitli eksiklikler yaşadığı bilinmektedir. Kadınların güçlenmesi, yaptığı işten elde edilen verimin artması ve yeni beceriler kazanarak kişisel anlamda güçlenmesini gerçekleştirebilmek için kırsal alanda da ekonomik faaliyetlere katkıda bulunulabilmelidir. Bu sayede hem daha kaliteli ve refah bir hayata sahip olmanın önü açılmış, hem de toplumsal ilişkilerde kırsal kadınların saygınlık kazanması sağlanmış olacaktır. Ancak bu süreçte toplumun tamamının eğitim sürecine katılması sağlanmalı ve toplumsal cinsiyet rollerinin eşitlenmesinde izlenecek politikalara hız verilmelidir. Özellikle erkeklerin bu konuda duyarlılığının artırılması son derece önem arz etmektedir (Başbakanlık, 2008; Kaya 2011).

Kadınların ekonomik faaliyetler hakkında bilinç düzeylerinin artırılarak istihdamın güçlendirilmesi, yaşam kalitesi, sosyal ve ekonomik koşulları iyileştirilerek ekonomik hayata katkılarının artırılması, ekonomik yönden kırsal alanda yaşayan kadınları güçlü bir pozisyona taşıyabilecektir (Kadim ve ark., 2014). Kırsal alanda kadınlara yönelik eğitim ve kurs olanaklarıyla bilgi birikimlerinin ve pratiklerinin geliştirilmesi, kadınların toprak ve/veya hayvan sahibi olabilmeleri için desteklerin sağlanması ve genç kadınların örgütlü faaliyetlerle kırsalda kaliteli yaşamaya devam etmelerinin sağlanması güvenilir ve yeterli gıdaya erişimi mümkün ve sürdürülebilir kılmak açısından da son derece önemlidir (Fidan ve ark., 2017; Yavuz ve ark., 2018; Tunç ve Demirbaş, 2022). Son yıllarda kamu ve özel bankalar tarafından tarımsal üretim amacıyla kadın çiftçilere verilen krediler bu açıdan önemli olarak değerlendirilmektedir. Ancak, üretici örgütlerine ve girişimlerine katılımın önünde duran engellerden biri olan, aile izninin alınmasındaki güçlükler göz önünde bulundurularak, eş ve diğer aile bireylerinin kırsal kadınların ekonomik faaliyetlere katılımı kapsamındaki çabalarını destekleyecek bilinç düzeyine ulaşmaları da eşanlı olarak ele alınması gereken konular arasındadır.

5. SONUÇ

Bu çalışmada kırsal kadınların tarımsal faaliyetlerdeki rolü ve kırsal kadın konulu organizasyonların önemi değerlendirilmiştir. Kadın işgücü için eğitim eksikliği, kayıt dışı istihdam, eşit işe eşit olmayan ücretler, gelenek ve görenekler üzerinden yönlendirmeler ile girişimler için yeterli teşvik/destek olmaması gibi olumsuzluklar kırsal kadınların ekonomik faaliyetlere katkısını da sınırlamaktadır. Eğitim olanakları sağlanan, hakları teslim

edilen ve bu haklarını kullanabileceği alanlar yaratılan kadınlar olumsuzluklarla daha kolay mücadele edebilmektedir. Tarımsal üretimde daha verimli ve bilinçli hale gelen kırsal kadınlar üretim aşamasında toprağın korunmasını gözetip, sürdürülebilirliğe katkıda bulunarak hem günümüz hem de gelecek için tarımsal faaliyetlerin sürdürülmesinin de garantisidir. Aynı zamanda daha çok sorumluluk alanlarına bırakılan aile için gıda üretimi aşamasında olduğu gibi ekonomik faaliyete dahil olduklarında hijyen ve sanitasyon sürecinde de etkin rol oynayan kırsal kadınlar, bunun önemini daha iyi kavrayarak toplum için sağlıklı ve besleyici gıda temininde önemli bir hareket noktası olabilecektir.

Hükümet programları, hazırlanan eylem planları ve kalkınma planları çerçevesinde yapılan çalışmaların tümü kırsal kadınların yaşadığı zorlukları azaltmaya ya da kolaylaştırmaya yöneliktir. Fakat kırsal kadınların günümüzde hala aynı problemleri yaşamaya devam ediyor olması uygulanan ve uygulanması düşünülen çabaların yetersizliğini de ortaya koymaktadır. Kırsal kadınların tarımsal üretime katılımının niteliğinin iyileştirilmesi, tarımsal üretimdeki verimliliği ile birlikte alım gücünün artması, dolayısıyla, kırsal kadınların ekonomik ve sosyal hayatı için yapılan çalışmaların etkinliğinin artırılmasında, kadın özneli organizasyonların teşvik edilmesi ve desteklenmesi sürdürülmelidir.

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Döviz Dönüşümlü Kur Korumalı Türk Lirası Vadeli Mevduat Hesaplarının Muhasebeleştirilmesi

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Özet: Türkiye Cumhuriyeti Merkez Bankası tarafından düzenlenen olan ve bankalarda uygulanan Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat Hesabı uygulamasından döviz kurlarındaki yükselişi durdurarak finansal istikrar sağlamak amaçlı olarak yararlanılmaktadır. Gerçek ve tüzel kişilerin yararlanabildiği bu ürün sayesinde döviz kurlarındaki değişimlerden korunmak mümkün olmakta ve yüksek getiri avantajı sağlanabilmektedir. Söz konusu Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat Hesabı, mevduat sahiplerine hem faiz getirisi elde etme imkanı hem de döviz kuru getirisinden kazanç elde etme imkanı sağlamaktadır.

Bu çalışmada, yayımlanan tebliğ, usul ve esaslar göz önünde bulundurularak Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat Hesabına ilişkin muhasebe kayıtları, Türkiye Muhasebe Standartları/Türkiye Finansal Raporlama Standartları' na göre kayıt tutan işletmeler açısından Finansal Raporlama Standartlarına Uygun Hesap Planı Taslağı'ndan yararlanılarak açıklanmaktadır.

Anahtar Sözcükler: Muhasebe, Döviz Dönüşümlü Kur korumalı TL Vadeli Mevduat Hesabı, Türkiye Muhasebe Standartları/Türkiye Finansal Raporlama Standartları, Finansal Raporlama Standartlarına Uygun Hesap Planı Taslağı

Accounting of the Currency Conversion Exchange Rate Protected Turkish Lira Deposit Accounts

Abstract: The Currency Conversion Exchange Rate Protected Turkish Lira Deposit Accounts practice, which was regulated by the Central Bank of the Republic of Turkey and applied in banks, is used to provide financial stability by stopping the rise in exchange rates. Thanks to this product, which can be used by real and legal persons, it is possible to be protected from changes in exchange rates and a high return advantage can be achieved. These Currency Conversion Exchange Rate Protected Turkish Lira Deposit Accounts provide depositors with both the opportunity to earn interest income and the opportunity to earn profits from exchange rate returns.

In this study, accounting related to The Currency Conversion Exchange Rate Protected Turkish Lira Deposit Accounts are disclosed by using Draft Chart of Accounts in Compliance with Financial Reporting Standards for businesses accounting in accordance with Turkish Accounting Standards/Turkish Financial Reporting Standards, taking into account the published communiqués, procedures and principles.

Keywords: Accounting, Currency Conversion Exchange Rate Protected Turkish Lira Deposit Accounts, Turkish Accounting Standards/Turkish Financial Reporting Standards, Draft Chart of Accounts in Compliance with Financial Reporting Standards

1. GİRİŞ

Döviz Dönüşümlü Kur Korumalı Türk Lirası Vadeli Mevduat Hesabı, döviz kurunun yükselişinden korunmak için yararlanılabilecek bir vadeli mevduat ürünüdür. 21 Aralık 2021 tarih ve 31696 (Mükerrer) sayılı Resmi Gazete' de, Merkez Bankası'nca "2021/14 Sayılı Türk Lirası Mevduat ve Katılma Hesaplarına Dönüşümün Desteklenmesi Hakkında Tebliğ" yayımlanmıştır.

Tebliğde döviz tevdiat hesaplarının Türk Lirası (TL) vadeli mevduat hesabına dönüştürülmesi ile bu tür mevduat hesaplarına sahip olan gerçek ve tüzel kişilerin döviz kuru fiyatındaki artışlar karşısında korunması amaçlanmaktadır. Tebliğe göre yurtiçinde yerleşik gerçek ve tüzel kişilerin bankada döviz tevdiat hesaplarında bulunan ABD doları, Euro ve İngiliz Sterlini olan yabancı paralarındaki bakiyeler ya da kur korumalı TL vadeli mevduat hesabı açmak istedikleri döviz, Türkiye Cumhuriyeti Merkez Bankası (TCMB) tarafından açıklanan işlem günündeki döviz alış kuru üzerinden TL'ye çevrilmekte ve karşılığı TL mevduat hesabına aktarılmaktadır. Aktarılan bu tutar üzerinden 3, 6 ay veya 1 yıl vadeli gerçek kişiler, 6 ay veya 1 yıl vadeli işletmeler TL mevduat hesabı açabilmektedir. Azami faiz oranı TCMB tarafından belirlenmektedir. Vade sonunda ise TCMB tarafından belirlenmiş olan vade sonu döviz kurları üzerinden işlem yapılmaktadır. Vade sonundaki kur, hesabın TL'ye çevrildiği döviz kurundan yüksek ise, kur farkı, tam tersi düşük ise faiz tutarı dikkate alınarak mevduat sahibinin hesabına aktarılmaktadır.

Bu çalışmada döviz dönüşümlü kur korumalı TL vadeli mevduat hesaplarına ilişkin olarak yayımlanan tebliğ, usul ve düzenlemeler doğrultusunda, Türkiye Muhasebe Standartları/Türkiye Finansal Raporlama Standartları (TMS/TFRS)'ye göre kayıt yapan işletmeler açısından Finansal Raporlama Standartlarına Uygun Hesap Planı Taslağı dikkate alınarak döviz kuru temelli tasarlanmış örnek uygulamalar kapsamında muhasebe kayıtları açıklanmakta, uygulayıcılara ve meslek mensuplarına faydalı olması amaçlanmaktadır.

Döviz dönüşümlü kur korumalı TL Vadeli Mevduat hesapları TFRS 9 çerçevesince gerçeğe uygun değer değişimi kâr veya zarara yansıtılarak ölçümü gerçekleştirilecektir. Bu hesaplardan vade sonu elde edilecek nakit tutarı döviz kuru değişiminden dolayı belli olmadığından Finansal Durum Tablosu'nda Finansal Yatırımlar sınıfında yer alması ve Finansal Raporlama Standartlarına Uygun Hesap Planı Taslağı'nda 11 Finansal Yatırımlar grubunda yer alan 115 Bankalarda Vadeli Mevduat hesabında izlenmesi mümkündür.

2. DÖVİZ DÖNÜŞÜMLÜ KUR KORUMALI TL VADELİ MEVDUAT HESABI

Türk Lirası (TL) birikimlerine hesap açılışında belirlenmiş olan faiz oranı ile getiri sağlayan ve vade boyunca muhtemel döviz kuru hareketlerine karşı koruyan döviz dönüşümlü Kur Korumalı TL Vadeli Mevduat Hesabı avantajlı bir mevduat türüdür.

Döviz dönüşümlü Kur Korumalı TL Vadeli Mevduat Hesabı, Bankaların döviz tevdiat hesaplarında yer alan ABD doları, Euro ve İngiliz Sterlini üzerinden olan yabancı para tutarlarının TL vadeli mevduata dönüştürülmesi ile vade başındaki kur ile vade sonundaki kur arasındaki farkın faiz oranından daha fazla artması söz konusu olduğunda mevduat sahibine kur farkı koruması sunan bir vadeli mevduat türüdür. Bu tür vadeli mevduat, hesap sahiplerine TL hesaplarındaki bakiyelerinin vade sonunda diğer dövizler karşısında değer kaybetmemesi için sağlanan destektir. Kur korumalı TL vadeli mevduat hesaplarında vade sonundaki faiz getirisi, döviz kurundaki artış oranından düşük ise mevduat sahibine döviz kurundaki artış yansıtılmaktadır. Vadenin başladığı tarihteki döviz kuru ile vade bitimindeki döviz kuru arasındaki değişim hesaplanmakta, daha sonra kur değişimi üzerinden hesaplanan tutar ile faiz tutarı karşılaştırılarak yüksek olan tutar üzerinden mevduat sahibine tüm ödemeler TL olarak yapılmaktadır.

TL üzerinden yatırımları teşvik etmek, ekonomik göstergelerin iyileştirmek, döviz kurlarındaki aşırı artışı durdurmak ve piyasa istikrarını sağlamak amaçlı ortaya çıkan söz konusu vadeli mevduat hesabına ilişkin özellikler aşağıda yer almaktadır.

- Gerçek ve tüzel kişiler Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat Hesabı'ndan yararlanabilmektedir.
- Vadeli mevduat hesapları gerçek kişiler için 3, 6, 12 ay, işletmeler için 6, 12 ay vade seçenekleriyle açılabilir.
- Bu hesapların stopaj oranı 0 (sıfır) dır.
- Yalnızca TL üzerinden Döviz Dönüşümlü Kur Korumalı TL Vadeli mevduat hesabı açılabilir.
- Vadeli hesap açılışı ücretsizdir ve uygulanacak faiz oranı TCMB Politika faiz oranıdır.
- Vade sonunda hesap sahibinin isteğine göre hesap kapatılabilir.
- Vadeli mevduat hesabı sahipleri vade bitiminde, vade başında dönüşüm yaptıkları döviz cinsinden TCMB' nın belirlediği döviz kuru üzerinden kambiyo vergisi ödmeden döviz alımı yapabilir.
- Söz konusu mevduat hesabı açıldıktan sonra, vade içerisinde kısmi çekim işlemi yapılmamakta, fakat vade içinde istenildiğinde hesap kapatılabilir.
- Hesabın vadesinden önce kapatılmasında ise, kapatılma tarihindeki TCMB tarafından ilan edilen döviz kuru hesabın dönüşüm kurundan yüksek olması durumunda TCMB tarafından kur değişim tutarı ödenmemektedir.
- Hesaplar talep edilirse, vade sonundaki TL tutarı üzerinden vade sonu döviz kuru dikkate alınarak yenilenebilir.
- Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat Hesabı açılırken TCMB' nın günlük ilan ettiği döviz alış kuru dikkate alınmaktadır.

3. DÖVİZ DÖNÜŞÜMLÜ KUR KORUMALI TL VADELİ MEVDUAT HESAPLARININ TMS/TFRS KAPSAMINDA MUHASEBELEŞTİRİLMESİ

Çalışmanın bu bölümünde Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat hesaplarının, TMS/TFRS'ye göre kayıt yapan işletmeler açısından muhasebeleştirme kayıtları tasarlanmış örnek uygulamalar yardımıyla açıklanmıştır. Bu doğrultuda, muhasebe kayıtlar yapılırken Finansal Raporlama Standartlarına Uygun Hesap Planı Taslağı'ndan yararlanılmaktadır.

Döviz dönüşümlü kur korumalı TL Vadeli Mevduat hesabında vade sonunda döviz kurundaki değişikliklere bağlı olarak alınacak nakit tutar belli değildir. Bu yüzden bu tür hesaplar nakit ve nakit benzeri olarak değerlendirilememektedir. Fakat sözleşmeye dayalı olarak nakit elde etme hakkı olduğundan TMS 32 Finansal Araçlar: Sunum Standardına göre varlık olarak ifade edilebilir. Bu tür mevduatlar finansal araçların muhasebeleştirilmesini düzenleyen TFRS 9 Finansal Araçlar Standardı kapsamında finansal tablolara yansıtılacaktır. Bu tür mevduat hesaplarının ölçümü TFRS 9 çerçevesince gerçeğe uygun değer değişimi kâr veya zarara yansıtılarak gerçekleştirilecektir. Bu hesaplar Finansal Durum Tablosu'nda "Finansal Yatırımlar" sınıfında yer alacaktır. Döviz kuruna göre değişen, gelecekteki bir tarihte ödenecek finansal araçlar riskten korunma muhasebesi uygulanmadığı sürece gerçeğe uygun değer değişimi kâr veya zarara yansıtılarak ölçülmektedir (www.kgk.gov.tr).

3.1. Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat Hesabı Açılması

İşletmenin A Bankasındaki Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat Hesabı açılışına ilişkin bilgileri aşağıda yer almaktadır.

- Açılan hesap tutarı (TL): 200.000,00
- Hesap açılışındaki ABD doları döviz kuru: 12,50
- Hesabın açılışındaki ABD doları karşılığı: 16.000,00
- Vade gün sayısı: 181
- Hesaba uygulanan faiz oranı: 15,00%
- Hesabın açılışına ilişkin muhasebe kaydı:

115 BANKALARDAKİ VADELİ MEVDUAT HS.	200.000,00	
115.01 Döviz Dönüşümlü Kur Korumalı TL Vdl. Mev. Hs		
102 BANKA HS.		200.000,00
102.01 Vadesiz Mevduat Hs.		

Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat Hesabı'nda vade sonunda döviz kuru değişiklikleri nedeniyle işletme hesabına geçecek nakit tutarın belirsizliğinden dolayı bu tür hesaplar Finansal Raporlama Standartlarına Uygun Hesap Planı Taslağı'nda "11 Finansal Yatırımlar" grubunda "115 Bankalardaki Vadeli Mevduat" hesabında muhasebeleştirilmesi uygundur.

3.2. Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat Hesabının Vade Sonunda Kapatılması

Döviz dönüşümlü Kur Korumalı TL Vadeli Mevduat Hesaplarında vade sonunda döviz kuru getirisinin faiz getirisinden yüksek veya düşük olduğu durumlara ilişkin muhasebe kayıtları aşağıda yer almaktadır.

i) Hesabın vade sonunda döviz kuru getirisinin faiz getirisinden yüksek olması durumu

- Açılan hesap tutarı (TL): 200.000,00
- (a) Hesap açılışındaki ABD doları döviz kuru: 12,50
- (b) Hesabın açılışındaki ABD doları karşılığı: 16.000,00
- (c) Hesabın vade bitimindeki ABD doları döviz kuru: 15,00

- Vade gün sayısı: 181
- Hesaba uygulanan faiz oranı: 15,00%
- Hesabın vade bitimindeki faiz getirisi: $200.000,00 \times 181 \times 15 / 36.500$: 14.876,71 TL
- Hesabın vade bitimindeki döviz kuru getirisi (TL) $[(c-a) \times b]$: 40.000 ,00TL
- Hesabın vade bitiminde faizin üzerinde elde edilen getiri (TL): 40.000,00 TL-14.876,71 TL: 25.123,29 TL
- Hesabın vade bitimindeki toplam tutarı (TL): 200.000,00 TL+40.000,00 TL: 240.000,00 TL

İşletmenin mevduat hesabının vade sonunda kapatılmasına ilişkin muhasebe kaydı:

102 BANKA HS.	240.000,00	
102.01 Vadesiz TL Mevduat Hs.		
115 BANKALARDAKİ VADELİ MEVDUAT HS.		200.000,00
115.01 Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat Hs.		
660 MEVDUAT FAİZ GELİRLERİ HS.		14.876,71
664 KUR FARKI KAZANÇLARI HS.		25.123,29

Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat hesapları vade sonunda vade günündeki TCMB tarafından açıklanan cari kura göre değerlendirilir. Kur değişimi olumlu ise Finansal Raporlama Standartlarına Uygun Hesap Planı Taslağı'nda "664 Kur Farkı Kazançları" hesabının alacağına kaydedilmektedir. Faiz geliri ise "660 Mevduat Faiz Gelirleri" hesabına alacak kaydedilir. Ancak Muhasebe Sistemi Uygulama Genel Tebliği (MSUGT) uygulayan işletmelerin tahakkuk eden faizleri "181 Gelir Tahakkukları" hesabında izlemesi durumunda "660 Mevduat Faiz Gelirleri" hesabı karşılığında "181 Gelir Tahakkukları" hesabına borç kaydedilmektedir.

ii) Hesabın vade sonunda döviz kuru getirisinin faiz getirisinden düşük olması durumu:

- Açılan hesap tutarı (TL): 200.000,00
- (a) Hesap açılışındaki ABD doları döviz kuru: 12,50
- (b) Hesabın açılışındaki ABD doları karşılığı: 16.000,00
- (c) Hesabın vade bitimindeki ABD doları döviz kuru: 12,20
- Vade gün sayısı: 181
- Hesaba uygulanan faiz oranı: 15,00%
- Hesabın vade bitimindeki faiz getirisi: $200.000,00 \times 181 \times 15 / 36.500$: 14.876,71 TL
- Hesabın vade bitimindeki döviz kuru getirisi (TL) $[(c-a) \times b]$: 4.800 TL
- Hesabın vade bitiminde ödenecek toplam tutarı (TL): 200.000,00 TL+14.876,71 TL: 214.876,71 TL

İşletmenin mevduat hesabının vade sonunda kapatılmasına ilişkin muhasebe kaydı:

102 BANKA HS.	214.876,71	
102.01 Vadesiz Mevduat Hs.		
115 BANKALARDAKİ VADELİ MEVDUAT HS.		200.000,00
115.01 Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat Hs.		

660 FAİZ GELİRLERİ HS.	14.876,71

Hesabın özelliği gereği vade sonunda TCMB döviz kurunun hesabın açılış tarihindeki döviz kurundan düşük olması durumunda işletmenin kazancı getirisi yüksek olan faiz tutarı üzerinden olacaktır. Vade sonunda döviz kuru getirisi faiz getirisinden düşük olduğundan sadece faiz tutarı ve anapara tutarı döviz dönüşümlü kur korumalı TL hesabının kapatılması ile vadesiz mevduat hesabına aktarılması gerekmektedir.

3. 3 Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat Hesabının Vadesinden Önce Kapatılması

24.12.2021 tarihinde T.C Hazine ve Maliye Bakanlığı'nın kur korumalı mevduatlara ilişkin yayınladığı uygulama esaslarına göre Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat Hesabının vadeden önce kapatılması durumunda (<https://www.hmb.gov.tr/haberler/kur-korumali-tl-vadeli-mevduatlara-ve-katilma-hesaplarina-iliskin-uygulama-esaslari-hakinda-basin-aciklamasi>),

a. Hesabın kapatıldığı tarihte TCMB' nca ilan edilen döviz kurunun vade başında esas alınan kurdan yüksek olması durumunda kur farkına ilişkin ödeme yapılmaz.

b. Hesabın kapatıldığı tarihte TCMB' nca ilan edilen kurun vade başında esas alınan kurdan düşük olması durumunda, hesabın vadeden önce kapatıldığı tarihteki TCMB tarafından ilan edilen döviz alış kurundan hesap bakiyesi güncellenir.

Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat hesaplarının vadesinden önce kapatılmasında olası durumlarda yapılması gereken muhasebe kayıtları aşağıda yer almaktadır.

i) Hesabın vadesinden önce kapatılması ve döviz kurunun düşük olması durumu:

- Açılan hesap tutarı (TL): 200.000,00

- (a) Hesap açılışındaki ABD doları döviz kuru: 12,50

- (b) Hesabın açılışındaki ABD doları karşılığı: 16.000,00

- (c) Hesabın vadesinden önce kapatıldığı tarihteki ABD doları döviz kuru: 11,00

- Vade gün sayısı: 181

- Hesaba uygulanan faiz oranı: 15,00%

- Hesabın vadesinden önce kapatılması durumunda faiz getirisi: 0 TL

- Hesabın vadesinden önce kapatılması durumunda döviz kuru getirisi (TL) [(c-a) x b]: (-)24.000,00 TL

-Hesabın vadesinden önce kapatılması ve döviz kurunun düşmesi durumundaki ödenecek toplam tutar: 16.000x11,00 (kur) = 176.000 TL

İşletmenin mevduat hesabının vadesinden önce kapatılmasına ilişkin muhasebe kaydı:

102 BANKA HS.	176.000,00	
102.01 Vadesiz Mevduat Hs.		
674 KUR FARKI ZARARLARI HS.	24.000,00	
115 BANKALARDAKİ VADELİ MEVDUAT HS.		200.000,00
115.01 Döviz Dönüşümlü Kur Korumalı TL Vadeli Mevduat Hs.		

24.12.2021 tarihinde T.C Hazine ve Maliye Bakanlığı'nın kur korumalı mevduatlara ilişkin yayınladığı uygulama esaslarına göre, işletme vade sonunu beklemeden kur korumalı mevduat hesabını kapatırsa faiz gelirinden mahrum kalacağı gibi kur düşüşü nedeniyle zarara uğrayacaktır. Olumsuz kur farkları ise "674 Kur Farkı Zararları (-)" hesabının borcunda muhasebe kaydına alınmaktadır.

ii) Hesabın vadesinden önce kapatılması ve döviz kurunun yüksek olması durumu:

- Açılan hesap tutarı (TL): 200.000,00
- (a) Hesap açılışındaki ABD doları döviz kuru: 12,50
- (b) Hesabın açılışındaki ABD doları karşılığı: 16.000,00
- (c) Hesabın vadesinden önce kapatıldığı tarihteki ABD doları döviz kuru: 13,00
- Vade gün sayısı: 181
- Hesaba uygulanan faiz oranı: 15,00%
- Hesabın vadesinden önce kapatılması durumunda faiz getirisi: 0 TL
- Hesabın vadesinden önce kapatılması durumunda döviz kuru getirisi (TL) [(c-a) x b]: 8.000,00 TL
- Hesabın vadesinden önce kapatılması ve döviz kurunun yükselmesi durumundaki ödenecek toplam tutar: 200.000,00 TL

İşletmenin mevduat hesabının vadesinden önce kapatılmasına ilişkin muhasebe kaydı:

102 BANKA HS.	200.000,00	
102.01 Vadesiz Mevduat Hs.		
115 BANKALARDAKİ VADELİ MEVDUAT HS.		200.000,00
115.01 Döviz Dönüşümlü Kur Korumalı TL Vadelî Mevduat Hs.		

Döviz dönüşümlü kur korumalı mevduat hesabı vadeden önce kapatıldığı için kur farkı gelirinden faydalanılamayacağı 21 Aralık 2021 tarih ve Sayı: 31696 (Mükerrer) tebliğin 5. madde 3. bendinde belirtilmektedir.

4. SONUÇ

Gerçek ve tüzel kişiler tarafından açılabilmesi mümkün hale getirilmiş olan Döviz Dönüşümlü Kur Korumalı TL Vadelî Mevduat Hesabını geçişin nedenleri arasında döviz kurlarının aşırı yükselmesi, gerçek ve tüzel kişileri TL yatırımlarından uzaklaşması, yabancı paralara olan talebin artması gibi etkenler yer almaktadır. Bu tür mevduat hesapları uygulamasına geçilmesi ile piyasadaki tüm bu olumsuz durumların önlenmesi, TL'ye olan talebi arttırmak hedeflenmektedir.

Bu çalışmada Döviz Dönüşümlü Kur Korumalı TL Mevduat Hesaplarının tasarlanmış kapsamlı örnekler üzerinden işletmeler tarafından hesabın açılışına, hesabın vade sonunda kapatılmasına ve hesabın vadesinden önce kapatılmasına ilişkin yapılması gereken muhasebe kayıtları TMS/TFRS' ye göre ve Finansal Raporlama Standartlarına Uygun Hesap Planı Taslağı'ndan yararlanarak gösterilmektedir.

Döviz dönüşümlü kur korumalı TL Vadelî Mevduat hesabında vade sonunda döviz kurundaki değişikliklere bağlı olarak alınacak nakit tutar belli olmadığından nakit ya da nakit benzeri olarak değerlendirilememektedir. Bu tür mevduat hesaplarının ölçümü ise, TFRS 9 çerçevesince gerçeğe uygun değer değişimi kâr veya zarara yansıtılarak gerçekleştirilecektir. Bu hesapların vade sonu değeri belli olmadığından Finansal Durum Tablosu'nda "Finansal Yatırımlar" sınıfında yer alacaktır. Finansal Raporlama Standartlarına Uygun Hesap Planı Taslağı'nda "11 Finansal Yatırımlar" grubunda yer alan "115 Bankalarda Vadelî Mevduat" hesabında izlenmesi mümkündür.

Söz konusu mevduat hesaplarında, hesabın açılışındaki döviz kuru vade bitimindeki döviz kurunun altında kalmışsa faiz getirisi sağlanmakta, bu iki döviz kuru arasındaki farkın faiz getirisinden daha fazla olması durumunda ise kur farkı getirisi de elde etme imkanı sağlanmaktadır. Bu hesaplar vadesinden önce kapatıldığında ise işletme hiçbir kazanç elde edemeyeceği gibi zarara da uğrayabilmektedir.

Bu çalışma, TL olarak bulunan mevduatların döviz kuru artışlarına karşı korunma amacıyla olan işletmeler için Döviz dönüşümlü Kur Korumalı TL Mevduat hesaplarının avantajları ve vadesinden önce kapatılması durumunda karşılaşılabilecekleri dezavantajları göstermesi açısından önemlidir.

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Satın Alma Gücü Paritesinin Türkiye İçin Geçerliliğinin İncelenmesi: Fourier Enders ve Granger Doğrusal Olmayan Birim Kök Testi

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Özet: Satın alma gücü paritesi (SAGP), belirli malların ve hizmetlerin ülkeler arasındaki fiyat düzeyleri farklılıklarını ortadan kaldırarak ülkelerin para birimlerinin satın alma gücünü eşitleyen bir yaklaşımdır. Satın alma gücü paritesi uluslararası gelişmişlik ölçütü olarak kullanılmakta ve ülkeler arası karşılaştırmaların yapılmasına olanak tanımaktadır. Bu yüzden ekonomide karar vericiler açısından önemli bir göstergedir ve çeşitli ekonometrik yöntemler kullanılarak analiz edilmesi gerekmektedir. Satın alma gücü paritesi hipotezinin geçerliliği genellikle reel döviz kuru serisine birim kök analizleri uygulanarak incelenmektedir. Bu çalışmada, Türkiye için satın alma gücü paritesinin geçerliliği 1994:1-2021:12 dönemlerini kapsayan aylık veriler kullanılarak Enders ve Granger (1998) ve Fourier Enders ve Granger doğrusal olmayan birim kök testi ile karşılaştırmalı olarak incelenmiştir. Böylece birim kök analizi gerçekleştirilirken yapısal kırılmalar ve doğrusal olmama durumları da dikkate alınmıştır. Fourier Enders ve Granger doğrusal olmayan birim kök testinin sonuçlarına göre Türkiye’de satın alma gücü paritesinin geçerli olduğu sonucuna varılmıştır.

Anahtar Kelimeler: Satın Alma Gücü Paritesi, Fourier Enders ve Granger Doğrusal Olmayan Birim Kök Testi, Reel Döviz Kuru

Abstract: Purchasing power parity (PPP) is an approach that equalizes the purchasing power of countries' currencies by eliminating differences in price levels between countries for certain goods and services. Purchasing power parity is used as an international development criterion and allows comparisons between countries. Therefore, it is an important indicator for decision makers in the economy and needs to be analyzed using various econometric methods. The validity of the purchasing power parity hypothesis is generally examined by applying unit root analysis to the real exchange rate series. In this study, the validity of purchasing power parity for Turkey was examined comparatively with Enders and Granger (1998) and Fourier Enders and Granger nonlinear unit root tests using monthly data covering the period 1994:1-2021:12. Thus, while performing the unit root analysis, structural breaks and nonlinearity were also taken into account. According to the results of Fourier Enders and Granger nonlinear unit root tests, it was concluded that purchasing power parity is valid in Turkey.

Key Words: Purchasing Power Parity, Fourier Enders ve Granger Nonlinear Unit Root Test, Real Exchange Rate

1. GİRİŞ

Satın alma gücü paritesi, belirli bir mal ve hizmet sepetinin ülkeler arasındaki fiyat düzeylerinin oranıdır. Fiyat düzeyleri farklılıklarını gideren bu değişim oranı ile ülkeler arasındaki satın alma gücü eşitlenebilmektedir. Böylece uluslararası anlamda hacim ve fiyat karşılaştırmaları yapılabilmektedir (TÜİK, 2021:1). Satın alma gücü paritesi kavramı döviz kurları ile ilgili en eski teorilerden olup literatüre Cassel (1918) tarafından kazandırılmıştır. Bununla birlikte bir yaklaşım olarak 15. ve 16. yüzyıllarda Salamanca Üniversitesi akademisyenlerinin yazılarına kadar uzanan bir geçmişinin olduğu görülmektedir (Taylor, 2003).

İktisat literatüründe satın alma gücü paritesi terimi yaygın olarak çalışılan bir konudur. Temeli ulusal fiyatların ortak bir para birimi ile ifade edilmesini belirten tek fiyat yasasına dayanmaktadır (Sarno ve Taylor, 2002). Satın alma gücü paritesinin geçerliliği konusunun çok sayıda açık ekonomi makro modeli üzerinde doğrudan etkisi bulunmaktadır (Cuestas ve Regis, 2013). Bu yüzden geçerliliği iktisadi açıdan önemlidir.

Satın alma gücü paritesinin geçerliliğinin analiz edilmesinde eşbütünleşme analizleri ve birim kök testleri gibi ekonometrik yöntemlerden yararlanılmaktadır. Eşbütünleşme analizleri, nominal döviz kuru ile yurtiçi ve yurtdışı fiyatları gibi iki değişken arasındaki ilişkinin incelenmesine dayanmaktadır. Birim kök analizleri ise reel döviz kuru serisinin durağanlığının araştırılmasında kullanılmaktadır. Bu çalışmada birim kök testleri kullanılarak inceleme yapılmıştır.

Çalışmada ilk olarak satın alma gücü paritesinin geçerliliğini birim kök testleri ile inceleyen çalışmalara değinilmiştir. Ardından veri olarak kullanılan reel döviz kuru değişkeninin elde edilmesinden bahsedilmiştir. Ekonometrik yöntem bölümünde, güncel yöntem olan Fourier Enders ve Granger doğrusal olmayan birim kök

testinin prosedürü açıklanmıştır. Uygulama kısmında ise reel döviz kuru serisinin durağanlığının araştırılmasında kullanılan doğrusal olmayan birim kök test sonuçları tablolar ile sunulmuştur.

Bu çalışmanın amacı, Türkiye’de 1994:1-2021:12 döneminde satın alma gücü paritesinin geçerliliğini doğrusal olmayan birim kök testleri kullanarak analiz etmektir. Ekonometrik yöntem olarak Enders ve Granger (1998) birim kök testi ve Fourier Enders ve Granger doğrusal olmayan birim kök testi kullanılmıştır. Birim kök testlerinden elde edilen sonuçlar karşılaştırmalı olarak tartışılmıştır.

2. LİTERATÜR TARAMASI

Satın alma gücü paritesinin geçerliliğinin incelendiği birçok çalışma bulunmaktadır. Bu çalışmalar, incelendikleri dönemlere ve çeşitli yöntemlerin kullanılmasına göre birbirinden farklılık göstermektedir. Literatürde satın alma gücü paritesinin incelenmesinde eşbütünlük veya birim kök testleri kullanılmaktadır. Fakat bu testler kullanılırken en uygun modelin belirlenebilmesi çok önemlidir. Eğer özünde doğrusal olmayan bir seri doğrusal testler kullanılarak analiz edilirse yanıltıcı sonuçlar elde edilebilir (Güriş, 2020). Bu durumda satın alma gücü paritesinin geçerliliğinin analizinde reel döviz kurunun doğrusal olmayan formda incelenmesi önerilmektedir. Çünkü doğrusal olarak incelenmesi sonucunda satın alma gücü paritesinin eşitlikten sapması durumunda uyum hızı, sapmanın tüm boyutları için sabit kabul edilecektir. Heckscher (1916) çalışmasında, uluslararası arbitrajdaki işlem maliyetleri nedeniyle bu ayarlamaların doğrusal olmayacağını öne sürmektedir (Taylor ve Taylor, 2004).

Satın alma gücü paritesinin ve reel döviz kurunun teorik olarak incelenmesi için Taylor (1995), Taylor ve Taylor (2004), Sarno ve Taylor (2002) çalışmalarına bakılabilir. Bu çalışmada satın alma gücü paritesinin geçerliliğinin ampirik olarak incelenmesi Fourier Enders ve Granger birim kök testi ile gerçekleştirilecektir. Bu yüzden literatür taraması birim kök testi uygulaması içeren çalışmalara göre yapılmıştır.

Cuestas ve Regis (2013) çalışmalarında satın alma gücü paritesinin geçerliliğini OECD ülkeleri için Ocak 1972-Ocak 2010 döneminde doğrusal ve doğrusal olmayan birim kök testleri kullanarak incelenmişlerdir. Test sonucunda, satın alma gücü paritesi teorisinin 12 ülkede geçerli olduğu görülmüştür. Yılcı ve Eris (2013) çalışmalarında, 33 Afrika ülkesinde satın alma gücü paritesinin geçerliliğini aylık veriler ile Fourier ADF ve Fourier KSS birim kök testleri kullanarak incelemiştir. Çalışmanın sonucuna göre 20 ülkede satın alma gücü paritesinin geçerli olduğu sonucuna varılmıştır.

Bahmani-Oskooee ve Chang (2015) çalışmalarında satın alma gücü paritesinin geçerliliğini, geçiş ekonomileri olarak nitelendirilen ülkeler için 1994:1–2012:6 döneminde eşik değerli doğrusal olmayan birim kök testleri kullanarak incelemişlerdir. Çalışmanın sonucunda 5 ülkede satın alma gücü paritesinin geçerli olduğu görülmüştür.

Güriş vd. (2016) çalışmalarında 4 İskandinav ülkesinde satın alma gücü paritesinin geçerliliğini 2009:1-2014:12 dönemlerini kapsayan aylık veriler kullanarak incelemişlerdir. Kapetanios vd. (2003) ve Kruse (2011) doğrusal olmayan birim kök testlerini ve Narayan ve Popp (2010) iki kırılmalı birim kök testini kullandıkları çalışma sonucunda satın alma gücü paritesinin geçerli olmadığı görülmüştür. Destek ve Okumuş (2016) çalışmalarında 27 OECD ülkesinde 1990:1-2015:5 döneminde satın alma gücü paritesinin geçerliliğini Fourier birim kök testleri kullanarak incelemişlerdir. Çalışmanın sonucunda 14 OECD ülkesinde satın alma gücü paritesinin geçerli olduğu sonucuna varılmıştır.

Güriş ve Tıraşoğlu (2017) çalışmalarında BRICS ülkelerinde satın alma gücü paritesinin geçerliliğini 1993:1–2015:3 döneminde incelemişlerdir. Fourier KPSS durağanlık testi sonucunda satın alma gücü paritesinin Brezilya ve Güney Afrika için geçerli olduğu; Rusya, Hindistan ve Çin için geçerli olmadığı görülmüştür.

Türkiye’de satın alma gücü paritesinin geçerliliğini farklı dönem itibarıyla inceleyen birçok çalışma bulunmaktadır. Köktürk ve Mert (2019) çalışmalarında 2003:1-2018:12 dönemini dikkate alarak incelemişlerdir. Fourier KPSS durağanlık testinin kullanıldığı bu çalışmada satın alma gücü paritesinin geçerli olduğu sonucuna varılmıştır. Yine örnek olarak Yücesan (2021) çalışması verilebilir. Fourier tipi birim kök testlerinin kullanıldığı bu çalışmada 1980:1-2019:9 döneminde Türkiye’de satın alma gücü paritesinin geçerli olmadığı sonucuna varılmıştır.

3. VERİ VE METODOLOJİ

Bu çalışmada Türkiye için satın alma gücü paritesinin geçerliliği Enders ve Granger (1998) birim kök testi ve Fourier Enders ve Granger doğrusal olmayan birim kök testi ile incelenmiştir.

3.1. Veri Seti

Satın alma gücü paritesinin geçerliliğinin incelenmesinde reel döviz kuru serisi kullanılmaktadır. Reel döviz kuru aşağıdaki gibi hesaplanmaktadır:

$$y_t = s_t \times p_{US,t} / p_{TR,t} \quad (1)$$

Burada s_t nominal döviz kuru, $p_{US,t}$ US birimi ile fiyat endeksi ve $p_{TR,t}$ Türkiye'nin fiyat endeksidir. Denklemden her iki tarafın logaritmasının alınmasıyla reel döviz kuru aşağıdaki gibi ifade edilir:

$$y_t = s_t + p_{US,t} - p_{TR,t} \quad (2)$$

Burada y_t logaritmik reel döviz kuru, s_t logaritmik nominal döviz kuru, $p_{US,t}$ logaritmik fiyat endeksi (US) ve $p_{TR,t}$ Türkiye'nin logaritmik fiyat endeksidir.

Bu çalışmada, reel döviz kuru serisinin türetilmesinde kullanılan veriler Merkez Bankası veri tabanından elde edilmiştir. Fiyat endeksi olarak tüketici fiyat endeksi (2003 = 100) kullanılmıştır. Satın alma gücü paritesinin geçerliliği 1994:1-2021:12 dönemini kapsayan aylık veriler kullanılarak Türkiye için incelenmiştir.

3.2. Ekonometrik Yöntem

Zaman serisi çalışmalarında satın alma gücü paritesinin geçerliliği incelenirken birim kök testlerinden veya eşbütünleşme testlerinden faydalanılmaktadır. Eşbütünleşme analizleri, nominal döviz kuru ile yurtiçi ve yurtdışı fiyatları arasındaki ilişkinin incelenmesine dayanmaktadır. Birim kök analizlerinde ise reel döviz kuru durağan ya da birim köklü olması incelenmektedir. Eğer reel döviz kuru birim köklü ise şokların etkisi kalıcı olacaktır ve ilgili değişken uzun dönem dengesine geri dönemeyecektir. Bu durum satın alma gücü paritesinin geçerli olmadığı anlamına gelmektedir. Eğer reel döviz kuru durağan ise şokların etkisi kalıcı olmayacak, zamanla ortadan kalkacak ve bir süre sonra denge sağlanacaktır. Bu durumda satın alma gücü paritesinin geçerli olduğunu gösterecektir (Cuestas ve Regis, 2013).

Bu çalışmada, satın alma gücü paritesinin geçerliliği birim kök testi kullanılarak incelenecektir. Birim kök testi olarak Fourier Enders ve Granger doğrusal olmayan birim kök testi kullanılacaktır. Fourier fonksiyonları, bir zaman serisinin trigonometrik terimler kullanılarak frekans yapısıyla tanımlanmasına olanak tanımaktadır. Böylece yapısal kırılmaların biçimi ve sayısı dikkate alınmadan zaman serisi analizleri gerçekleştirilebilmektedir (Enders ve Lee, 2004). Bununla birlikte zaman serisi kullanılarak ekonometrik bir çalışma yapılıyor ise serilerin doğrusal olup olmadığının incelenmesi oldukça önemlidir. Çünkü özünde doğrusal olmayan bir seri doğrusal yöntemler kullanılarak modellenir ise hatalı sonuçlar elde edilebilmektedir.

Çalışmada satın alma gücü paritesinin incelenmesinde reel döviz kuru serisi kullanılacaktır. Reel döviz kuru serisine uygulanacak olan Fourier Enders ve Granger doğrusal olmayan birim kök testinin prosedürü aşağıda açıklanmaktadır.

Enders ve Granger (1998) çalışmasında MTAR modeli aşağıdaki gibi gösterilmektedir:

$$\Delta y_t = I_t \rho_1 y_{t-1} + (1 - I_t) \rho_2 y_{t-1} + \varepsilon_t \quad (3)$$

Burada I_t gösterge fonksiyonudur ve şu şekilde tanımlanmaktadır:

$$I_t = \begin{cases} 1 & \text{eğer } \Delta y_{t-1} \geq 0 \\ 0 & \text{eğer } \Delta y_{t-1} < 0 \end{cases} \quad (4)$$

Enders ve Granger (1998) çalışmasında $H_0: \rho_1 = \rho_2 = 0$ birim kök temel hipotezi, $H_1: \rho_1 \neq \rho_2 \neq 0$ durağanlık alternatif hipotezine karşı F test istatistiği kullanılarak test edilmektedir.

Fourier Enders ve Granger doğrusal olmayan birim kök test prosedürü Christopoulos ve Leon – Ledesma (2010) çalışmasından yararlanılarak aşağıdaki adımların uygulanmasıyla gerçekleştirilmektedir:

Adım 1. Doğrusal olmayan deterministik bileşen aşağıdaki gibi belirtilmektedir.

$$\text{Model A: } y_t = \alpha_0 + \alpha_1 \sin\left(\frac{2\pi k^* t}{T}\right) + \alpha_2 \cos\left(\frac{2\pi k^* t}{T}\right) + v_t \quad (5)$$

$$\text{Model B: } y_t = \alpha_0 + \beta t + \alpha_1 \sin\left(\frac{2\pi k^* t}{T}\right) + \alpha_2 \cos\left(\frac{2\pi k^* t}{T}\right) + v_t \quad (6)$$

Burada model A sabit terimin bulunduğu denklem ve model B ise sabit terimin ve trend bileşeninin bulunduğu denklemdir. T örnek büyüklüğü ve t trend terimidir. Frekans değeri k ile ifade edilmekte ve $1 \leq k \leq 5$ aralığında değer almaktadır.

Uygun frekans değeri (k^*) belirlenirken Enders ve Lee (2004) çalışması dikkate alınmaktadır. Buna göre, her k değeri kullanılarak en küçük kareler yöntemiyle model tahmini yapılır. Tahmin edilen modeller arasından kalıntı kareler toplamının en küçük olduğu modele ait frekans değeri k^* olarak belirlenir. Ardından kalıntılar aşağıdaki gibi elde edilir.

$$v_t = y_t - \alpha_0 - \alpha_1 \sin\left(\frac{2\pi k^* t}{T}\right) - \alpha_2 \cos\left(\frac{2\pi k^* t}{T}\right) \quad (7)$$

Adım 2. İlk adımdan elde edilen hata terimleri aşağıdaki gibi modellenir ve bu model üzerinden test istatistiği hesaplanır.

$$\Delta v_t = I_t p_1 v_{t-1} + (1 - I_t) p_2 v_{t-1} + \varepsilon_t \quad (8)$$

$$I_t = \begin{cases} 1 & \text{eğer } \Delta v_{t-1} \geq 0 \\ 0 & \text{eğer } \Delta v_{t-1} < 0 \end{cases} \quad (9)$$

Adım 3. Eğer $H_0: \rho_1 = \rho_2 = 0$ birim kök temel hipotezi reddedilir ise Fourier terimlerinin anlamlılığı incelenmelidir. Bu durumda $H_0: \alpha_1 = \alpha_2 = 0$ temel hipotezi, $H_1: \alpha_1 = \alpha_2 \neq 0$ alternatif hipotezine karşı F testi ile Becker vd. (2006) çalışmasında yer alan kritik değerler kullanılarak test edilmektedir. Eğer temel hipotez reddedilir ise Fourier terimleri anlamlı olacaktır. Böylece, serinin deterministik fonksiyon ile ifade edilen kırılma yapısı altında durağan olduğu sonucuna varılabilir.

4. UYGULAMA VE BULGULAR

Çalışmanın bu bölümünde Türkiye’de satın alma gücü paritesinin geçerliliği 1994:1-2021:12 dönemlerini kapsayan reel döviz kuru serisi kullanılarak incelenmiştir. Yöntem olarak Enders ve Granger (1998) doğrusal olmayan birim kök testi ve bu testin Fourier fonksiyonu ile yorumlanmasını içeren Fourier Enders ve Granger doğrusal olmayan birim kök testi kullanılmıştır. Enders ve Granger (1998) doğrusal olmayan birim kök testi sonuçları Tablo 1’de sunulmuştur.

Tablo 1: Enders ve Granger (1998) doğrusal olmayan birim kök test sonuçları

Türkiye	Enders ve Granger (1998)								
	Deterministik bileşenlerin tahmin edilmediği model test istatistiği			Sabitin yer aldığı model			Sabit ve trendin yer aldığı model test istatistiği ²		
Test istatistik değeri	0.204			0.876			1.071		
250 gözlem için kritik değer ¹	%1	%5	%10	%1	%5	%10	%1	%5	%10
	5.10	3.41	2.68	6.99	4.95	4.05	8.85	6.65	5.64

NOT1 Test istatistiğinin kıyaslanmasında kullanılan kritik değerler Enders ve Granger(1998) çalışmasında yer almaktadır.

NOT2 Yapılan analizler sonucunda sabitli ve trendli modelin dikkate alınması önerilmektedir.

Enders ve Granger (1998) doğrusal olmayan birim kök test sonuçları incelendiğinde, hesaplanan test istatistik değerinin üç model için tüm anlamlılık düzeylerinde kritik değerden küçük olduğu görülmektedir. Test sonucuna göre reel döviz kuru serisinin birim köklü olduğunu ifade eden temel hipotez reddedilememektedir. Bu durum incelenen dönemler itibarı ile Türkiye’de satın alma gücü paritesinin geçerli olmadığı anlamına gelmektedir.

Tablo 2: Fourier Enders ve Granger doğrusal olmayan birim kök testleri sonuçları

Frekans değeri (k)	Fourier Enders ve Granger			
	Sabitli model test istatistiği	Kalıntı Kareler Toplamı (sabitli)	Sabitli ve trendli model test istatistiği ¹	Kalıntı Kareler Toplamı (sabit ve trendli)

k = 1		7.599		3.3334		17.217		2.4578 ²		
N = 250 için üretilmiştir.	Fourier Enders ve Granger Kritik Değerleri									
	Sabitli model					Sabitli ve trendli model				
	%1		%5		%10	%1		%5		%10
k = 1	10.5115		7.9394		6.8027	12.7687		10.1223		8.8977

NOT1 Yapılan analizler sonucunda sabitli ve trendli modelin dikkate alınması önerilmektedir.

NOT2 Çalışmanın ekonometrik yöntem bölümünde anlatıldığı üzere kalıntı kareler toplamının en küçük olduğu değer uygun frekans değeri olarak belirlenir.

Fourier Enders ve Granger doğrusal olmayan birim kök testi sonuçları incelendiğinde sabitli ve trendli model üzerinden değerlendirme yapılmıştır ve k = 1 uygun frekans değeri olarak belirlenmiştir. Hesaplanan istatistik değerinin, k = 1 frekans değeri için üretilen kritik değerlerden tüm anlamlılık düzeylerinde büyük olduğu

görülmektedir. Bu durumda $H_0: \rho_1 = \rho_2 = 0$ birim kök temel hipotezi reddedilmektedir. Yani reel döviz kuru serisinin deterministik fonksiyon ile ifade edilen kırılma yapısı altında durağan olduğu sonucuna varılabilir. Bu ise Türkiye’de 1994:1 – 2021:12 dönemleri arasında satın alma gücü paritesinin geçerli olduğu anlamına gelmektedir.

5. SONUÇ

Bu çalışmada Türkiye için satın alma gücü paritesinin geçerliliği, 1994:1-2021:12 dönemlerini kapsayan reel döviz kuru serisi kullanılarak incelenmiştir. Serinin durağanlığının incelenmesinde Enders ve Granger (1998) doğrusal olmayan birim kök testi ve Fourier Enders ve Granger doğrusal olmayan birim kök testi kullanılmıştır.

Enders ve Granger (1998) doğrusal olmayan birim kök testi sonucuna göre reel döviz kuru serisi birim köklüdür. Bu durumda satın alma gücü paritesi geçerli değildir. Fourier Enders ve Granger doğrusal olmayan birim kök testine göre ise reel döviz kuru serisi deterministik fonksiyon ile ifade edilen kırılma yapısı altında durağandır. Bu durumda satın alma gücü paritesinin geçerli olduğu sonucuna varılmaktadır.

Ekonometride Fourier fonksiyonlarının kullanılması serilerin zaman boyutunun frekans yapısıyla tanımlanmasına olanak tanımaktadır. Literatürde ise birim kök testlerinin Fourier yapısı ile uygulanması sonucunda daha güçlü test sonuçlarının elde edilebildiği görülmektedir. Bu yüzden zaman serisi çalışmalarında serilerin durağanlığı araştırılırken serinin yapısına en uygun olan birim kök testinin kullanılması önerilmektedir.

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Toplum Çevirmeninin Sosyal İşlevi

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Özet: Tarihsel süreç içerisinde farklı kültürler ait bireyler ve toplumlar birbirleri ile çeşitli yollarla iletişim kurmuşlardır. Farklılıklar, iletişim ihtiyaçlarını herhangi bir ortak dil aracılığı ile gerçekleştirmişlerdir. Bu esnada farklı kültürler arasında çeşitli etkileşimlerde söz konusu olmuştur. Özellikle bugün hızlı teknolojik gelişmeler nedeniyle ülkeler arasındaki coğrafik sınırlar kalkmış ve farklı kültürlerin etkileşimleri en yüksek düzeye ulaşmıştır. Tam bu noktada farklılıklar arasında köprü görevini yerine getiren çeviri olgusu her geçen gün genişleyen kapsam alanı ile insanlığın hizmetine bağımsız bir bilimsel disiplin olarak girmiştir.

Son yüzyılda çeviri olgusu, özgün bir bilimsel alan olarak gerek yazılı çeviri gerekse sözlü çeviri olarak insanlığın yaşamı içerisinde olmuştur. Sözlü çeviri, özellikle büyük uluslararası organizasyonlarda çeşitli türleri ile kullanılmaktadır. Ancak sözlü çeviriyi gerçekleştiren ve çeviri olgusunun öznesi olan çevirmene büyük görev düşmektedir. Çünkü ne tür çeviri olursa olsun, karşılıklı iletişimin doğru olabilmesi için, çevirmenin ilgili konunun uzmanı olması gerekmektedir. Her iki dilin de konuşma yetisine sahip ve kültürel olgularını tanıması beklenmektedir. Bu bağlamda özellikle dünyada uluslararası alanda yaşanan ortak sorunların giderilmesinde kültür ve dil uzmanları sayılan toplum çevirmenlerinin yeri tartışılmaz bir gerçektir.

Toplum çevirmeni, farklı kültürleri ve her birinin toplum yapısını tanıyan bir dil uzmanıdır. Toplum çevirmenleri, farklı kültürlerden gelen kimselere dilsel rehberlik eden ve onların yaşadıkları yabancı toplum içerisinde kamu hizmetlerinden faydalanmasını sağlayan kimselerdir. Diğer taraftan toplum çevirmeninin, farklılıkları bünyesinde bandıran toplumun yapısını da yeni gelenlere anlatan ve kamu düzenine onların uyumunu sağlama görevi vardır. Farklı kültürlerin bir arada bulundukları yerlerde hoşgörü ve uyumlu yaşamın gerekliliği için toplum çevirmenleri büyük özverili çalışmalar yapmaktadır. Bu bağlamda toplumsal yaşamın devamı açısından toplum çevirmenlerinin önemi büyüktür.

Bu çalışmada, toplum çevirmen kimliği ve görevlerinin yanı sıra farklı kültürlerden gelen kimselerin yeni topluma uyumu konusunda, toplum çevirmenlerinin eylemleri göz önüne serilecektir. Ayrıca farklılıklar arasında iletişim ve etkileşimin berberinde getireceği olumlu olayların yanı sıra ortaya çıkabilecek olumsuzluklarında giderilmesi konusunda sosyal ve kültürel alanlarda uygulanacak çözüm stratejileri, nitel bir araştırma yöntemi ile betimleme yoluyla irdelenecektir.

Anahtar Sözcükler: Toplum Çevirmenliği, Toplum Çevirmeni, Kültür, Toplum

The Social Function of the Community Translator

Abstract: In the historical process, individuals and societies belonging to different cultures have communicated with each other in various ways. Differences have fulfilled their communication needs through any common language. In the meantime, there have been various interactions between different cultures. Especially today, due to rapid technological developments, the geographical borders between countries have been removed and the interaction of different cultures has reached the highest level. At this point, the phenomenon of translation, which serves as a bridge between differences, has entered the service of humanity as an independent scientific discipline with its ever-expanding scope.

In the last century, the phenomenon of translation, as an original scientific field, has been in the life of humanity, both as written translation and oral translation. Interpreting is used in various forms, especially in large international organizations. However, the translator, who performs the interpretation and is the subject of the translation phenomenon, has a great responsibility. Because no matter what kind of translation, the translator must be an expert on the relevant subject in order for mutual communication to be correct. It is expected that both languages have the ability to speak and recognize their cultural phenomena. In this context, the place of community translators, who are considered as culture and language experts, is an indisputable fact, especially in the elimination of common problems experienced in the international arena in the world.

A community translator is a language expert who knows different cultures and the social structure of each. Community translators are people who provide linguistic guidance to people from different cultures and enable them to benefit from public services in the foreign community they live in. On the other hand, the community translator has the duty of explaining the structure of the society embodied in the differences to the newcomers and ensuring their adaptation to the public order. Community translators work devotedly for the necessity of tolerance and harmonious life in places where different cultures coexist. In this context, the importance of community translators is great for the continuation of social life.

In this study, in addition to the identity and duties of community translators, the actions of community translators regarding the adaptation of people from different cultures to the new society will be revealed. In addition, the solution strategies to be applied in social and cultural fields in order to eliminate the negative events that may arise as well as the

positive events that communication and interaction among the differences will bring will be examined through a qualitative research method.

Keywords: Community Translator, Community Translator, Culture, Society

1. GİRİŞ

İnsanoğlu kendini ve isteklerini ifade etmek için doğuştan gelen konuşma becerisini kullanmaktadır. Ait olduğu toplumun bir bireyi olarak toplumsallaşırken, o toplumda konuşulan dili çeşitli kurumlar aracılığı ile edinmektedir. Ve birey, yaşamı boyunca bu dili, kendi toplumun da dilsel tüm ihtiyaçlarını karşılayabilmektedir. Ancak dünyada farklı toplumların konuştuğu oldukça çok sayıda farklı dillerin varlığı söz konusudur. Bu diller, insanoğlunun dünya üzerinde gerçekleştirdiği birçok (göç, küreselleşme, medya gibi) etkinlikler sonucunda karşılaşmaktadır. Farklı dilleri konuşan bireylerin aynı coğrafya üzerinde yaşamlarını uyum içerisinde sürdürmeleri, ortak bir dilin anlaşma aracı olarak kullanılması zorunluluğunu beraberinde getirmektedir. Farklı dilleri konuşan bireylerin birbirlerini anlaması ve anlaşılmasını sağlayan çeviri eylemi ve bu eylemi gerçekleştiren çevirmenler gerekmektedir.

Çeviri ve onun öznesi çevirmen, farklı dil ve kültürlerle sahip toplum veya bireyler arasında bir iletişim köprüsü işlevini yürütmektedir. Bu iletişim eylemi, insanların birbiri ile edindikleri farklı yaşam deneyimlerinin paylaşımını ve bulundukları yerlerde temel ihtiyaçlarının karşılanmasını sağlarken, birbirlerini anlayan kimselerin çatışmasını da önlemektedir. Özellikle içerisinde bulunulan son yüzyılda gerçekleşen teknolojik gelişmeler, insanoğlunun dünya üzerinde hızlı hareket etme olanağı sunmuştur. Bu nedenle, farklı toplumların insanları, başta internet olmak üzere ortak iş ve ticaret, çeşitli amaçlarla düzenlenen organizasyonlar gibi etkinlikler sonucunda daha sık ve hatta sürekli karşılaşmak durumunda kalmışlardır. Bu bağlamda, özellikle hızlı ve kısa sürede gerçekleştirilen sözlü çeviri bir zorunluluk haline gelmiştir.

İnsanlık tarihinin yazı ile tanışmasıyla birlikte, sözlü olarak gerçekleştirilen çeviri eylemi yazılı olarak da yapılmıştır. Her alanda oldukça işlevsel bir görev üstlenen çeviri eylemi, son yüzyılda bağımsız bir bilim dalı haline gelmiştir. Gittikçe kapsam alanı genişleyen çeviri alanındaki bu değişim, çeviri alanında çeşitliliği de gerektirmiştir. Sözlü çeviri ana başlığı altında uygulanan birçok çeviri alanının yanında, dünyada yaşanan kitlesel olayların sonucu olarak “Toplum Çevirmenliği” de özel bir çeviri alanı olarak ortaya çıkmıştır.

2. TOPLUM ÇEVİRMENLİĞİ VE TOPLUM ÇEVİRMENİNİN TANIMI

Farklı toplum içerisinde yaşayan ve dil bilmeyen kimselerin insani boyutta yaşamlarını sürdürebilmeleri için, bulundukları devletin kamu hizmetlerinden yararlanabilmeleri için yapılan sözlü çeviri türü, Toplum Çevirmenliği en temel tanımı olarak bilinmektedir. Bu nedenle, toplum çevirmenliğinin adı farklı dillerde farklı adlar verilerek ifade edilmektedir. Örneğin: İngilizcede “community interpreting”, “public service interpreting”, veya “Liaison Interpreting” /Fransızca “interprétariat communautaire”, Almanca’da “Sprach-und Kulturmittler”, “Sprach-Intergrationsmittler” veya “Gemeindedolmetscher”, Avusturya’da “Kommundolmetscher” ve İsviçre’de ise “Interkultureller Übersetzer” veya “Interkulturelle MediatorInnenen” olarak bilinmektedir. Ancak tüm hepsinin yürüttüğü görev, Toplum Tercümanlığının üstlendiği görev ile eşdeğerdir.

Toplum Çevirmenliği; kamusal alan çerçevesinde, farklı dilleri konuşan ve bu nedenle devletin sunduğu kamu hizmetlerine ulaşmakta dilsel sorunlar yaşayan kimselere, sözlü çevirmenliğin yanında bir sosyo-kültürel danışmanlık hizmeti de sunan, bir çeviri kurumdur. Rets’e (1998) göre toplum çevirmenliğini şöyle tanımlamıştır.

Toplum Tercümanlığı, en temel anlamda “toplum hizmeti alanında; polis merkezlerinde, göçmen bürolarında, sosyal hizmet merkezlerinde, sağlık ve psikiyatrik tedavi merkezlerinde, okullarda ve benzeri kurumlarda; yetkililerle halk arasındaki iletişimi kolaylaştırmak amacıyla verilen sözlü çeviri hizmeti...”(Akt.Kurultay/Bulut, 2012:79).

Uluslararası alanda dünyanın en büyük sorunu göç’tür. Toplum Çevirmenliği, özellikle yoğun göçe maruz kalan ve çeşitli nedenlere dayalı olarak göçmen alan ülkelerde (özellikle İskandinav ülkeleri, Almanya, Fransa, Hollanda gibi Avrupa ülkeleri, Amerika Birleşik Devletleri, Kanada ve Avustralya gibi) toplumsal yaşam içerisinde göçmenlerin kültürel açıdan iletişim gereksinimlerinin sağlamsı yönünde yapılan çeviri eylemidir. Ayrıca küreselleşme nedeniyle çeşitli iş alanlarının dünya üzerindeki mevcut iş yerlerinde çalışanlarının bulundukları ülkelerde karşılaştıkları bürokratik işlemlerden doğan kültürlerarası iletişim ihtiyaçlarında kullanılmaktadır. Doğan, Toplum Çevirmenliğinin işlevini şu şekilde ifade etmektedir.

Toplum Çevirmenliği, özellikle yabancı ülkelerde ya da farklı dillerin konuşulduğu ülkelerde yaşayan ya da bulunan halktan kişilerin devlet kurumlarındaki iletişim sorunu böyle bir çeviri türünün gelişmesine önayak olmuştur. Kamu Hizmeti Çevirmenliği de denilen bu alan zamanla gelişmekte ve türleri açısından genişlemektedir. Örneğin, Avustralya, nüfus yapısının çeşitliliği nedeniyle, toplum çevirmenliği organizasyonu açısından oldukça iyi bilinir. Olimpiyatlar, bu çeviri türünün geçici olarak kullanıldığı ortamlardır (Doğan, 2015:62).

Tarihsel olarak çeviri eylemine bakıldığında Toplum çevirmenliğinin geçmişinin çok eski olduğu görülmektedir. Çünkü sözlü iletişim bağlamında yapılan Toplum Çevirmenliği, aynı coğrafyada yaşayan ortak bir dil bilmeyenler arasında gerçekleştirilen bir çeviri türüdür. Sözlü çeviri türlerinin çoğu açık ve söylenen her şeye tanık olabilinen bir ortamda yapılırken, toplum çevirmenliği bireyin özel yaşamı üzerinden hareket eylemini gerçekleştirir. Bu konuda Erdoğan şöyle demektedir.

Uluslararası ortamlarda yapılan konferans çevirmenliğinin aksine toplum çevirmenliği genellikle ulusal ortamlarda yapılır. Toplum çevirmenliği bir bireyin en mahrem ve önemli sorunlarının tartışıldığı ortamlarda gerçekleşir. Bu ortamlar, doktor ameliyathanesinden, mahkeme ortamına veya okulda veli toplantılarına kadar uzanabilir. Hastane çevirmenliği ve mahkeme çevirmenliği de „toplum çevirmenliği“ Şemsiyesi altında değerlendirilir (Erdoğan, 2021:52).

Toplum çevirmenliği işini gerçekleştiren kimse, yani yapılan eylemin öznesi “Toplum Çevirmeni”dir. Toplum çevirmenleri, farklılıklar arasında bir dil ve kültür aracıdır. Farklı kültür ve dillere sahip toplumların bir arada uyum içerisinde yaşamaları konusunda büyük bir rol oynamaktadır. Çünkü toplum çevirmeni, dilsel iletişim dışında danışmanlık ve arabuluculuk rolleri de üstlenmiştir. Bu bağlamda Toplum çevirmeni belli bir mekanda bulunarak çeviri eylemini gerçekleştirmemektedir. Kendisine gereksinim duyulan her yerde bulunmak ve farklılıklar arasında iletişimin kurulmasına yardımcı olmak zorundadırlar.

Toplum çevirmenleri mahkeme çevirmenleri ve konferans çevirmenlerinden farklı bir şekilde zor toplumsal ortamların tam olarak içinde bulunurlar ve bulundukları ortamın zorluklarını deneyimlerler. Daha çok halkın arasındadırlar. Ailelerin evlerindedirler, bazen devlet dairelerinde çeviri yaparlar, bazen polis karakollarında, bazen de hastanede çalışırlar (Erdoğan, 2021:51).

Toplum çevirmeni olarak hizmet veren kimse, hedef ve amaç dilleri çok iyi bilmenin yanında, her iki dilin konuşulduğu, toplum yapısını ve kültürel değerlerini de tüm incelikleri ile bilmek zorundadır. Böylelikle çeşitli alanlarda çalışma sürdüren Toplum çevirmeni, kültürel çerçevede yanlış anlamaların önüne geçecektir.

3. FARKLI KÜLTÜRLERARASINDA İLETİŞİM UZMANI OLARAK TOPLUM ÇEVİRMENİ

Çeviri eylemi farklı dil ve kültürler arasında ortak bir anlaşma noktası bulmak anlamına gelmektedir. Çevirmen de bu eylemin gerçekleştiren kişidir. Çevirmenlerin yaptıkları iş, farklı dil ve kültürlere sahip toplumların birbirlerini anlamalarını sağlamaktır. Bu bağlamda çevirmen, kültürlerarasında bir hoşgörü anlayışı oluşturmak ve her iki tarafa da kendilerine yabancı olan bilgi akışı sağlayarak, yabancı olanı kabullenme olgusunu ön plana çıkarmaktır. Çeviri eylemi sürecinde çevirmenlik, çok yüzeysel ve hafife alınacak bir uğraş değildir. Çevirmen etkin bir düşün eylemi gerçekleştirmektedir. Bu anlamda çevirmen, kültürlerarası uyumun sağlanması yönünde bir uğraş vermektedir. Çevirmenin yaptığı çeviri eylemini Hönig şu şekilde ifade etmektedir.

Hönig’e göre çeviri, bir kültürden diğerine bir köprüdür. Çevirmenler ise, anlaşma köprüsünü inşa eden uzmanlardır. Çeviri köprüsü, iki farklı kültürü ve dil toplumunu birbirine bağlar ve böylece sözcüklerin ve düşüncelerin iki kültür arasında serbest değişimini mümkün kılar. Çeviri köprüsü, metinleri sorunsuz bir şekilde bir taraftan diğer tarafa aktarmaya yarar (Akt. Tosun, 2017:266).

Dünyada yaşanan küreselleşme süreci, iletişimsel ve ulaşım gelişmeleri beraberinde getirmiş ve teknolojik gelişmelere paralel olarak çeviri alanının çalışma kapsam alanı da genişlemiştir. Küresel bu hareketlilik, özellikle çeviri alanında yaşanan paradigma değişimini tetiklemiş ve çevirinin bağımsız bir bilimsel alan olması çevirinin ve çevirmenin rollerini de yeniden belirlenmesini gerektirmiştir. Çeviri eylemi sosyo- kültürel odaklı çalışmalara yönelmiş ve çeviri eyleminde bu yeni ufuklar açmıştır. Bu yöneliş çevirmenlerin çalışma alanlarını da yakından etkilemiştir. Böylece, çevirmenler sadece farklı diller arasında dil aktarıcısı olmaktan çok, toplumsal ve kültür aracılığı rolü üstlenmiştir. Bu durumu Karaca şöyle dile getirmektedir.

Küreselleşmenin kültürel etki boyutu sosyolojik incelemelerde daha da önemli hale gelmektedir. Söz konusu bu etkiler, bir kültürel etkinlik olan çeviri faaliyetleri üzerinde doğrudan kendini göstermekteyken, sosyolojinin günümüz toplumunu anlamaya yönelik geliştirdiği kuramsal ve kavramsal araçlardan çeviribilim araştırmalarının uzak durması olası düşünülemez (Karaca, 2011: 361).

Farklı kültürel yapıya ve sosyal dokuya sahip toplumların çeşitli nedenlere dayalı olarak bir araya gelmesi, çeviri ve çevirmen etkinlik alanlarının ve görevlerinin değişmesini gerekli hale getirmiştir. Çevirmeni, her iki dile hâkim olmanın yanında, her iki toplum yapısını ve toplumların içerisinde pratik olarak yaşanan kültürel olguları yakından tanıması yönünde donanımlı olmasını zorunlu kılmıştır. Bu bağlamda çevirmen, sadece dilsel aracı konumundan çıkmış ve kültürlerarası uzman olarak, bir kültür ve bir toplumbilimci durumuna gelmiştir. Bu anlamda çevirmenin, bir toplumbilimci, kültür uzmanı olması beklenmektedir. Toplumsal bir özne olarak çevirmen, dünyada yaşanan tüm sosyolojik, ekonomik, siyasal, bilimsel gelişmelerden haberdar olmanın yanında bu gelişmeler doğrultusunda çeviri eylemini yerine getirmesi önemli hale gelmiştir. Bu anlamda Tunalı şöyle demektedir:

Her birey gibi çevirmen de belli toplumsal yapı içinde eylemde bulunan bir öznedir. Çevirmen, toplumsal etmenlerden yalıtılmış, her türlü etki ve müdahaleye kapalı bir ortamda çalışmamakta; tam tersine toplumsal bir özne olarak toplumla etkileşim içindedir, başka bir deyişle toplumu oluşturan birey ve kurumlar, çevirmenin davranışlarını ve kararlarını belirlemektedir (Tunalı, 2006:79).

Toplumsal bir özne olarak nitelenen çevirmenlik uğraşı, sözlü çevirinin en hareketli ve özveri gerektiren Toplum çevirmenliği yapan kimseler büyük sorumluluklar yüklemektedir. Toplum çevirmeni, dünyada küresel bağlamda olan toplumsal değişimlere paralel, yaşanan her türlü toplumsal olaylarda (göç, doğal felaketler, savaş gibi) her anlamda donanımlı bir uzman olarak yer almaktadır. Toplum çevirmeni, farklı alanlarda üstlendiği sorumluluklarla birlikte küreselleşen dünyada yaşanan olumsuzlukların çözümünde anahtar rolü oynamaktadır.

4. TOPLUM ÇEVİRMENİNİN BİREYİN TOPLUMSALLAŞMASINDAKİ ROLÜ

Her birey içinde doğup büyüdüğü ve yaşamını sürdürdüğü toplumun bir üyesidir. Bireyin kendi toplumuna ait olma duygusu, toplumun varlığını sürdürmesi açısından oldukça önemlidir. Ayrıca toplumun en küçük yapı taşı olan bireyinde varlığını sürdürebilmesi toplumun üyesi olmasına bağlıdır. Bireyin toplumun bir üyesi olması yani toplumsallaşması, toplumun yaşam pratiği içerisinde kendine özgün uyguladığı değer ve kuralların bireye öğretilmesidir. Bireyin toplumun kabul edeceği tutum ve davranışları öğrenmesi ve bu roller doğrultusunda hareket etmesi, toplumla bütünleşmesi anlamına gelmektedir. Bireyin toplumlaşması doğumundan itibaren çeşitli toplumsal kurumlar (aile, okul, çevre) aracılığı ile gerçekleşmektedir. Toplumsallaşmanın tanımı kısaca aşağıdaki şekilde verilmektedir.

Toplumsallaşma, sosyalizasyon ya da sosyalleşme, toplumun mevcut değer ve normlarının bireylere öğretilmesi süreci olarak tanımlanabilir. Bu süreç içerisinde birey ferdi olduğu toplum içerisinde nasıl davranacağını öğrenir. Aynı zamanda, bireyin sahip olduğu ya da toplum tarafından verilen rollerin ve sahip olunan statülerin gerektirdiği davranış biçimlerini, toplumun kendilerinden beklentilerini öğrenir. Toplumsallaşma sürecinde birey kendi toplumunun bir üyesi olmayı, toplumu tarafından kabul gören davranış örüntülerini, insanın davranışlarına yön veren, bunları belirleyip şekillendiren temel toplumsal ve kültürel değerleri (normları) öğrenir. Öğrenmekle de kalmayıp bunları içselleştirip kendisine mal eder ve bu değer ve normlar doğrultusunda davranmaya başlar. Daha öz bir anlatımla, birey toplumu ile bütünleşir ve toplumunun bir parçası haline gelir (www.wikipedia.org)

Bireyin toplumsallaşması sadece bireyin içinde doğduğu toplum içerisinde gerçekleşmemektedir. Dünyada yaşanan göçler sonucu yeni toplumlara entegre olarak yaşamak zorunda kalan bireylerin yeniden toplumsallaşması gerekmektedir. Yeni toplumun değer yargılarını, toplum içerisinde uygulanan tutum ve davranışları öğrenmek ve uygulamak zorundadır. Aksi halde yeni toplum bireyi kabullenemeyecektir. Bu yüzden göç alan ülkeler sık sık uyum programlarından söz emektirler. Toplumun yeni üyeleri ile yerli halkın uyumlu olabilmesi için ortak bir anlaşma dili oluşturmaları söz konusudur. Bu anlamda özellikle göç alan yerlerde toplum çevirmenliğinin gerekliliği tartışılmayacak kadar önemlidir. Farklı dil ve kültürler sahip toplumların bir arada gönüllü veya zorunlu olarak yaşam sürdürmeleri, birbirlerini tanımaları ile eş orantılıdır. Birbirlerini tanımaları için önce anlamaları gerekmektedir. Böylece yeni oluşturulan toplum içerisinde uyum içerisinde yaşayabilirler. Aksi halde farklılıklar arasında çatışma çıkacaktır. Göç yoluyla farklı bir yere gelen toplumlar, o ülkedeki kamu düzenini bozmadan uyum sağlamaları beklenirken, o ülke toplumunun da göçmenlerin kültürlerini yadsımadan onları tanıyarak kabullenmeleri ortak yaşam açısından önemlidir. İşte bu bağlamda her iki toplumun dilini ve sosyo-kültürel yapısını çok iyi tanıyan toplum çevirmeni bir arabulucu rolünde ortaya çıkmaktadır. Toplum çevirmenleri, göçmenlerin yeni geldikleri toplumun bir bireyi olmaları yolunda bilmeleri gereken tüm bilgileri kendilerine aktarmaktadır. Böylece, göçmenler, davranış biçimlerini yeni toplumun yapısına göre uyarlamak durumunda kalacaktır. Örneğin Almanya'da çeşitli kurumlar (Berlin Gesundheit e.V., Interkulturelle Buro der Stadt Darmstadt, Diakronie Wuppertal) tarafından düzenlenen toplumsal uyum

programlarına, toplum çevirmeleri, bir uyum uzmanı olarak sürekli olarak davet edilmektedir. Bu durumu Doğan şöyle ifade etmektedir.

Toplum Çevirmenliğine yönelik eğitim seminerleri düzenleyen bu üç kuruluş da, halen varlıklarını sürdürmekte ve göçmenlere yönelik hem sosyo- kültürel hem de kamu hizmetlerinden daha etkin yararlanmalarını sağlayacak koşulların hazırlanmasına yardımcı olmaktadır. Göçmenlere, Toplum Çevirmenliği görevini yapan “Uyum Çalışanları” tarafından Almanya’daki eğitim, sağlık ve sosyal yapının, çalışma alanlarının ciddi temel bilgiler verilerek kendi dil ve kültürlerini unutmadan, Alman toplumuna uyum sağlamaları aynı zamanda da sosyalleşmeleri yönünde eğitimler de verilmektedir. Bir yandan da göçmenlerle kurumlarda uzman personelin bir araya gelmesini sağlayarak aralarındaki iletişim konusunda yardımcı olmaktadır (Doğan. 2020:102).

Toplum çevirmenleri, göç veya diğer herhangi bir nedenle yabancı bir toplum içerisinde yaşamak zorunda kalan kimselerin, yeniden toplumsallaşması konusunda en büyük yardımcılarıdır. Toplum çevirmenlerinin hem kültürel hem toplumsal hem de dilsel olarak donanımlı kimseler olması, toplumun yeni üyelerine yönelik verilen uyum eğitimlerinde sosyal uyum uzmanı olarak büyük sorumluluk aldıklarını göstermektedir. Diğer taraftan toplum çevirmenleri, toplumun yeni üyelerinin kültürel ve yaşamsal değerlerin tanıtılması ile ilgili olarak yerli toplumun bilgilendirilmesi konusunda önemli rol oynamaktadırlar.

5. SONUÇ

Dünyada iletişim ve ulaşım alanlarında yaşanan hızlı gelişmeler, çeviri eyleminin çalışma alanlarının genişlemesini sağlamıştır. Çeviri eylemi klasik dilsel aracılığının yanında, kültür ve toplum ekseninde çalışmalara sahne olmuştur. Bunun en büyük nedenleri, dünyada yaşanan küreselleşme, medyanın çok etkin hale gelmesi ve halen yaşanan uluslararası göçlerdir. Bu bağlamda çeviri eylemini sosyo-kültürel bir olgu olarak incelemek gerekmektedir. Çeviri son dönemlerde özgün bir bilimsel alan olarak ortaya çıkması, toplumsal boyutta çeviri çalışmalarının hız kazanmasını sağlamıştır. Özellikle çeviri eyleminin öznesi olan çevirmenin de bir toplumbilim uzmanı olarak ön plana çıkarmıştır.

Sözlü çevirinin alt bölümlerinden biri olan toplum çevirmenliği, çeviri eyleminin toplumsal işlevinin ön plana çıkması ile birlikte daha belirgin şekilde gündeme oturmuştur. Çevirinin toplumlararası ya da kültürlerarası iletişim aracılığı, toplum çevirmenliğinin ana hedefini oluşturmaktadır. İlk olarak gönüllülük esasına dayalı olarak yapılan toplum çevirmenliği, artık uzmanlık gerektiren bir meslek olarak kendini kabul ettirmiştir. Bir uzman olarak toplum çevirmeni her iki dilin konuşulduğu toplumların yapısını ve kültürel yapılarını en yakından tanıyan kimse özelliği taşımaktadır. Bu bağlamda toplum çevirmenliğinin sosyal işlevi, dünyada yaşanan farklı kültürlerle sahip insanların bir arada uyum içerisinde yaşayabilmesi için önemli bir olgudur.

Toplum çevirmeni, sadece bir dil aracı olmak rolünden çok, farklı kültürlerin buluştuğu bir köprü rolü üstlenmiştir. Bu bağlamda toplum çevirmeni, topluma yeni katılmış üyelerin, o toplumun bir üyesi olması konusunda aracı olmasına yardımcı olmaktadır. Yeni toplum içerisinde yaşamak durumunda kalan toplumun yeni üyelerine kabuledilebilir davranış ve tutumların sergilenmelerinde eğitici katkılar sunmaktadır. Toplum ve kültürün birbirinden ayrılamaz oluşu, toplum çevirmeninin farklılıkların birbirlerini anlamasında ve karşılıklı hoşgörü çerçevesinde birlikte yaşamalarına olanak sağlamaktadır. Toplum çevirmeni, gerek sahada gerekse büroda her zaman bir toplumbilim uzmanı ve kültür aracı olarak görev almaktadır.

Uluslararası insan hareketliliğinin çok yoğun olduğu bugünün dünyasında, sadece toplumların değil, bireylerinde her an farklı bir sosyo-kültürel yapıda kimselerle karşılaşması kaçınılmaz hale gelmiştir. Çeşitli uluslararası etkinliklerin düzenlendiği ortamlarda toplum çevirmenleri, çok etkin şekilde görev almakta ve farklılıklarının hoşgörü çerçevesinde birlikteliklerine yardımcı olmaktadır.

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Spor Alanında Toplum Çevirmenliğinin Gerekliliği

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Özet: Spor, insan yaşam kalitesini her anlamda arttıran, kişisel ve toplu olarak belli kurallar çerçevesinde yapılan bir etkinliktir. Bugün, belli bir rekabeti de gerektiren spor etkinliği, kitlesel ve toplumsal olarak belli bir sektörel duruma ulaşmıştır. Bu anlamda spor, ulusal düzeylerden çıkarak uluslararası organizasyonlara dönüşmüştür. Farklı coğrafyalarda ve kültürlerden insan topluluklarını bir araya getiren spor etkinlikleri, oyunların ortak belli kuralları çerçevesinde anlaşmalarını sağlasa bile, yeterli iletişimi sağlayamamaktadır. Bu nedenle, spor farklı toplum ve kültürleri bir araya getirme rolü varken, dilsel aracılık görevini çeviri üstlenmektedir.

Spor etkinlikleri, çok çeşitli olduğu kadar insanlık tarihi kadar eski bir olgudur. Kısa süreli ve geçici de olsa uluslararası boyutta gerçekleştiğinde mekânsal bir yer değiştirme anlamına gelmektedir. Spor etkinliğinin gerçekleştirildiği ülkelerde, etkinlik süresince hem demografik yapıda hem de sosyo- kültürel ilişkilerde değişiklikler yaşanmaktadır. Farklı ülkelerden gelen kimselerin, kamusal ihtiyaçlarını gidermesinde, spor organizasyonunun olduğu ülkelerin yönetimleri, farklı kültürlerarasında köprü görevi olan toplum çevirmenliğini ilk olarak devreye sokmak zorundadır. Aksi halde farklı toplumsal ve kültürel yapıya sahip toplumların kısa süreli de olsa karşılaşması bir takım çatışmalara neden olabilecektir.

Spor etkinlikleri içerisinde yer alan birçok yarışmacı da yabancı ülkelerde spor yaşamını sürdürmektedir. Bu kimselerin de içinde yaşadıkları topluma katıldıkları da yaşadıkları en büyük sorun sosyalleşme (toplumsallaşma) sorunudur. Bu tür sporcuların yerli halkla uyum içerisinde yaşayabilmeleri için, içinde bulundukları toplumun bütün kurumları ile bireyleri ile birlikte yeniden ilişkilerinin düzenlenmesi gerekmektedir. Bu bağlamda yurt dışında görevli konumunda olan sporcular, kültürlerarası iletişim uzmanı toplum çevirmenlerinin yardımı ile yeni geldikleri ülkenin toplumuna uyum sürecini daha kolay sağlayacaklardır.

Bu çalışmada, yaşamın her alanında karşılaşılan spor etkinliğinin çeşitliliği gün geçtikçe artmakta ve tüm dünya ulusları arasında rekabete dayalı organizasyonlara dönüşmüş durumdadır. Bu organizasyonlarda yer alan sporcu kabilelerinin ve seyircilerinin bulundukları ülkelerde yaşayabilecekleri dilsel sorunların çözümünde toplum çevirmenliğinin gerekliliği göz önüne serilecektir. Ayrıca farklı kültürlerarasında dilsel sorunların giderilmesi için sosyal ve kültürel alanlarda uygulanacak çözüm stratejileri, nitel bir araştırma yöntemi ile betimleme yoluyla irdelenecektir.

Anahtar Sözcükler: Spor, Çeviri, Toplum Çevirmenliği,

The Necessity of Community Interpretation in the Field of Sports

Abstract: Sport is an activity that increases the quality of human life in every sense and is carried out individually and collectively within the framework of certain rules. Today, the sporting event, which also requires a certain competition, has reached a certain sectoral situation, both massively and socially. In this sense, sports have evolved from national levels to international organizations. Sports events that bring together people from different geographies and cultures cannot provide sufficient communication even if they agree within the framework of certain common rules of the games. Therefore, while sports have the role of bringing different societies and cultures together, translation takes on the role of linguistic mediation.

Sports events are as old as human history as they are diverse. Even if it is short-term and temporary, it means a spatial displacement when it occurs on an international scale. In the countries where the sports event is held, there are changes in both the demographic structure and socio-cultural relations during the event. In order to meet the public needs of people coming from different countries, the governments of the countries where there is a sports organization must first put the community interpreter, which is a bridge between different cultures, into action. Otherwise, the encounter of societies with different social and cultural structures, even for a short time, may cause some conflicts.

Many competitors who take part in sports events also continue their sports life in foreign countries. The biggest problem that these people experience when they join the society they live in is the problem of socialization. In order for such athletes to live in harmony with the local people, it is necessary to reorganize their relations with all the institutions and individuals of the society they live in. In this context, athletes who are in the position of working abroad will more easily adapt to the society of the country they have just come from, with the help of intercultural communication specialist community translators.

In this study, the diversity of sports activities encountered in all areas of life is increasing day by day and has turned into organizations based on competition among all the nations of the world. The necessity of community interpreting in solving the linguistic problems that the athletes' groups and spectators taking part in these organizations may experience in their

countries will be revealed. In addition, solution strategies to be applied in social and cultural fields in order to eliminate linguistic problems between different cultures will be examined through a qualitative research method and description.

Keywords: Sports, Translation, Community Translation,

1. GİRİŞ

Spor sözcüğünün temel anlamı, insanın, zorunlu temel fiziksel hareketlerden uzaklaşarak, eğlenmek için yapılan etkinliklerdir. İş dışında boş zamanların değerlendirilmesi için yapılan oyunusal davranışlar, zamanla belli bir düzen ve kurallar çerçevesinde yapılmaya başlanmıştır. Bu bağlamda spor etkinlikleri, zamanla kitleleri eğlendirmeye yönelik, rekabete dayalı büyük küçük organizasyonlar şeklinde gerçekleştirilmiştir. Yapılan spor eylemine göre farklı zamanlarda farklı spor türleri ön plana çıkmıştır. Sporu yapan kimseler, her zaman kitleleri etkilemek için, rekabetçi düşünce bağlamında daha üstün performans göstermektedirler. Bu düşünce bugün dünyada insanları etkileyen spor türlerinin ulusal ve uluslararası yarışmalar şeklinde, büyük maddi yatırımlar çerçevesinde yapılmasına neden olmuştur.

Spor türleri için gerekli kurallar, artık dünyada ilgilenen kimseler tarafından bilinmekte ve eğlenmenin hazına ulaşmak için, düzenlenen uluslararası yarışmalar gerek çeşitli medya araçları aracılığı ile gerekse bizzat yarışmanın yapıldığı mekânda izlenmektedir. Farklı ülkelerden aynı spor türlerini icra eden sporcuların ve bu yarışmaları farklı ülkelerden izleyen seyircilerin ortak iletişim dili o spor türünün ortak oyun kurallarıdır. Spor aracılığı ile iletişimin gerçekleşmesi, farklı insanların birbirine yakınlaşmasını sağlamaktadır. Bu yakınlaşma farklılıkların birbirlerini tanıma ve birbirlerini anlamaya yönelik istekleri ile sonuçlanmaktadır. İşte bu bağlamda dilsel iletişim aracı olan çeviri eylemi de devreye girmektedir.

Çeviri eylemi, gittikçe çalışma alanı genişleyen bir bilimsel uğraş haline gelmiştir. Canlılar içerisinde sadece insanlara özgü olan dilsel anlaşıma, diğer farklı diller arasında olan iletişimi de çeviri dili aracılığı ile gerçekleşmektedir. Dünyanın en eski eylemi olan çevirinin her alanda olduğu gibi spor alanında da çok gerekli bir eylem olduğu aşîkârdır. Bu düşünceden hareketle, spor ve çeviri insanlığın ortak dili olarak birbirinden ayrılmaz bir ikilidir. Farklılıkların ifade şekli, spor da ve karşılıklı anlaşma anlamında çeviride, yani çok yakından ilişki halinde olan iki eylemde de kendini bulmaktadır.

Spor ve çeviri insanlık tarihi kadar eski eylemlerdir. Her ikisi de farklılıklar arasında birer iletişim aracı görevi üstlenmişlerdir. Biri fiziksel diğeri zihinsel iki insancıl eylemdir. Bu bakımdan anlaşılma ve anlaşılma arasında etkin rol oynamaktadırlar. İnsanlık, geçmişte, farklılıklar arasında bir ortak buluşma özelliği taşıyan köprü niteliğindeki anlaşma eylemlerini, bireysel ve özellikle toplumsal çatışmaların önüne geçmek için kullanmışlardır. Her iki eylem de, bugün dünyada yaşanan hızlı teknolojik gelişmelerin ışığında da halen varlıklarını ve işlevlerini sürdürmektedir. Spor ve çeviri eylemlerinin bu kadar yakın ilişkili ve faydalı etkinlikler olması, bu alanda yapılan çalışmaların insanlığa sağladığı kazanımlar açısından büyük önem taşır.

2. SPOR VE İLETİŞİM

İnsanoğlu doğduğundan itibaren doğası gereği çeşitli fiziksel hareketler yapmak zorundadır. Bu hareketler, varlığının devam edebilmesi için yaşamsal önem taşımaktadır. Aksi halde yaşam içerisinde kalabilmek için, ihtiyaçlarını gidermez. Yaşadığı coğrafik yapıya göre, insanların bazı fiziksel hareket zorunlulukları daha da ön plana çıkmaktadır. Özellikle yüzmek, koşmak, tırmanmak, ağır yük kaldırmak veya kol gücü ile çalışmak zorunda olmak gibi örnekler, insanın yaşamının devamı için gerekli hareketlerdir. Diğer taraftan “Spor” sözcüğü altında ne tür insani bir fiziksel hareketler yapılmaktadır ve spor neyi amaçlamaktadır? Bu sorunun yanıtı için “Spor” sözcüğünün etimolojik yapısını ve anlamını açıklamak gerekmektedir. Bu açıklamayı Günışık şöyle ifade etmektedir.

Spor sözcüğünün kökeni, etimolojik olarak, Latince ‘Disport’ sözcüğünden kaynaklanır. ‘Dis-Portare’ sözcük olarak, işten uzaklaşma, eğlence ve dinlenme amacıyla yapılan etkinlik demektir. Bu anlamda ‘Spor’, işin karşıtı, oyun karakteristiğinde bir boş zamanları değerlendirme uğraşıdır (Günışık,1990:22).

Spor her ne kadar baş zaman değerlendirmesi gibi algılsa da, zamanla belli kurallar çerçevesinde ve düzenlenen büyük küçük organizasyonlarla, sporu icra eden kimselerin de bir eğlence ve boş zaman değerlendirme aracı olmuştur. Zamanla büyük kitlelerin seyir zevkine yönelik, büyük ekonomik yatırımlarla devasa bir sektör haline gelen spor eylemi, sporcuların kendilerine özgün belli yeteneklerine uygun branşlara ayrılmıştır. Tüm spor branşlarının bireylerin eğilimine göre bir izleyici kitlesi oluşmuştur. Spor ve sportif eylemler yerel ve küresel çapta büyük organizasyonlar şeklinde düzenlenmeye başlanmıştır. Böylece spor, hem bireylere hem de devletlere büyük ekonomik gelirler getiren eğlence sektörü haline dönüşmüştür. Çetin (2011) bu durumu şöyle ifade etmektedir.

Spor; hem yerel hem de ulusal ekonominin büyümesine ve gelişmesine önemli ve büyük katkılar sağlayabilir. Olimpiyatlar gibi büyük oyunlar, futbol ve basketbol gibi her hafta gerçekleşen müsabakalar, sadece iş alanı sağlamanın dışında, doğrudan veya dolaylı olarak diğer ekonomik faaliyetleri (satın alma, tüketim, vb.) etkilemektedir (Akt. Yazıcı, 2014:401).

İletişim toplumsal yaşam içerisinde yaşamsal öneme dayanan bir olgudur. Gerek bireylerarası gerekse topluluklararası olmazsa olmaz bir ihtiyaçtır. İletişim için öncelikle ortak bir dile ihtiyaç vardır. Bireylerarası duygu, düşünce ve bilgilerin paylaşılması anlamına gelen iletişim, göndericinin doğru kodlamasına ve alıcının da doğru algılamasına bağlı olarak sağlıklı bir şekilde gerçekleşmiş olmaktadır. Doğru bir iletişimin gerçekleşmemesi, toplumsal kural ve yasaların sağlıklı bir şekilde yürütülmemesi ve karmaşanın olmasına neden olacaktır. İletişimin tanımı wikipedia ansiklopedisinde şu şekilde yapılmıştır.

İletişim, iletilmek istenen bilginin hem gönderici hem de alıcı tarafından anlaşıldığı ortamda bilginin bir göndericiden bir alıcıya aktarılma sürecidir. Organizmaların çeşitli yöntemlerle bilgi alışverişi yapmalarına olanak tanıyan bir süreçtir. İletişim tüm tarafların üzerinden bilgi alışverişi yapılacak ortak bir dili anlamalarına ihtiyaç duyar (www.wikipedia.org).

İletişim en temel anlamda sözlü olarak kurulan bir eylemdir. Ancak toplumların yazıyı kullanmasıyla birlikte yazılı iletişimde oldukça sık başvurulan ve kalıcı bir iletişim türü olarak tercih edilmiştir. Ancak, birçok iletişim türü de söz konusudur. Spor alanında kullanılan iletişim türü sözsüz olan ve beden diline dayalı iletişim türüdür. İnsanın duyu organlarına dayalı (özellikle görme, duyma) jest, mimik şeklinde bilgi alış verişinin gerçekleştiği beden dili, sporcuların mücadele esnasında kullandıkları etkili bir iletişim şeklidir. Ancak spor etkinliklerinin gerçekleştirildiği büyük organizasyonlarda, sporda gerek kurum içi (sporcular, yöneticiler, teknik heyetler vs.) gerekse kurum dışı (medya, seyirciler, eski sporcular vs.) kimselerin iletişimi ortak sözlü bir dil varlığı zorunludur. Bu da dilsel çeviri eylemi ile olasıdır.

3. SPORDA ÇEVİRİ EYLEMİNİN GEREKLİLİĞİ

Spor alanında oldukça çok çeşitli alanlar vardır. Her bir spor dalının kendine özgü davranış biçimi, tekniği ve kurallarla örgülenmiş bir iletişim tarzı söz konusudur. Bu bakımdan her spor dalı kendine özgün dilini oluşturmuştur. Dünyada bugün yaşanan hızlı iletişim olanakları, hemen hemen tüm spor dallarının özgün dilleri, her toplumun günlük yaşamının bir parçası haline gelmesine neden olmuştur. Spor dilinin, beden diline dayalı, az sözcükle çok şeyin ifade edildiği imgelerden oluşması, çok hızlı ve çabuk algılanmasını sağlamıştır. Fiziksel davranışlara dayalı özgün spor dili, farklı kültürlere sahip toplumların ortak buluşma noktası olmuştur. Bu bağlamda spor dili farklılıkların birbirlerine yakınlaşmasını ve birbirlerini tanımasını mümkün kılmıştır. Bu konuyla ilgili Ünsal şöyle demektedir.

Spor dilinin sözlü iletişim biçiminde, en az çaba yasası gereği, az sözcükle çok şeyi anlatma durumu vardır. Spor dili sözü tasarruflu kullanır. Bir maç ya da yarışta hız çok önemli bir etkidir. Oyuncunun yaptığı bir eylemi söze dökmek, oyuncu kadar hızlı hareket etmeyi gerektirir. Eylem ile sözün eşzamanlı olması, az sözle çok şeyin anlatılması beklenir. Bu nedenle spor yorum ve metinlerinde söz yoğunlaştırılır. Spor dili sözsüz iletişim biçimine de dayanır. Bir maçta sözün yerini artık işaretler almıştır. Sporda «sakin ol » yerine « nefes al» denmesi, sporcunun kafasından çok bedenine yönelmişliği gösterir. Burada fiziksel eylemin zihinsel durumu düzeltmede çok etkili olduğu söylenebilir. Ancak, sporun doğası gereği bedene yönelme durumu, sözlü iletişimin aleyhine, sözsüz iletişimi -beden dili- daha da geliştirebilir. Bu da her kültürde farklı olan beden dilini, sporun evrensel diliyle, aynışmaya kadar götürebilir(Ünsal, 2019:120).

Hemen hemen her kültürde sözlü dilin yanında kullanılan beden dili farklıdır. Hatta yabancı toplum içerisinde yaşamak durumunda kalan kimseler, o kültürün beden dilin de kullanılan bazı hareketleri kendi kültürlerinin benimsediği beden dili ile uyumadığı için yadırgarlar. Ancak sporda beden dili ortaktır. Bu bağlamda sporun dili evrenselidir denilmektedir. Tüm herkesin kabul ettiği davranış şekilleri ve buna bağlı olarak seçilen sözcükler, sporun özel bir dille sahip olduğunu göstermektedir. Farklı toplumlar arasında bu kadar ortak iletişim unsurları barındıran spor dilinin, farklı kültürlerarasında dilsel aktarımı değişik bir çeviri anlayışı içerisinde olması söz konusu olmuştur. Bu da çevirmenin çalıştığı ilgili spor alanında çok donanımlı olmasının yanında, farklı kültürlerin pratikte spora nasıl baktıklarını bilmeleri gerekmektedir. Bu bağlamda çevirmenin gerek sporun özgün dilin özelliklerini tanıması gerekse sporun toplum içerisinde kabul edilen davranışsal yönleri açısından çok farklı bir sözlü çeviri çalışması yapması zorunludur. Sporun çevirmenin iş yoğunluğunu arttıracak konusıyla ilgili olarak Ünsal şöyle düşünmektedir.

Sonuç olarak, spor dilinin kendine özgü bir jargon, klişe, argo, eğretilmeli ve deyimsele ifadeler, teknik ve özel terimler içermesi, kültürel ve sosyal özellikler taşımasından dolayı çevirmeni zorlayan bir dil olduğu kanaatine varılmıştır. Buna göre, spor haber metinlerinin çevirisinde amacın erek dil ve kültür odaklı bir iletişim olması, çevirisinde bu unsurları içeren bir yöntem benimsenmesini gerekli kılar (Ünsal,2019:136).

Sadece uluslararası değil ulusal spor organizasyonlarında da hemen hemen her branştaki takımlarda yabancı dil ve kültürlere sahip oyuncular ve teknik heyetinde (Teknik Direktör, Koç, Antrenör, Masör gibi) bulunmaktadır. Profesyonel düzeyde sportif etkinliklerine katılan takımların bünyesinde bulunan yabancı oyuncuların ve teknik heyetinin, dilsel sorunları çevirmen aracılığı ile çözüme kavuşturulmaktadır. Her spor kulübünün yabancı sporcularının iletişim kurabileceği dillerde çevirmeni olduğu görülmektedir. Spor alanında bir kulübün maaşlı olarak çevirmenlik işini yapan kimsenin uğraşı, yabancı sporcuların, teknik heyetinin her anlamda dilsel sorunlarını spor kulübünün istekleri doğrultusunda çözmek zorunda olduğu için zordur. Bu anlamda Doğan' şöyle düşünmektedir:

Spor çevirmeni, kulübün gereksinim duyduğu her an görevi başında olan maaşlı çalışan olabilmektedir. Yabancı sporcuların dil sorunlarını çözmek durumlarında olduklarından antrenmanlardan, toplantılara, basın açıklamalarından televizyondaki röportajlara kadar ilgili her ortamda çalışırlar. Diğerlerine göre, rahatlatıcı tarafı hep aynı kişilerle çalıştığı için, içeriğe ve terimlere diğer çevirmenliklerden daha aşina olabildikleridir; diğer yandan, büyük paralarla iş yapıldığından streslidir (Doğan, 2015:66)

Spor çevirmeni, sadece çeviri yapan bir kimse değildir. Spor etkinliği süresince, bir antrenör, bir teknik adam veya bir doktor gibi hareket etmek ve düşünmek zorundadır. Hatta müsabaka sonrasında yabancı oyuncu ve teknik heyetinin eli ayağı, yani refakatçisidir. Çevirmen kulübün bir çalışanı olduğu için, kulübün çıkarlarını gözetmek ve taraftarların istediği ve arzuladığı şekilde çeviri yapması önemlidir. Bu bağlamda çevirmenin hem alanında bir uzman hem de kültürlü ve donanımlı bir kişi olması gerekmektedir. Bu anlamda Uyanık şöyle demektedir.

Spor çevirisi ve spor çevirmenliği özellikle, çevirmenin çevirmenlik kimliğinin bütün bileşenlerini de ön plana çıkaran bir uzmanlık alanı ve mesleği olarak karşımıza çıkmaktadır. Bir kulüp adına çalışan spor çevirmeni, bir yandan kulübün çıkarlarını gözetirken diğer yandan da taraftarın beklentisi doğrultusunda çevirisini yapmaya mahkum bir dil uzmanı olabilmektedir. Bu dil uzmanı spor kültürünün de uzmanı kişi iken, o kulübün kültürü konusunda bilgili ve kültürlü kişidir de (Uyanık,2015: 27).

Çeşitli spor branşlarında farklı ülkelerden sporcular, bir ülkenin aynı takımında mücadele edebilmektedir. Hem takımın başarısı hem de sporcuların performanslarını etkin şekilde kullanabilmeleri, sporcu, antrenör ve yöneticiler arasında doğru şekilde gerçekleştirilecek iletişime bağlıdır. Farklı kültürlerden sporcuların aynı takımda, çokkültürlülük anlayışında uyum içerisinde olmaları, spor etkinlikleri açısından oldukça önemlidir. Bu bağlamda çeviri etkinliği etkin bir rol oynamaktadır. Bu anlamda Erkan Çakır şöyle düşünmektedir.

Nitekim farklı ülke ve farklı kültürlerden olup farklı dilleri konuşan birçok insanın aynı ortamda bulunması, onlar arasındaki iletişimin doğru ve etkili bir biçimde sağlanmasını gerektirmektedir. Bu gereklilik, çokkültürlü ortamlarda çeviri etkinliğini vazgeçilmez kılmaktadır. Bu bağlamda, çokkültürlü ortamlarda iletişim ve etkileşim sürecine katkı sağlayan çeviri etkinliğinin daha yakından tanınması, spor etkinlikleri açısından öneminin kavranmasına da yardımcı olacaktır (Erkan Çakır, 2020: 153).

Sporun dünyada tüm insanlığı cezbeden ve heyecanlandıran yönü ile özellikle ekonomik ve siyasal alanlarda yaşanan gelişmelere olumlu yönde katkıları olmaktadır. Özellikle büyük uluslararası spor organizasyonları ekonomik açıdan büyük maddi gelirler sağlarken siyasal olarak da farklı toplumların bir araya gelmesini ve birbirlerini tanımasını sağlamaktadır. Bu anlamda spor, farklılıklar arasında gelecekte yaşanabilecek birçok anlaşmazlıkların ortadan kalmasını sağlamaktadır. Bir diğer deyişle spor, toplumlar arasında barışın mimarı olmaktadır. Bu bağlamda çeviri de çok önemli rol oynamaktadır. Sportif etkinlikler çerçevesinde bir araya gelen spor paydaşlarının aralarındaki iletişimi ve onların bulundukları mekânda ihtiyaçlarını karşılamaların sağlamak çeviri eyleminin görevidir. Çevirinin özel bir dalı olan ve toplumsal yaşam bağlamında dilsel ve kültürlerarası iletişimi sağlama rolü toplum çevirmenliğini gerektirmektedir.

4. TOPLUM ÇEVİRMENLİĞİ VE SPOR İLİŞKİSİ

Küreselleşen dünyada ülkeler arasında her alanda uluslararası sıkı bir işbirliği söz konusudur. Gittikçe çok hızlı bir şekilde gelişen iletişim ve ulaşım olanakları, uluslararası insan hareketliliklerini tetiklemiş ve medyanın dünyadaki gücünü arttırmıştır. Bu nedenle, farklı dil ve kültürlere sahip toplumlar daha sık karşılaşmaktadır.

Hatta farklı dil ve kültürleri sahip toplumlar aynı mekânda bir arada yaşamaya başlamıştır. Farklılıkların bu birlikteliği ortak bir anlaşma dili gerektirmektedir. Farklılıklar arasında dilsel iletişimi sağlayacak eylem çeviridir. Ancak dünyada bugün çeviri sadece dilsel aracılık işlevinin yanında toplumsal ve kültürel boyutlarda uzmanlık gerektirmektedir. Bu bağlamda uygulamada toplumsal ve kültürel farklılıkların önemli rol oynadığı toplum çevirmenliği ön plana çıkmaktadır. Bu konuda Doğan şöyle düşünmektedir.

Farklı kültürel yapıya ve sosyal dokuya sahip toplulukların bir araya gelmesi, çeviri etkinliğinin de aracılık rolünün değişmesini gerekli hale getirmiştir. Böylece çevirmenin sadece dilsel aracı konumundan çıkarak, bir kültür ve bir toplumbilimci olması beklenmektedir. Bu anlamda çok kısa bir süredir kavram olarak gündeme gelen “Toplum Tercümanlığı”, çevirinin sosyo- kültürel işlevini yerine getiren bir ayrı disiplindir (Doğan, 2020: 75).

Önceleri gönüllü olarak yapılan toplum çevirmenliği, çok çeşitli nedenlere dayalı olarak yaşanan hızlı insan hareketlilikleri nedeniyle, çeşitli kurum ve kuruluşlar bünyesinde bir uzmanlık gerektiren sözlü bir çeviri türü olarak yürütülmektedir. Sağlık, eğitim, emniyet, hukuk gibi topluma kamu hizmetleri sunan kurumlar, hizmet alanlarında yaşamını sürdüren yabancıların bu kamu hizmetlerinden faydalanabilmesi için, toplum çevirmenlerine ihtiyaç duymaktadır. Ayrıca küreselleşen dünyada ortak sorunların çözümünde, örneğin yaşanabilecek doğal afetler, savaş ve çeşitli çatışma ortamlarında toplum çevirmenleri görev yapmaktadır. Diğer taraftan, tüm dünyada insanların ortak eğlence kaynağını oluşturan sportif etkinliklerin uluslararası organizasyonlarında toplum çevirmenliğine büyük görev düşmektedir. Tüm alanlarda gerçekleştirilen etkinliklerin küresel boyut kazanması, spor alanında da gerçekleştirilen etkinliklerin küresel olması kaçınılmazdır. Bu nedenle, devasa şekilde yapılan spor alanlarının inşasında, uluslararası gerçekleşen teknik eleman ve sporcuların transferlerinde ve sanal spor oyunlarında toplum çevirmenliğinin gerekliliği tartışılmaz bir olgudur. Spor alanında çevirmen gerekliliğine yönelik olarak Bulut şöyle düşünmektedir.

Spor etkinliklerinin uluslararası bir nitelik kazandığı her durumda sözlü çevirmen de gerekir. Olimpiyatlarda, kış oyunlarında, yaz oyunlarında, kitlesel olarak dünyanın farklı yerlerinden gelen sporcuları bir araya getiren etkinliklerde ister eşlik/mihmandarlık düzeyinde ister basın toplantısı, panel gibi farklı dilleri konuşan uzman ve oyuncuların bir araya getirildiği etkinliklerde iki yönlü aradıl çeviri yapılmış olmalı. Çünkü çeviri bir gereksinim, kültürlerarası iletişim aracı, sporda ya da başka bağlamda...(Bulut, 2018:27).

Toplum çevirmenleri, takım içerisinde bulunan yabancı sporcuları ve teknik adamları takımın diğer paydaşları (yöneticiler, seyirciler) ile birbirine bağlamaktadır. Her iki kültüre de hakim olan toplum çevirmeni, dilsel aktarım yapacağı kültüre uygun olarak çeviri yapacaktır. Bu bağlamda toplum çevirmeni sosyal bir aracı rolü oynamaktadır. Ayrıca toplum çevirmeni her ne kadar spor dili evrensel olsa da bireysel iletişimlerde yapılan diyaloglarda gizliliğe önem vermektedir. Diğer taraftan spor faaliyetlerini farklı dil ve kültür ortamında sürdüren sporcu ve teknik adamlar, iletişim sorun yaşadığı sürece o yere uyum sağlamakta güçlük çekmektedirler. Bu nedenle hem kendilerinin hem de adına yarıştıkları takımların başarıları düşmektedir. İşte bu uyum sorunun çözüm anahtarı toplum çevirmenidir.

5. SONUÇ

Bir boş zaman değerlendirme ve eğlence amacı anlayışında yapılmakta olan spor etkinlikleri, zamanla belli kurallar çerçevesinde kurumsallaşmıştır. Özellikle küreselleşme ile birlikte spor yarışmaları büyük organizasyonlar şeklinde düzenlenmeye ve sporcular uluslararası alanda performanslarını göstermeye başlamışlardır. Bunun yanı sıra spor, büyük bir ekonomik pazar şekline dönüşmüştür. Bu nedenle hemen hemen her ülkenin farklı branşlarındaki spor takımlarına farklı dil ve kültürden sporcular ve teknik adamlar büyük maliyetlerle transfer olmuşlar ve spor yaşamlarını yabancı ülkelerde sürdürmeye başlamışlardır. Kendilerine yabancı olan ülkede iletişim sorunu yaşayan bu kimselere, dilsel ve kültürel bağlamda yardımcı olacak toplum uzmanları diğer adı ile toplum çevirmenleri gerekmektedir.

Farklı uluslardan kimseleri (sporcu ve teknik adam olarak) kimselerin aynı spor takımı içerisinde yer alması, toplum çevirmenliğini farklılıkların bir buluşma noktası olmasına neden olmuştur. Bu bağlamda spor alanında toplum çevirmenliği uluslar ötesi bir çeviri eylemidir. Kendine özgün bir jargon oluşturan spor dili, gerek terim gerekse beden dili açısından kültürden kültüre aktarımı oldukça zor bir olgudur. İşte toplum çevirmeni, bu zorluğu zengin sosyo- kültürel donanımı sayesinde başaracak güce sahiptir.

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Şükrü Saraçoğlu Hükümetleri Dönemi Ekonomi Politikaları (1942-1946)

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Özet: Türkiye ekonomisi 1939 yılından 1945 yılına kadar İkinci Dünya Savaşı'nın ülke ekonomisi üzerindeki olumsuz etkileri ile karşı karşıya kalmıştır. Türkiye İkinci Dünya Savaşı'na katılmamasına rağmen dönemin hükümeti her an savaşa girecekmiş gibi yaklaşık bir milyon kişinin silah altına alınması ve savunma harcamalarındaki olağanüstü artışlara bağlı olarak katı ekonomik politikalar uygulamıştır. Ancak uygulanan katı ekonomik politikalar ekonomide yaşanan sorunlara çözüm olamamış Başbakan Refik Saydam'ın ani ölümüyle yeni hükümeti kuran Şükrü Saraçoğlu bir önceki dönemde süregelen katı kontrol ve müdahalelerinden vazgeçerek ya da gevşeterek piyasa mekanizmasına daha fazla yer veren, ticareti serbestleştiren bir politika uygulamaya başlamıştır. Şükrü Saraçoğlu Hükümetleri Varlık Vergisi, Toprak Mahsulleri Vergisi ve Çiftçiyi Topraklandırma Kanunu gibi dönemin en tartışmalı uygulamaları ile İkinci Dünya Savaşı'nın bütçe üzerinde yarattığı baskıya çözüm bulmayı amaçlamış ancak bu uygulamalardan beklenen sonuçlar elde edilememiştir. Şükrü Saraçoğlu Hükümetleri döneminde izlenen ekonomi politikaları, ekonomide yaşanan sorunların olumsuz etkilerinin ortadan kaldırılmasında yetersiz kalmış ve başarılı olamamıştır.

Anahtar Kelimeler: İkinci Dünya Savaşı, Şükrü Saraçoğlu, Ekonomi Politikaları

1.GİRİŞ

Türkiye, İkinci Dünya Savaşı'na girmemiş ancak 1939 yılından itibaren altı yıl süre ile savaş ekonomisi şartlarını yaşamıştır. İkinci Dünya Savaşı'nın Türkiye için yüklediği ilk zorunluluk, silah altındaki asker sayısının artırılması ve savaşa hazır tutulması nedeniyle savunma harcamalarının olağanüstü boyutlara yükselmesi olmuştur. Türkiye İkinci Dünya Savaşı'nda tarafsız olmayı ve savaş dışı kalmayı başarsa da barış zamanında yüz yirmi bin olan asker sayısını resmi bir seferberlik olmadığı halde yaklaşık bir milyona çıkarmıştır. İkinci Dünya Savaşı Türkiye'de halkın beslenmesi üzerinde olumsuz bir etki yaratmış ve milli savunma uğruna yüz binlerce köylünün silah altına alınması nedeni ile gıda maddelerinde eksikliğe neden olmuştur (BCA, 490.01/63.240.9). Bu durum askerin beslenmesi ve donatımı açısından devlet için önemli bir ekonomik yük olmuştur. Savaş ekonomisi bütün kesimlerde kendisini hissettirmiş ve Türk halkının büyük bir kısmının yaşam seviyesinde hızlı bir düşüşe neden olmuştur (Zürcher, 2019: 234).

Önceki dönemlerde bütçe gelirlerinin yaklaşık %40'ı savunma harcamalarına ayrılırken savaşın başlaması ile birlikte savunma harcamaları bütçe harcamalarının yaklaşık %60'ına yükselmiştir. 1942'de 394,3 milyon TL büyüklüğündeki bütçenin 221 milyon TL'si savunma harcamalarına ayrılmıştır (Şahin, 2011: 81-82). Yetişkin nüfusun büyük bir bölümünün askere alınması üretimde büyük düşüşlere neden olmuş, İkinci Dünya Savaşı yıllarında buğday üretiminde %50'ye yaklaşan bir gerileme yaşanmıştır. Savaş öncesinde başlayan planlama çalışmaları ve sınai yatırım programları savunma harcamalarının bütçeye hakim olması nedeniyle tümüyle ertelenmiştir (Boratav, 2012: 81). Yetişkin nüfusun askere alınması, çiftçinin ürününün değerinin altında devlete satmaya zorunlu tutulması savaş koşullarının ağırlığının etkisini göstermektedir (Aksanyar ve Biçer, 2008: 381). İkinci Dünya Savaşı döneminde Türkiye'yi yöneten Refik Saydam ve Şükrü Saraçoğlu Hükümetleri, savaş ekonomisi sorunlarına iki farklı yaklaşımı temsil etmekte olup her iki hükümetinde karşı karşıya bulunduğu iktisadi sorunlar aynıdır. Bu dönemde yaşanan sorunlar; azalan üretim, ithalat koşullarında oluşan darlıklar ve yüksek enflasyondur (Özsoylu, 2011: 60). İkinci Dünya Savaşı'nın yarattığı olumsuzluklar çerçevesinde azalan üretim ve ithalat koşullarında oluşan darlıkların ve genişleyen para arzının arttırdığı talep baskılarıyla iki rakamlı yüksek enflasyona dönüşen enflasyon karşısında geniş halk kitlelerinin tahammül sınırlarına ulaştığını gören hükümet, büyük kentlerin beslenmesini, ısınmasını ve giyinmesini sağlamak için katı fiyat denetimleri ve tarım ürünlerine düşük fiyatla el koyma yöntemlerine yönelmiştir. Bunun bir neticesi olarak da Milli Korunma Kanunu çıkartılmıştır. Ancak Milli Korunma Kanunu ile fiyatlar ve maliyetler üzerinde denetime gidilirken, emisyon hacminde çok büyük artışlar olmuş ve bu etkenlere bağlı olarak ekonomide üretim düşüşleri meydana gelmiştir. Üretimde yaşanan düşüşler sonucu ekonomide kıtlıklar ve karaborsa birlikte yaşanmaya başlamıştır (Parasız, 2003: 79). 1942 yılında Refik Saydam'ın vefatından sonra kurulan Şükrü Saraçoğlu Hükümeti önceki hükümetin el koyma, katı kontrol ve müdahalelerinden vazgeçerek piyasa mekanizmasına daha fazla rol veren bir politikayı hedeflemiştir (Tezel, 2015: 312-313).

Bu çalışmanın amacı, Cumhuriyet tarihinin 13. ve 14. hükümetlerinin Başbakanı Şükrü Saraçoğlu döneminin ekonomi politikaları ile uygulamalarının ekonomi üzerindeki etkilerini ortaya koymaktır.

2.ŞÜKRÜ SARAÇOĞLU HÜKÜMETLERİ DÖNEMİ ÖNCESİNDE EKONOMİNİN DURUMU

İkinci Dünya Savaşı Türkiye için yeni bir dönemi başlatmıştır. Savaşa fiili olarak girilmemiş olsa da yaklaşık bir milyonluk ordunun iâşe sorunu birçok sıkıntıyı da beraberinde getirmiştir (Özer, 2011: 216). İkinci Dünya Savaşı ile birlikte ithalat kanalları kısıtlanınca mal darlıkları başlamış, savaşın kokusunu önceden alanlar ise mal stoklamış, sonuçta karaborsa ve ihtikar (vurgunculuk) ortaya çıkmıştır (Kurtuluş, 2010: 436). Refik Saydam Hükümeti ortaya çıkan sorunu katı fiyat denetimleri ve tarım ürünlerine düşük fiyatla el koyma yöntemleri ile çözmeyi denemiştir. 18 Ocak 1940 tarihinde TBMM tarafından kabul edilen Milli Korunma Kanunu bu yaklaşımın ana aracı olmuştur (Saraçoğlu, 2005: 152). Milli Korunma Kanunu ile hükümet tarafından olağan üstü şartlar içinde tüm yetkilere sahip bir yasa oluşturulmuştur (Koçak, 2017: 373). Milli Korunma Kanunu ile devletin ekonomi üzerindeki kontrol ve yasaklamaları çok artmıştır (Kepenek ve Yentürk, 2005: 85).

Dönemin Başbakanı Refik Saydam Kanunun uygulaması üzerine sorulan bir soruya şöyle cevap vermiştir; *"Hâkim olacak zihniyet nedir, dediler; Bunu bilhassa çok mühim gördüm. Vatandaşın mümkün olduğu kadar normal hayatını örselemeyecek şekilde olmasına dikkat etmek bizim için bir vazifedir. Ve yine iş sahibi vatandaşların normal sâylerini ve kazançlarını mümkün olduğu kadar tahdid etmeyecek şekilde olmasına Hükümetiniz gayret edecektir."* (TBMM Zabıt Ceridesi, Devre:VI,Cilt:8 İçtimai:1, 18.I.1940: 140).

26.01.1940 tarihinde yürürlüğe giren 3780 sayılı Milli Korunma Kanunu yetmiş iki maddeden oluşmaktadır. Milli Korunma Kanunu'nun 1. Maddesi ile Hükümetin Umumi veya Kısmi Seferberlik, devletin bir harbe girmesi ihtimali, Türkiye Cumhuriyeti'ni de alakalandıran yabancı devletlerarasındaki harp hali durumunda iktisadi ve savunma amacı ile gerekli gördüğü uygulamaları ve önlemleri yapmasına olanak verilmiştir (T.C. Resmî Gazete, Tarih:26.01.1940, Sayı:4417: 1). 3780 numaralı Millî Korunma Kanununun 1 inci maddesinde öngörülen hallere nazaran Avrupa'daki harp hali, memleketimizin iktisadî bünyesinde tesirler yapmağa başladığından sözü geçen kanunda öngörülen fevkalâde salâhiyetlerin ihtiyaç nisbetinde tatbikine geçilmesine İcra Vekilleri Heyetinin 19 Şubat 1940 tarihli içtimasında karar verilmiştir (BCA, Kararlar Daire Başkanlığı, 30.18.1.2/90.16.9).

Milli Korunma Kanunu ile İkinci Dünya Savaşı yıllarındaki vurgunculuk, kaçakçılık gibi olumsuzlukların ortadan kaldırılması amacıyla, hükümete ekonomi ve yurttaşların hak ve özgürlükleri ile ilgili geniş yetkiler verilmiştir. Ancak, bu kanun fiyatların nispeten az yükselmesine katkıda bulunmuş, ancak mal yokluğu nedeniyle ortaya çıkan karaborsacılığın önünün alınmasını sağlayamamıştır (Karabulut, 2015: 369). Özetle, Milli Korunma Kanunu ile girişim özgürlüğü geniş ölçüde kısıtlanmış, toplumsal tepkiyi beslemekten öteye gidememiştir (Aydemir, 1975: 74).Savaş yıllarındaki karaborsacılık, ihtikar dönemin en önemli toplumsal ve ekonomik sıkıntılarının birisi olarak hükümet tarafından sıkı tedbirler ile önlenmek istense de özellikle halkın bilhassa köylü kesimin canını yakan bir hal almıştır (Ortaylı, 2019:114).

Refik Saydam Hükümeti döneminde alınan kararlardan biri de, tek tip ekmek uygulamasına geçilmesi olmuştur. Tek Tip Ekmek Çıkarılması Hakkında Kararname ile Ankara, İstanbul ve İzmir'de ekmeklere %15 çavdar karıştırılarak tek tip ekmek uygulamasına geçireceği belirtilmiştir (Tekeli ve İlkin, 2016: 267). Bu dönemin bir diğer önemli kararı da ekmeğin karneye bağlanması olmuştur ¹ (T.C.Resmî Gazete, 19.01.1942, Sayı:5010: 2160-2161). 1941 yılının sonlarına doğru hububat fiyatlarında yaşanan artış Hükümetin fiyat sınırlamalarını beraberinde getirmesine yol açmış, fiyat sınırlamaları ise karaborsanın oluşumuna engel olmamıştır. Hükümet fiyatların düşürülebilmesi üzerine 1942 yılında halkın temel gıda maddesi olan ekmeği karneye bağlamıştır. Ekmek istihkakları, 7 yaşına kadar olan çocuklar için 187,5 gram, 7 yaşından büyükler için 375 gram ve ağır sanayide çalışan işçiler için günde 750 gram olmak üzere üç kategori halinde gerçekleştirilmiştir (Bakar, 2013: 16). Ekmeğin karneye bağlanması uygulaması 1946 Eylül ayına kadar yürürlükte kalmıştır (Yenal, 2010: 90).

3. ŞÜKRÜ SARAÇOĞLU HÜKÜMETLERİ DÖNEMİ EKONOMİ POLİTİKALARI (1942-1946)

Başbakan Refik Saydam 9 Temmuz 1942 tarihinde aniden hayatını kaybetmiştir (BCA, 030.10/76.503.11). 09 Temmuz 1942 tarihinde Başbakanlık görevine Şükrü Saraçoğlu getirilmiştir. Şükrü Saraçoğlu 13. T.C. Hükümeti (09.07.1942 - 09.03.1943) ile 14. T.C. Hükümetini (09.03.1943 - 07.08.1946) kurmakla görevlendirilmiştir (T.C.

¹ Koordinasyon Heyetinin, 5010 Sayı ve 19.1.1942 tarihli Resmi Gazetede yayınlanan 247 No'lu kararı ile ekmek karneye bağlanmış ve ekmeklik hububat tüketimi konusunda sınırlandırılmaya gidilmiştir.

Başbakanlık Devlet Arşivleri Genel Müdürlüğü, 2004: 44). Bu çalışmada Şükrü Saraçoğlu Hükümetleri dönemi I. Saraçoğlu Hükümeti dönemi ve II. Saraçoğlu Hükümeti dönemi olarak ele alınarak dönemin ekonomi politikaları ve uygulamaları değerlendirilecektir.

3.1. I. Saraçoğlu Hükümeti Dönemi Ekonomi Politikaları (09.07.1942 - 09.03.1943)

Şükrü Saraçoğlu 9 Temmuz 1942 tarihinde Başbakan Refik Saydam'ın ölümü üzerine, Cumhurbaşkanı İsmet İnönü tarafından aynı gün yeni hükümeti kurmakla görevlendirilmiştir² (TBMM Zabıt Ceridesi, Devre:VI,Cilt:27 İçtimai:3,3.VIII.1942: 4). Cumhuriyet'in 13. Hükümeti 9 Mart 1943'teki seçimlere kadar işbaşında kalmıştır. 13. Cumhuriyet hükümetinin Başbakanı Şükrü Saraçoğlu 5 Ağustos 1942 tarihinde 13. Cumhuriyet Hükümetinin (I. Saraçoğlu Hükümeti) Programı sunuş konuşmasında hükümetin ekonomi politikasını şu sözlerle açıklamıştır; *"Arkadaşlar, Dahilî politikamızın en mühim cephesi iktisadi cephedir ve bu iktisadi cephenin en hararetli köşesi de işe meselesidir.... Bir memleket, umumî ve geniş ihtiyaçlarını bizzat kendisi istihsal edemiyorsa o memleket sulhta ve harpte yabancı iradelerin tesirinde kalabilir. Onun için biz, gıda, elbise, ayakkabı, silâh gibi umumî ve geniş ihtiyaçlarımızı bizzat kendimiz yetiştirmek için her fırsattan istifade ederek çalışmak kararındayız.... Bugünkü sıkıntılar bilhassa işe etrafında toplanmıştır ve hepsi muvakkat ve geçici ve harple beraber nihayet bulacak arzılardır"* (TBMM Zabıt Ceridesi, Devre:VI,Cilt:27 İçtimai:3, 5.VIII.1942: 22).

İkinci Dünya Savaşı'nın Türkiye ekonomisi üzerindeki olumsuz etkisini ortaya koyan Şükrü Saraçoğlu, Refik Saydam hükümetinin katı kontrol ve müdahalelerinden vazgeçerek ticareti serbestleştiren bir politika izlemiştir (Üzümcü, 2018: 107). Şükrü Saraçoğlu, Refik Saydam Hükümeti döneminde izlenen ekonomi politikasını ve I. Saraçoğlu Hükümetinin ekonomi politikasını şu sözlerle açıklamıştır; *"Bundan evvel benim ve on arkadaşımın dahil olduğu Hükümet, memlekette hayat pahalılığına ve iktisadi buhranlara mâni olmak için verilen salâhiyetlere istinaden bir çok sert kararlar aldı ve onları sıkı bir gayretle tatbika başladı. Fakat aradan günler geçtikçe, bu kararların matlup neticeyi vermiyeceği, yapılan şikâyetlerden, tesbit edilen fiyatlarla birçok malların ve gıda maddelerinin bulunamamağa başlamasından ve yapılan tetkiklerden anlaşılmaya başladı. Onun için yeni Hükümet hemen işe başlayarak bu sert tedbirleri yumuşatmaya, yer yer kaldırmağa ve yer yer değiştirmeğe karar verdi ve tedbirlerin iktisadi olmasına daha çok bel bağladı. Tuttuğumuz bu yolda fiyatlar, kendisiyle mal tedariki imkân haricinde çıkan resmî fiyatların tabiatıyla üstüne çıkacak ve fakat herhalde kara pazar fiyatlarının dununda kalacaktır"* (TBMM, 1988 : 100; TBMM, 2014: 137).

I. Saraçoğlu Hükümeti ilk olarak piyasa üzerindeki sıkı denetim mekanizmalarını kaldırma ya da gevşetme yoluna gitmiştir. Fiyatlar serbest bırakıldığında bunun üreticiyi teşvik edeceği, tarımsal üretimin artacağı ve üretimdeki artışın fiyatları dengeleyeceği düşünülüyordu. Ayrıca fiyatlar bir miktar artsa bile bu artış devlet için herhangi bir sorun teşkil etmeyecektir. Çünkü sabit bir fiyattan ürünün önemli bir bölümüne el konulmuş, el konulan bu ürün hem ordunun hem de kentlerin beslenmesinde kullanılmıştır (Metinsoy, 2017: 176). Saraçoğlu Hükümeti hububat alım fiyatlarını yükseltmiş ve ürünün %25'inden (büyük çiftçiler için biraz daha yüksek bir orandan) fazlasının piyasa fiyatlarından satışı çiftçi için serbest bırakılmıştır. İşe Müsteşarlığı'nın kaldırılmasına bağlı olarak gıda maddelerinde de fiyat denetimleri kaldırılmış veya hafifletilmiştir (Boratav, 2012: 84). 1942 yılında tüketici fiyatlarında %100'e varan artışlar yaşanmış ve bu artışlar çiftçi ve tüccarların gelirlerini büyük ölçüde artırmıştır (Parasız, 2003: 79).

3.1.1.Varlık Vergisi Kanunu

1940'lı yılların başında savaş dönemi enflasyonundan yararlanarak karaborsa ve benzeri yolların kullanılmasıyla vergilendirilmemiş büyük kazançlar elde eden bir savaş fırsatçıları sınıfı oluşmuş bu sınıfın elindeki sermaye önemli bir düzeye erişmiştir (Alpay ve Alkin, 2017: 72-73). Saraçoğlu Hükümeti bu hak edilmemiş kazançları vergilendirerek bir yandan azınlıkların ekonomi üzerindeki etkisini kırmak, milli burjuvaziyi öne çıkarmak, öte yandan savunma harcamalarının finansmanına katkı sağlamak ve hem de enflasyonist baskıları azaltmak amacıyla 11 Kasım 1942'de Varlık Vergisi Kanununu çıkarmıştır (Şahin, 2011: 84). 11 Kasım 1942 tarihinde Şükrü Saraçoğlu tarafından Varlık Vergisi Kanununun gerekçeleri açıklanmış ve haksız kazanç alanlara karşı 4305 sayılı Varlık Vergisi Kanunu kabul edilmiştir (TBMM Zabıt Ceridesi, Devre:VI,Cilt:28 İçtimai:4, 11.XI.1942: 21.; T.C. Resmi Gazete, (12 Kasım 1942) Varlık Vergisi Hakkında Kanun, Sayı:5255: 3865).

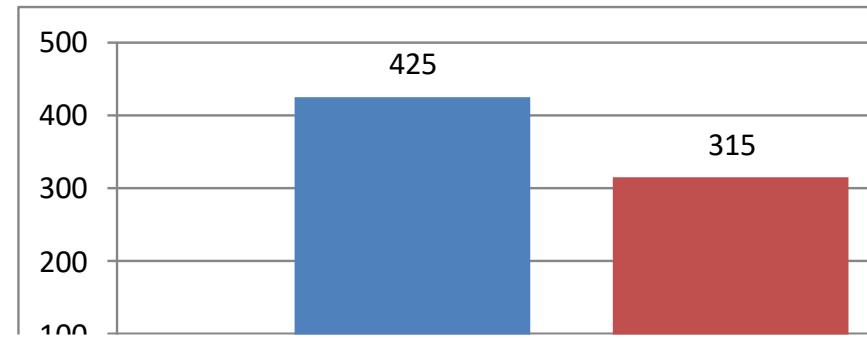
² "Başvekilliğe İzmir mebusu Şükrü Saraçoğlu'nun tâyin edildiğine dair Riyaseti Cumhur tezkeresi Ankara, 9 Temmuz 1942: Büyük Millet Meclisi Reisliğine İstanbul mebusu Dr. Refik Saydam'ın irtihalinden inhilâl eden Başvekilliğe İzmir mebusu Şükrü Saraçoğlu'nun tâyin edildiğini saygılarımla arz ederim. Reiscumhur İsmet İnönü "

Varlık Vergisi Kanununun gerekçesini dönemin Başbakanı Şükrü Saraçoğlu 5 Ağustos 1942'de hükümet programını okurken, niyetin sadece devletin kasasına para girmesi olmadığını şu sözlerle anlatıyordu: *"Biz Türk'üz, Türkçüyüz ve daima Türkçü kalacağız... Bu kanun aynı zamanda bir devrim kanunudur. Bize ekonomik bağımsızlığımızı kazandıracak bir fırsat karşındayız. Bu kanun sayesinde piyasaya egemen olan azınlık tüccar sınıfı ortadan kaldırılarak, Türk piyasasını Türklerin eline vereceğiz* (TBMM, 2014: 141).

Varlık Vergisi Kanunu sıradan mükellefler için belli bir formüle göre standart, iş adamlarından ve ticaret kurumlarından piyasadan ve başka yerlerden sağlanan bilgilere göre, devlet görevlileri ve iş adamlarından kurulu bir komisyon tarafından belirlenmiştir. Verginin on beş gün, uzatmalı olarak bir ay içinde ödenmesi, ödenmemesi halinde ise gerektiğinde haciz hatta sürgün yoluyla zorla alınması kararlaştırılmıştır. Diğer taraftan varlık vergisine itiraz hakkı bulunmamaktadır (Kayra, 2013: 292-293). Komisyonun kararlarının itiraza kapalı olması beraberinde hataları da getirmiştir. Çünkü, gizli olarak tespit edilmeye çalışılan servet miktarları çoğu yerlerde veri ve bilgi yetersizliğinden dolayı yanlış tespit edilmiştir. Diğer taraftan vergide bir oran ve ölçünün olmaması da birçok suistimali ve yanlışlığı da beraberinde getirmiştir (Özsoylu, 2011: 63).

Kanun metni bir ayırım yapmamakla birlikte, toplam vergi tahsilatının yarıdan fazlası azınlıklarca ödenmiş ve böylece Varlık Vergisi ırk ve din ayırımına dayalı bir vergi uygulaması olarak maliye tarihimize geçmiştir (Parasız, 2003: 83). Varlık Vergisi Kanununun tek başına azınlıklara uygulandığını söylemek ise tamamen mesnetsizdir (Kurtoglu, 2010: 438). Bir kerelik olağanüstü bir servet niteliğinde olan Varlık Vergisi 114.368 mükellefe uygulanmıştır. Varlık Vergisi ile 465 milyon lira hasılat beklenirken uygulanmasının durdurulduğu 1944 yılına kadar ancak 315 milyon lira sağlanabilmiş ve bunun 221 milyonu İstanbul'dan toplanmıştır (Yaşa, 1980: 88). Grafik 1'de Varlık Vergisine ilişkin bilgilere vergi yer verilmektedir.

Grafik 1: Varlık Vergisi Genel Tablo (Milyon TL)



Kaynak: Kayra, 2013: 294

3.2. II. Saraçoğlu Hükümeti Dönemi Ekonomi Politikaları (09.03.1943 - 07.08.1946)

Cumhuriyet tarihinin 14. hükümeti II. Saraçoğlu Hükümeti 9 Mart 1943 tarihinden 7 Ağustos 1946 tarihine kadar görev yapmıştır (T.C. Başbakanlık Devlet Arşivleri Genel Müdürlüğü, 2014: 65).

3.2.1. Toprak Mahsulleri Vergisi

İkinci Dünya Savaşı ile birlikte artan kamu açıkları iki yolla finanse edilmeye çalışılmıştır. 1942 ve 1943 yıllarında uygulanan Varlık Vergisi bütçe açıklarının finanse edilmesi için önemli bir gelir kaynağı ve ilk yol olarak benimsenmiş ancak yüksek savunma harcamalarının ve enflasyonun sürmesi sebebiyle bütçe açıklarını kapatmakta yetersiz kalmıştır (Tezel, 2015: 314). Kamu açıklarının finanse edilmesi için ikinci yol olarak benimsenen Toprak Mahsulleri Vergisi ile 1942 yılında tarım dışı kesimde uygulanan ve büyük tepki çeken Varlık Vergisinin bir uzantısı olarak köylü kesiminin vergilendirilmesi ve söz konusu tepkilerin bir ölçüde hafifletilmesi amaçlanmıştır (Çomaklı, Koç ve Yıldırım, 2012: 63).

Dönemin Başbakanı Şükrü Saraçoğlu ise ekonomide yaşanan zorluklara bir çözüm olarak getirilen "Toprak Mahsulleri Vergisinin" gerekliliğini şu sözlerle açıklamıştır; *"Arkadaşlar, içinde bulunduğumuz büyük zorluklar, büyük ihtiyaçlar bizi istiyerek, istemiyerek toprak mahsullerinden vergi almağa götürdü. Biz bu toprak mahsullerinden alacağımız vergiyi eski aşara benzetmemek için elden gelen bütün gayreti sarfetmiş bulunuyoruz"* (TBMM Zabıt Ceridesi, Devre:VII, Cilt:3 İçtimai:F, 4.VI.1943: 16). 4429 Sayılı Toprak Mahsulleri Vergisi Kanunu 7 Haziran 1943 tarihinde yürürlüğü girmiş ve bu verginin vergiye tabii mahsullerin sahibinden

alınacağı belirtilmiştir (T.C. Resmi Gazete, 7 Haziran 1943). 1946'da kaldırılan bu vergiden savaş yıllarında 167 milyon lira kadar toplanmıştır. Varlık Vergisi boyutlarına ulaşmamış olmakla birlikte Toprak Mahsulleri Vergisi Aşarın kaldırılmasından beri ilk kez tarıma yönelik büyük çapta ilk dolaysız vergi olarak önem taşımaktadır ve küçük ve yoksul köylünün üzerinde çok ağır bir yük oluşturmuştur (Boratav, 2012: 85-86).

3.2.2.Çiftçiyi Topraklandırma Kanunu

Saraçoğlu döneminin büyük tartışmalar sonucu çıkarılan 11 Haziran 1945 tarih ve 4738 sayılı Çiftçiyi Topraklandırma Kanunu, kamu mülkiyetinde olan ancak kullanılmayan köy ve mahallerinin ortak kullanımında bulunan fakat hükümete göre gereğinden fazla olan, sahibi bilinmeyen topraklarla özel mülkiyette olup da kamulaştırılacak olan toprakların, topraksız ve az topraklı köylüye dağıtılmasını öngörüyordu (Kepenek ve Yentürk, 2005: 108). Büyük tartışmalara sebep olan Çiftçiyi Topraklandırma Kanununa yönelik eleştirilerin temel nedenini büyük işletmelerin tamamen ortadan kaldırıldığı düşüncesi oluşturmaktadır. Devletin 5000 dönümden fazla toprakları kamulaştırıyor olması ve orta işletmeyi ise 5000 dönüm olarak sınırlandırması bazı büyük toprak sahiplerini ve meclis içerisindeki sözcülerini rahatsız etmiştir. Diğer taraftan yasaya göre, devlet 5000 dönümden fazla toprakları kamulaştıracaktır. Ancak devlet kamulaştırdığı bu toprakları sadece çiftçinin kalkınmasını sağlayacak kamu hizmetlerinde kullanabilecektir (İnce, 2006: 65).

Çiftçiyi Topraklandırma Kanunu 1945 yılından 1973 yılına kadar yirmi sekiz yıl yürürlükte kalmıştır. Bu süre içinde 2 milyon hektar toprak 432.117 aileye dağıtılmıştır. Bu topraklardan sadece 154 bin dönümü kamulaştırma yolu ile sağlanmıştır. Bununda sadece 54 bin dönümü özel kişilerden kamulaştırılmıştır (Şahin, 2011: 85). Daha çok çiftçiye toprak vermek için kısmi topraklandırma adı altında yapılan dağıtım rasyonel olmayan küçük ve yetersiz işletmelerin artmasına sebep olmuştur. Toprakların kullanımı yeterince izlenmediği için toprak sahibi olanların bir bölümü toprağını dolaylı yollardan elden çıkarmış ya da kiracılık ortaklık gibi yollarla başkası eliyle işletmiştir. Toprak reformu meselesi, CHP'nin yürüttüğü siyasete muhalif olan odakların bir araya toplanacağı Demokrat Parti'nin doğuşuna da yol açan önemli nedenlerden biri olmuştur (Alpay ve Alkin, 2017: 85).

3.3. ŞÜKRÜ SARAÇOĞLU HÜKÜMETLERİ DÖNEMİ EKONOMİK PERFORMANSI

İkinci Dünya Savaşı yılları, savaşa girmemesine rağmen Türkiye için ekonomik açıdan oldukça sıkıntılı bir dönemdir (Yenal, 2010: 89). Bu bağlamda Şükrü Saraçoğlu Hükümetleri dönemi ekonomi politikalarının temel belirleyicisi İkinci Dünya Savaşı olmuştur. Savaşın ortaya koyduğu gerçek Türkiye'nin askeri gücünün zayıflığı ve temel gıda maddesi buğdayı bile sağlayamadığıdır (Kazgan, 2002: 79). Şükrü Saraçoğlu Hükümetleri döneminde İkinci Dünya Savaşı'nın ekonomi üzerinde yarattığı olumsuzları gidermek amacıyla uygulanan Varlık Vergisi ve Toprak Mahsulleri Vergisi başarısız uygulamalar olmuştur. Türkiye İkinci Dünya Savaşı'na katılmamış olmasına rağmen bir anlamda bu avantajı kullanamamış 1943, 1944 ve 1945 yıllarında ekonomi üst üste üç yıl küçülmüştür. Fiyatlar genel düzeyi, 1942 yılında %94,1, 1943 yılında ise %73,7 artmıştır. İç ve dış borçların milli gelire oranı ise 1943 yılından itibaren artan bir seyir izlemiştir. Tablo 1'de Şükrü Saraçoğlu Hükümetleri döneminde ekonomi politikası uygulamalarının makroekonomik sonuçları gösterilmektedir.

Tablo 1: Şükrü Saraçoğlu Hükümetleri Döneminde Türkiye Ekonomisinin Makroekonomik Göstergeleri

Yıllar	Kişi Başı Gelir (\$)	Büyüme Hızı (%)	Enflasyon Oranı (%)	Dış Borç/GSMH (%)	İç Borç/GSMH (%)
1942	261	5,6	94,1	5,8	15,5
1943	384	-9,8	73,7	3,9	11,2
1944	275	-5,1	-22,1	5,9	16,2
1945	222	-15,0	-3,4	6,7	20,0
1946	198	31,9	3,9	7,1	16,0

Kaynak : Özsoylu, 2011: 76

İkinci Dünya Savaşı yılları boyunca hem ihracatımız hem de ithalatımız iki taraflı alınan anlaşmalarla yürütülmüştür. Bu gelişmenin temel nedeni ise fiyat avantajıdır. Buna bağlı olarak dış ticaret dengesi dönem boyunca ve sürekli artan oranda fazlalık vermiştir. Bu gelişmeler ışığında dış ticaret dengemiz 1942 yılında 13,2 milyon dolar, 1943 yılında 35,8 milyon dolar, 1944 yılında 51,7 milyon dolar, 1945 yılında 71,3 milyon dolar ve 1946 yılında ise 95,7 milyon dolar fazla vermiştir (Tokgöz, 2018: 128). Tablo 2'de Şükrü Saraçoğlu Hükümetleri döneminde Türkiye ekonomisinin dış ticaret göstergelerine yer verilmiştir.

Tablo 2: Şükrü Saraçoğlu Hükümetleri Döneminde Türkiye'nin Dış Ticareti (Milyon Dolar)

Yıllar	İhracat	İthalat	Fark
1942	126,1	112,9	13,2
1943	196,7	155,3	35,8
1944	177,9	126,2	51,7
1945	168,3	97,0	71,3
1946	214,6	118,9	95,7

Kaynak : Tokgöz, 2018: 128

İkinci Dünya Savaşı'nın genel olarak ekonomi üzerinde yarattığı olumsuz etkilere karşılık Savaşın bitmesiyle birlikte hazinenin altın ve döviz rezervlerinin önemli miktarda arttığı görülmektedir (Şahin, 2011: 85). Kazgan'a göre Türkiye savaş döneminde yıllık ithalatının iki katı kadar 500 milyon dolar altın ve döviz rezervi biriktirmiştir (Kazgan, 2002: 80).

4. SONUÇ

Şükrü Saraçoğlu Hükümetleri bir önceki hükümetin izlediği katı ekonomi politikaları ve uygulamalarının ekonomi üzerinde beklenen sonucu vermemesi nedeniyle bu katı uygulamalardan vazgeçerek ya da gevşeterek piyasa mekanizmasına daha fazla rol veren, ticareti serbestleştiren bir ekonomi politikası izlemiştir. Şükrü Saraçoğlu Hükümetleri döneminde ekonomi politikasının belirlenmesinde İkinci Dünya Savaşı ve savaşın ortaya çıkardığı olumsuz etkiler temel belirleyici olurken bu olumsuz etkileri ortadan kaldırmak amacı ile bir takım ekonomik tedbirler alınmıştır. Bunlar; Varlık Vergisi, Toprak Mahsulleri Vergisi ve Çiftçiyi Topraklandırma Kanunu'dur. Saraçoğlu Hükümetinin İkinci Dünya Savaşı'nın ortaya çıkardığı aşırı ticari kazançların bir kısmına el koyulması amacını taşıyan Varlık Vergisi uygulaması, savunma harcamalarının artması ve enflasyonun yükselmesi gibi nedenlerle başarılı olamamıştır. Şükrü Saraçoğlu Hükümetleri döneminin tartışmalı diğer bir vergi uygulaması olan Toprak Mahsulleri Vergisi, Aşar vergisinin kaldırılmasından sonra çiftçinin üzerindeki yükün daha da artmasına yol açan diğer bir başarısız uygulama olmuştur. Çiftçiyi Topraklandırma Kanunu ise oluşan büyük tepkiler nedeniyle geri adım atılarak uygulanamamış ve diğer uygulamalar gibi amacına ulaşamamıştır. Şükrü Saraçoğlu Hükümetleri döneminde izlenen ekonomi politikalarının İkinci Dünya Savaşı'nın ülke ekonomisi üzerindeki olumsuz etkilerini hafifletmeye yönelik uygulamalar olmasına karşılık, İkinci Dünya Savaşı'nın ekonomi üzerindeki etkilerinin derinden hissedildiği Şükrü Saraçoğlu hükümetleri döneminde uygulanan ekonomi politikaları sorunların çözülmesinde başarılı olamamıştır. Diğer taraftan dönem içinde uygulanan Varlık Vergisi, Toprak Mahsulleri Vergisi ve Çiftçiyi Topraklandırma Kanunu gibi uygulamalar halkı daha da yoksul hale getirmiş, çeşitli kesimlerden büyük tepkilerin oluşmasına yol açmış ve hükümete karşı güvenin azalmasına sebep olmuştur.

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Maliye Politikasının Ülkelerin Subjektif İyi Olma Halleri (Subjective Wellbeing) Üzerindeki Etkisi

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Özet: İyi olma hali kavramının felsefi temelleri Antik Yunan dönemine dayanmaktadır. Platon ve Aristo, mutluluk ve iyi yaşam üzerine çok tartışmışlardır. Konforlu, rahat ve sağlıklı olma hali olarak tanımlanan iyi olma hali literatürde geniş anlamlarda yer almaktadır. İyilik halinin ölçüm yöntemlerinde ise bireysel iyilik hali sıklıkla uygulanmaktadır. Genel olarak iyi olma hali (wellbeing) kavramı bireyin yaşamdan aldığı tatmin, hissettiği duygular ve olumsuz duyguların yokluğundan oluşur. Özellikle teknolojik gelişmeler ve yükselen gelir düzeyiyle birlikte iyi olma hali üzerinde toplumsal, ekonomik ve politik faktörlerinde önemli olduğu gözlenmektedir. Genel olarak insani gelişme düzeyleri yüksek zengin ülkelerde bireyler kendilerini daha iyi ve mutlu hissederken, insani gelişme düzeyleri düşük ve yoksul ülkelerde bu durum tersine bir seyir izlemektedir. Kamu maliyesinin amaçları olarak kaynak kullanımında etkinliğin sağlanması, gelir dağılımında adaletin sağlanması ve ekonomik istikrarın sağlanması gösterilmektedir. Bunlar aynı zamanda bireysel iyi olma halinin (subjective wellbeing) de ekonomik göstergelerinden biridir. Ayrıca yeni kamu mali yönetim anlayışında da vatandaş memnuniyeti temelli bir uygulama söz konusudur. Bu doğrultuda iyi olma hali, gelir, maddi refah, sağlık, ahlaki tutumlar, aile hayatı, toplumsal destek, çalışma koşulları, siyasi yapılanma, eğitim olanakları ve beslenme gibi birçok faktör tarafından şekillenmektedir. Buradan hareketle çalışmanın amacı 2010-2021 dönemi için 14 OECD ülkesinin maliye politikasında kullandığı araçların iyi olma halleri üzerindeki etkisini sıralı probit modeliyle incelemektir.

Anahtar Kelimeler: Öznel İyi Olma Hali, Maliye Politikası, Sıralı Probit Model

Abstract: The philosophical base of wellbeing date back to ancient greek. Plato and Aristotle had debated a lot on happiness and better life. Wellbeing is defined as comfortable, relax and healthy manner has a wide meaning in the literature. The measurement techniques of wellbeing, subjective wellbeing is used frequently. In general wellbeing consists of satisfaction, feelings and absence of negative feelings of human being. It is observed that especially with technological developments and increased income levels, social, economic and political factors are important on wellbeing. In general rich countries with high developed levels, individuals feel better and happier whereas in poor countries with low human development levels, this situation follows reverse process. The aim of public finance are, allocate resources efficiently, fairness in income distribution and provide economic stability. These determinants are economic determinants of wellbeing as well. In addition to this, there is an implementation based on citizen satisfaction in the new public management view. In this respect wellbeing is shaped by many factors such as, income, material wealth, health, moral attitudes, family life, social support, working conditions, political structure, educational opportunities and nutrition. From this point of view the aim of this study, the effect of fiscal policy determinants on subjective wellbeing of 14 OECD countries with the period of 2010-2021 by using ordered probit models.

Keywords: Subjective Wellbeing, Fiscal Policy, Ordered Probit Model

1.GİRİŞ

Mutluluk nedir ve insanları mutlu kılan şey nedir gibi soruların cevabı tek bir şekilde ve formda verilemez. Mutluluk en nihayetinde insani bir eylemdir ve yüzyıllar boyunca tarihin gördüğü en büyük düşünürler tarafından çokça tartışılmıştır. Psikolojinin 19. yy'a kadar felsefe bilimi içinde yer alması ve bu nedenle bağımsız bir bilim olarak kabul edilmemesi, 19 yy. öncesi mutluluğa ilişkin tüm değerlendirmelerin felsefe içinde yer almasına sebep olmuştur. Tüm büyük filozoflar mutluluk ile ilgilenmelerine rağmen, mutluluk kavramının ampirik çalışmaya çok uygun olmaması nedeniyle psikoloji biliminin özgürlüğünü sağladığı 19. yy. içinde dahi tümevarım tekniklerini kullanma konusunda psikologlar çok istekli olmamışlardır. Tarih boyunca filozoflar tarafından mutluluk en yüksek iyilik durumu ve nihai motivasyon kaynağı olarak görülmüştür. Psikolojinin bir bilim olarak kabul edilmesi ile birlikte artan mutluluğa ilişkin bilimsel çalışmaların en az dört yönü içerdiği iddia edilmektedir: (Wilson, 1960)

- a) önceki araştırmaların ve ortaya atılan spekülasyonların toplanması ve özetlenmesi
- b) test edilebilir teorilerin formüle edilmesi
- c) mutluluğu ölçmeye yönelik araçların geliştirilmesi
- d) mutluluğu ölçecek verilen toplanması

Sokrates adil/dürüst olmayanların her zaman daha fazla kazanacağını belirtmiş ve adaletsiz davranışlar ile mutluluk arasında ilişki kurmuştur. Plato insanların erdem olduğu konusunda hemfikir oldukları bir davranışın aynı zamanda mutluluk da getireceğini düşünmektedir. Eğer bir kişi erdem olarak kabul ettiği bir şeyin mutluluk getirmediğini düşünüyorsa, erdem veya mutluluğu ifade ederken ortaya koyduğu ifadeyi gerçekten kastetmemektedir. Cumhuriyet (The Republic) insanın doğasının değiştirilemez iddialarıyla refah ve mutluluk bulabileceği çerçeveyi tanımlamak için yapılan ilk sistematik girişimdir (Cornford, 1941). Cumhuriyet'in ilk kitabında mutluluğun nedenine ilişkin üç kaynak belirtilmiştir: gençliğin canlılığı, zenginlik ve içsel uyum (Wilson, 1960). Kendi içinde uyumu sağlayan temel faktör ise erdemli davranışlardır.

Öznel iyi olma halinin bileşenleri ve etkileyen faktörler açısından birlikte değerlendirildiğinde, kamu politikalarının öznel iyi olma hali üzerindeki önemli bir etkisi olduğu düşünülmektedir. Kamu politikalarının vergi, harcama, borçlanma açısından uygulanması gelir düzeyi, sağlık durumu vb. faktörler yoluyla öznel iyi olma halini etkileme potansiyeline sahiptir. Bu açıdan kamu politikalarının farklı ülkelerdeki öznel iyi olma hali üzerindeki etkilerinin belirlenmesi politika uygulayıcılar açısından önemli sonuçları barındırması muhtemeldir. Çalışmada 2010-2021 dönemi için 14 OECD ülkesindeki maliye politikası araçlarının kullanımının öznel iyi olma hali üzerindeki etkileri sıralı probit modeliyle analiz edilerek, politika uygulayıcılara yönelik çıkarılma sunulmaktadır.

2.ÖZNEL İYİ OLMA HALİ VE ÖLÇÜLMESİ

Mutluluk ve öznel iyi olma (Subjective well-being, SWB) Sokrates, Plato vb. büyük düşünürler için aynı anlamda kullanılmakla birlikte, öznel iyi olmaya ilişkin bilimsel literatürün 1960 yılında Warner Rushing Wilson tarafından yazılan doktora tezi ile başladığı kabul edilmektedir. Psikologların mutsuzluğa ilişkin derinlemesine çalışmaları oldukça fazla olmasına rağmen, mutluluk veya daha spesifik olarak öznel iyi olma ile ilgili çalışmaların yetersiz olmasının arkasında yatan temel faktör, ampirik çalışmalara uygunluğa yönelik göstergelerin elde edilmesi konusundaki genel kabulün sağlanmasında yaşanan aksaklık olarak görülebilir.

Tablo 1: İyi Olma Halinin Nesnel ve Öznel Göstergeleri

Nesnel Göstergeler	Öznel Göstergeler
Yaşam Beklentisi	Topluluk Duygusu
Suç Oranı	Maddi Mal Varlığı
İşsizlik Oranı	Güvenlik Hissi
GSYİH	Mutluluk
Yoksulluk Oranı	Bütün olarak Yaşamdan Tatmin
Okula Devam	Aileyle İlişkiler
Haftalık Çalışma Saatleri	İş Memnuniyeti
Olası Ölüm Oranı	Adalet Algısı
İntihar Oranı	Hobiler

Kaynak: (Rapley, 2003)

Tablo 1’de iyi olma hali nesnel ve öznel olarak ayrılmaktadır. Bizim çalışmamızda öznel iyi olma hali üzerinde durulmaktadır. Ancak nesnel göstergeler olarak da Yaşam Beklentisi, Suç Oranı, İşsizlik Oranı, GSYİH, Yoksulluk Oranı, Okula Devam, Haftalık Çalışma Saatleri, Olası Ölüm Oranı ve İntihar Oranı gösterilmektedir. Öznel göstergeler olarak ise, Topluluk Duygusu, Maddi Mal Varlığı, Güvenlik Hissi, Mutluluk, Bütün olarak Yaşamdan Tatmin, Aileyle İlişkiler, İş Memnuniyeti, Adalet Algısı ve Hobiler gösterilmektedir.

Wilson (1960) ünlü doktora tezinde mutluluğa ilişkin literatürü Sokrates’ten Freud’a kadar ayrıntılı şekilde ele almış ve öznel iyi olmanın önemi ile psikologların bu konuya yönelik ampirik ilgisi arasındaki tutarsızlığa vurgu yapmış, mutluluğa ilişkin göstergeler ve olası ampirik korelasyonları ortaya koymuştur (Wilson, 1960). 1973 yılında Psychological Abstracts International, mutluluğu bir endeks olarak listelemeye başlamış ve 1974 yılında Social Indicators Research adlı derginin öznel iyi olma kavramına odaklı birçok makale yayın hayatına başlaması, yine kavramın bilimsel literatürdeki yerini belirginleştirmiştir (Diener, 1984).

Genç, sağlıklı, iyi eğitilmiş, iyi ücret elde eden, sosyal yönden dışa dönük, iyimser, dindar, kendisine saygısı yüksek, evli, yüksek iş motivasyonuna sahip, mütevazı beklentileri ve özlemleri olan ve farklı zeka türlerine sahip olan kişi mutlu veya öznel iyi olmaya ulaşmış olan kişidir (Wilson, 1967). Öznel iyi olma insanların hem bilişsel yargıları hem de duygusal tepkileri dahil olmak üzere yaşam kalitelerine ilişkin değerlendirmelerini anlamaya çalışan psikoloji alanını tanımlamanın bir aracıdır (Diener vd., 1998). Öznel iyi oluş insanların

yaşamlarını ve yaşamlarındaki belirli alanları ve faaliyetleri nasıl deneyimlediklerini ve değerlendirdiklerini ifade eder. Son yıllarda, araştırmacılar, politikacılar, ulusal istatistik kurumları, medya ve halk arasında öznel iyi oluş hakkındaki bilgilere yönelik ilginin arkasında, öznel iyi oluş durumunun nüfusun ekonomik, sosyal ve sağlık koşullarının izlenmesine ve bu alandaki politika kararların potansiyel etkileri konusunda bilgilendirilmesine yönelik muhtemel katkıları yatmaktadır (Layard, 2006). İnsanlar benzer koşul ve durumlarda farklı tepki vermektedirler. Çünkü bireyler mevcut koşulları kendilerine özgü beklentilerine, değer yargılarına, önceki deneyimlerine göre değerlendirirler ve buna karşı oluşturdukları davranışları ile öznel iyi oluş durumuna ulaşmaya çalışırlar. Ancak öznel iyi olmanın hesaplanması ve insanların mutluluk durumlarının ölçülmesinde kullanılan göstergeler daha çok araştırmayı yapanın oluşturduğu kriterlere bağlı olarak gelişmektedir.

Öznel iyi oluş, insanların duygusal tepkilerini, tatminlerin etki alanını ve yaşam tatmininin küresel yargılarını içeren geniş bir kavramdır. kavramın spesifik yapılarının her birinin kendi başlarına anlaşılması gerekir, ancak bileşenler genellikle önemli ölçüde birbirleri ile ilişkilidir ve bu durum daha fazla faktöre olan ihtiyacı ortaya çıkarmaktadır. Bu nedenle öznel iyi oluş tek bir özel yapıdan ziyade, Tablo 1’de belirtildiği üzere ana bölümler ve alt bölümler olarak tanımlanmaktadır (Diener vd., 1999).

Tablo 2: Öznel İyi Olma Halinin Bileşenleri

Hoş (pozitif) Etki	Hoş Olmayan (negatif) Etki	Yaşam Tatmini	Tatminin Etki Alanı
Sevinç	Suçluluk ve utanma	Hayatı değiştirme arzusu	İş
Gurur	Üzgünlük	Mevcut hayattan memnuniyet	Aile
Özsaygı	Endişe ve sınır	Geçmişinden memnuniyet	Boş zaman ve sağlık
Duygusal Yakınlık (ilgi)	Stres	Geleceğinden ümitli	Mali durum
Mutluluk	Depresyon	Başkalarının hayatını önemseme	Öznel
Coşku	Haset		Birinin grubu

Kaynak: Diener (1999).

Diener (1999) öznel iyi oluşu 3 ana bölümde ele almaktadır. Pozitif etki, negatif etki ve yaşam tatmini olarak ifade edilen bu ana bölümler, farklı alt başlıklara ve farklı etki alanlarına sahiptir. Pozitif ve negatif etkiler öznel iyi oluşun duygusal yönünü, yaşam tatmini ise bilişsel yönünü ifade etmektedir (Das vd., 2020). Bu alanların her birinin kendi aralarında da ilişkili olduğu göz ardı edilmemelidir. Ana bölümler ve alt bölümler birlikte ele alındığında, Wilson(1967) tarafından ortaya konan mutlu insanın sahip olduğu niteliklere benzer durumların ortaya çıktığı görülebilmektedir.

İnsanların çoğu için mutluluğa ulaşmak hayatlarında nihai hedef olarak görülmektedir. Politika uygulayıcılarının hedonistik bakış açısıyla bireylerin daha mutlu olmasını sağlayan unsurları bilmeleri ve bu konuda teşvik edici politikalar ortaya koymaları, öznel iyi oluş ve buna bağlı oluşacak bireyin duygu ve davranışlarının etkilenmesi açısından oldukça önemlidir. Çünkü öznel iyi oluş bireyin kendi yaşam geçmişi ve tecrübelerine bağlı olarak oluşan algısı ile ortaya çıkmaktadır (Kıroğlu ve Yıldırım, 2022). Öznel iyi oluşa ilişkin bileşenlerin anlaşılması, buna ilişkin göstergelerin de belirlenebilmesi açısından oldukça önemlidir. Öznel iyi oluş ile ilgili ana ve alt kategorilerde yer alan her bir alan için göstergeler belirlenebileceği gibi, öznel iyi oluşa yönelik genel bir göstergede oluşturulabilmektedir. Öznel iyi oluş ile ilgili göstergeler, psikologların ve araştırmacıların konuyu ampirik olarak ele almasına yönelik motivasyonu artırması açısından da önemli görülmektedir. Diener (1985) Yaşam Memnuniyet Ölçeği (Satisfaction With Life Scales) geliştirmiş ve 5 soruda öznel iyi olma halini ölçmeye çalışmıştır. “Güçlü bir şekilde katılıyorum” ve “güçlü bir şekilde katılmıyorum” şeklindeki cevaplar arasındaki 7’li bir ölçek kullanmış ve öznel iyi oluşun ölçümüne yönelik bir ölçek oluşturmuştur (Diener, 1985). Sell ve Nagpal (1992) 40 madde ile bireylerin ve toplumun mutluluğunu ölçümünde kullanılabilecek kriterleri sıralamıştır (Sell ve Nagpal, 1992). Öznel refahın ölçülmesine yönelik Dünya Değerler Anketi (World Values Survey Data), GALLUP Dünya Anketi öznel iyi oluşun ölçülmesine yönelik en çok kullanılan sonuçları vermektedir. Tablo 2 öznel iyi oluş ölçümüne ilişkin bileşenleri ve öznel iyi oluşu etkileyen faktörleri göstermektedir.

Tablo 3: Öznel İyi Oluş Ölçüm Bileşenleri ve Etkileyen Faktörler



Kaynak: OECD, 2013.

Hazza dayalı mutluluk genellikle acının olmadığı durumu ifade etmektedir. Eudaimonik refah (mutluluk) ise bireyin kendi kabiliyet ve yeterliliklerini kullanarak, kendi özgür iradesi ile hayata dair amaç ve hedeflerini belirlemesi anlamında kullanılmaktadır. Deneyimlere odaklanmış yaşam değerlendirmelerinin yanı sıra, psikolojik işlevsellik kavramına odaklanan eudaimonik refah kavramı da literatürde tartışılmaktadır. Refahın işleyen unsuru (eudaimonik) özerklik, yetkinlik, öğrenmeye ilgi, hedef yönelimi, amaç duygusu, esneklik, sosyal katılım ve fedakarlıktan oluşmaktadır (Huppert, vd. 2009, Samman, 2007). Öznel iyi oluşa ilişkin eudaimonik kavramlar, öznel iyi oluşun ölçümünde hedonistik felsefenin getirdiği kavramların yanında, bireyin yeteneklerine, amaç ve hedeflerine yöneldiği için ve aynı zamanda yalnızca geçmişe dayalı bilgileri değil, değişen ve gelişen bir süreci ifade etmektedir.

Öznel iyi oluşun ölçümüne ilişkin kriterlerin belirlenmesi, psikologların ampirik çalışmalara uygunsuzluk gerekçesi ile bu konuda gösterdikleri çekingenliklerini azaltmaktadır. Diener (1985) tarafından ortaya konan beşli ölçek ile başlayan süreç içinde öznel iyi oluşun bileşenlerinin ve etkileyen faktörlerin daha geniş değerlendirilmesi ile ölçüme ilişkin kriterler ve alanlar da gelişmiştir. Öznel iyi oluş pozitif ve negatif etkiler, yaşam tatmini gibi bileşenlerin yanı sıra eudaimonik refaha ilişkin kriterleri de kapsamalı ve öznel iyi oluşun ölçümünde mutlaka değerlendirmeye alınmalıdır.

3. ÖZNEL İYİ OLMA VE KAMU POLİTİKALARI LİTERATÜR

Öznel iyi olma bileşenleri ve etkileyen faktörleri itibarıyla düşünüldüğünde, politika uygulayıcılarının doğrudan alanları içine giren kavramlar olduğu açıkça görülmektedir. Bireylerin duygu ve davranışlarının öznel iyi olma haline ilişkin algılarından etkilendiği düşünüldüğünde, politika uygulayıcılarının bu algının gelişmesi ve değiştirilmesi yönündeki politika uygulamaları, bireylerin ve onların oluşturduğu toplumun duygu ve davranışlarını da etkileyeceği görülebilmektedir.

Helliwell ve Huang (2008) 2002-2003 yıllarında yapılan 3 anket ve Dünya Değerler Anketi'nin yaşam tatmini ölçütlerini kullanarak yaptıkları çalışmada, Dünya Bankası'nın iyi yönetim ilkeleri ile öznel iyi oluş arasında oldukça sıkı bir ilişkinin olduğunu ortaya koymuşlardır. İyi yönetime ilişkin ilkeler hükümetin kalitesini doğrudan etkilemekte ve öznel iyi oluşun gelişmesine doğrudan katkı sağlamaktadır (Helliwell ve Huang, 2008). 1981-2007 yılları arasında OECD ülkeleri için Dünya Değerler Anketi verilerini kullanarak kamu politikalarının endüstriyel demokrasilerde yaşam tatminini nasıl etkilediğine ilişkin yapılan çalışmada, ekonomiye devlet müdahalesinin artmasıyla vatandaşların yaşamlarına ilişkin tatmin düzeylerinin arttığı sonucu elde edilmiştir. Çalışmanın önemli bulgularında birisi, düşük ve yüksek gelirli vatandaşlar açısından aynı sonucun elde edilmiş olmasıdır, yani gelir düzeyi fark etmeksizin bireyler öznel refahları için daha elverişli olan politikaları tercih etmektedirler (Flavin vd., 2014). Flavin vd. (2011) yılında yaptıkları çalışmada 15 ülke için Dünya Değerler Anketi verileri kullanılarak farklı kamu politikalarının öznel iyi oluş üzerindeki etkisini araştırmıştır. Çalışmada kamu politikalarını şu veriler ışığında değerlendirilmiştir.

- vergi gelirlerinin GSYİH yüzdesi
- hükümetin kişi başına düşen GSYİH değerindeki tüketim payı
- ortalama işsizlik ödeneği olarak kabul edilen sosyal ücret
- sosyal refah harcamalarının GSYİH payı
- Kullanılan göstergelerden sosyal ücret ve sosyal refah harcamalarının öznel iyi oluş üzerindeki pozitif etkisinin oldukça güçlü olduğu sonucu elde edilmiştir. Vergi gelirleri ve tüketim payına ilişkin göstergelerin öznel iyi oluş üzerindeki etkisi önemli görülmekle birlikte, gelir düzeyi arttıkça bu etkinin azaldığı anlaşılmaktadır (Flavin vd. 2011). Ram (2009) hükümet harcamalarındaki artış ile öznel iyi oluş arasında ters yönlü bir ilişkinin olmadığını ve etkinin pozitif yönlü olduğunu ortaya koymuştur (Ram, 2009).

Bjørnskov vd. (2007) yılında 74 ülkede 120.000 birey için hükümet büyüklüğünün yaşam tatmini için elverişli olup olmadığını ampirik olarak analiz etmiştir. Dünya Değerler Anketi 1997-2001 verileri kullanılarak yapılan çalışmada hükümet harcamalarındaki artışın yaşam tatminini azalttığı sonucu elde edilmiş ve bu sonucun düşük, orta gelirli ve erkek bireyler için çok daha güçlü, kadınlar için ise hükümet harcamalarının yaşam tatmini üzerindeki olumsuz etkilerinin daha az olduğu sonucu elde edilmiştir. Çalışmada devlet sermayesinin oluşumunun ve sosyal harcamaların yaşam tatmini ve dolaylı olarak öznel iyi oluş üzerinde önemli bir etkisi olmadığı sonucuna varılmıştır (Bjørnskov vd., 2007). Oishi vd. (2012) GALLUP endeksinde 132 ülke için oluşturulan öznel iyi oluş verilerinden 54 ülkenin verilerini kullanarak 59.634 bireysel katılımcının değerlendirmeye alındığı çalışmada, artan oranlı vergilemenin öznel refah üzerindeki etkisi araştırılmıştır. Artan oranlı vergilemenin öznel iyi oluş üzerinde olumlu etkiye sahip olduğu, vergi oranlarının devlet harcamalarının öznel refah ile ilişkili olduğu sonucuna varılmıştır. Artan oranlı verginin öznel iyi oluş üzerindeki etkisi vatandaşların eğitim ve kamusal mallara ilişkin memnuniyet düzeyinden de etkilenmektedir (Oishi vd., 2012).

Kiya (2012) 2005-2009 yılları arasında Davranışsal Risk Faktörü Gözetim Sisteminden (Behavioral Risk Factor Surveillance System) elde edilen verileri kullanarak devlet harcamaları ve gelirlerinin öznel refah üzerindeki etkisini incelemiştir. Çalışmada genel devlet harcaması büyüklüğünün öznel refah ile pozitif ilişkili olduğu, kategorik olarak incelendiğinde ise halk sağlığına yönelik harcamaların da aynı şekilde pozitif ilişkiye sahip olduğu sonucuna varılmıştır. Sosyal harcamalarda ise yüksek gelir gruplarının öznel refahına etkinin daha az olduğu görülmektedir. vergiler arttıkça öznel iyi oluşun azaldığı, vergi dışı finansman kaynaklarının kullanımının yaşam tatminini arttırdığı sonucuna varılmıştır. Özellikle artan oranlı özelliği nedeniyle bireysel vergilerin öznel iyi oluş üzerindeki olumsuz etkisi, yüksek gelir gruplarında çok daha fazla olarak görülmektedir (Kiya, 2012).

4. VERİ VE YÖNTEM

Çalışmada 2008-2021 dönemi için seçilmiş gelişmiş ve gelişmekte olan ülke olan 14 ülkenin Maliye politikası uygulamalarının subjektif iyi olma hali (subjective wellbeing) üzerindeki etkisi sıralı probit modellerle incelenmektedir.

Tablo 4: Değişken Tanımları

Değişkenler	Tanımları
Bağımlı değişken	
Subjektif iyi olma hali	1=Çok iyi, 2=İyi, 3=Orta
Bağımsız değişkenler	
Büyüme	GSYİH Büyüme hızı
İşsizlik	İşsizlik oranı
Enf	Enflasyon/GSYİH
Carac	Cari açık/GSYİH
Kamugel	Kamu Geliri/GSYİH
Kamuharc	Kamu Harcamaları/GSYİH
Bütçedeng	Bütçe açığı/GSYİH
Borç	Kamu borcu/GSYİH

Sıralı probit modeli bağımlı değişkeni nitel olan ikiden fazla değişkeni olan ve bu değişkenler arasında doğal bir sıralama olan değişkenleri analiz eden ekonometrik yöntemlerden birisidir. Çalışmada subjektif iyi olma halleri çok iyi, iyi ve orta olmak üzere 3 kategoride analiz edilmektedir.

Probit model aşağıdaki gibi ifade edilmektedir. (Greene, 2012)

$$Y_{it} = X_{it}\beta + \epsilon_i \quad i=1, \dots, T \quad (1)$$

Y gözlenemez gizli değişken, X açıklayıcı değişkenler vektörü, hata terimini ifade eden ϵ ise standart normal dağılım göstermektedir. Sıralı probit modelde ise birden fazla

Yit ,değişkeni aşağıdaki ifadeleri göstermektedir.

$$\rightarrow Y_{it} \quad Y_{it} < \tau_1 \text{ ise } 1 = \text{çok iyi} \quad (2)$$

$$\tau_1 \leq Y_{it} < \tau_2 \text{ ise } 2 = \text{iyi} \quad (3)$$

$$\tau_2 \leq Y_{it} < \tau_3 \text{ ise } 3 = \text{orta} \quad (4)$$

Çalışmada maliye politikası değişkenlerinin iyi olma hali üzerindeki göreceli etkilerini gösterebilmek amacıyla marjinal etkiler hesaplanmıştır. Her bir bağımsız değişkene ilişkin marjinal etkiler bağımlı değişkenlerin örneklem ortalamalarından yararlanılarak elde edilmiştir.

Bu durum aşağıdaki denklemde gösterilmektedir:

$$(OrtP) * (1 - OrtP) * (\beta) \quad (5)$$

Tablo 5: Sıralı Probit Tahmin Sonuçları

Bağımlı değişken: Öznel iyi Olma Hali				
Değişkenler	Katsayı	Dy/dx(predict=1)	Dy/dx(predict=2)	Dy/dx(predict=3)
Büyüme	-0.1363*** (-3.68)	0.0416351	-0.0263656	-0.0152695
İşsizlik	0.0399*** (2.60)	-0.0121854	0.0077165	0.0044689
Enf	0.0864*** (2.61)	-0.0263966	0.0167157	0.0096808
Carac	0.0168 (1.42)	-0.0051308	0.0032491	0.0018817
Kamugel	0.2079* (1.91)	-0.0634804	0.0401993	0.0232812
Kamuharc	-0.2460** (-2.27)	0.0751236	-0.0475724	-0.0275513
Bütçedeng	-0.0883 (-0.88)	0.0269738	-0.0170813	-0.0098925
Borç	0.0008 (0.34)	-0.0002703	0.0001712	0.0000991
Kesit 1	1.4925	-	-	-
Kesit 2	-0.0732	-	-	-
loglikelihood	-128.02173	-	-	-
LR chi2(8)	50.87	-	-	-
N	182	-	-	-

Sıralı probit tahmin sonuçları tablo 2’de yer almaktadır. Tabloya göre büyüme, işsizlik, enflasyon, kamu gelirleri ve kamu harcamalarının GSYİH’ya oranı öznel iyi olma hali üzerinde etkilidir. Büyüme oranındaki bir birimlik artış kendini çok iyi hissedenden gelişmiş ülkelerde öznel iyi olma halini artırma olasılığı yaklaşık olarak %4 iken, kendilerini iyi ve orta hissedenden ülkelerde öznel iyi olma halini azaltma olasılığı yaklaşık olarak %3 ve %2 civarındadır. İşsizlik ve enflasyonun kendini çok iyi hissedenden ülkelerde etkisi negatif yönlü iken iyi ve orta hissedenden ülkelerde düşük düzeydedir. Buradan gelişmiş ülkelerin işsizlik ve enflasyondaki değişikliklere karşı daha duyarlı olduğu ifade edilebilir. Çalışmada dikkati çeken bir diğer çarpıcı sonuç ise, kamu gelirindeki artışların çok iyi hissedenden ülkelerde kendilerini iyi hissetme olasılığını azaltırken, iyi ve orta hissedenden ülkelerde iyi hissetme olasılığını artırması, harcama olarak bakıldığında ise harcamalardaki artışın kendilerini çok iyi hissedenden ülkelerde kendilerini iyi hissetme olasılıklarını artırırken, iyi ve orta hissedenden ülkelerde kendilerini iyi hissetme olasılıklarını azaltma yönündedir. Buradan gelişmiş ve çok mutlu ülkelerde harcamalar gelire göre

daha önemli bir faktör iken kendilerini iyi ve orta hisseden ülkelerde gelir faktörü harcamalara göre ülkeleri daha mutlu hissettirmektedir.

5. SONUÇ

Küreselleşmenin artması, pandemi gibi yaşanan olağanüstü durumlar toplumları topyekün dönüşüm sürecine itmiştir. Bu süreçte artan ihtiyaçlar ekonomik, sosyal, teknolojik gelişmeyle birlikte toplumların mutluluklarına etki etmektedir. Öznel iyi olma halinin bileşenleri ve etkileyen faktörler açısından birlikte değerlendirildiğinde, kamu politikalarının öznel iyi olma hali üzerindeki önemli bir etkisi olduğu düşünülmektedir. Kamu politikalarının vergi, harcama, borçlanma açısından uygulanması gelir düzeyi, sağlık durumu vb. faktörler yoluyla öznel iyi olma halini etkileme potansiyeline sahiptir. Bu açıdan kamu politikalarının farklı ülkelerdeki öznel iyi olma hali üzerindeki etkilerinin belirlenmesi politika uygulayıcılar açısından önemli sonuçları barındırması muhtemeldir.

Çalışmada maliye politikası değişkenlerinin yaşam kalitesi üzerindeki etkisi analiz edilmiş ve sonucunda büyüme, işsizlik, enflasyon, kamu gelirleri ve kamu giderlerinin ülkelerin öznel iyi olma halleri üzerinde belirleyici değişken olduğu sonucuna ulaşılmıştır. Özellikle çok iyi düzeyde olan ülkelerde toplumların iyi hissetme düzeylerini bu değişkenler daha olumsuz etkilemektedir. Bunun nedeni ülkelerin ekonomik yapılarındaki istikrardır. Ancak iyi ve orta hisseden gelişmekte olan ülkelerde kırılma söz konusu olduğu için mutlulukları üzerindeki etki daha olumlu yöndedir. Buradan hareketle gelişmiş ülkelerde makroekonomik ve mali değişkenlerin gelişmekte olan ülkelere göre kendilerini iyi hissetmeleri üzerinde daha fazla etkisi bulunmaktadır denilebilir.

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Avrupa Yeşil Mutabakat ve Yeşil OSB

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Özet: Avrupa birliği iklim değişikliğine karşı sera gazı emisyonlarını azaltmak için birçok politika benimsemiştir. Fakat sera gazı emisyonlarını ikna edici bir şekilde azaltmayı başaramamış ve bazı sektörlerde emisyonların üstesinden gelmek için yeterli çabayı gösterememiştir. Ulaşımda sera gazı emisyonları artarken elektrik sistemlerinde kömür kalıcı bir rol oynamaya devam etmektedir. Binalardaki enerji verimliliğinin iyileştirmeleri yetersiz kalmıştır. Bu bağlamda iklim politikası en önemli konu haline gelmiştir. Enerji, çevresel, endüstriyel, ekonomik ve sosyal olarak kapsamlı bir politika çerçevesi iklimin olumsuz etkilerinden kurtulmak için son derecede önem arz etmektedir. Bunları da hayata geçirmek için Avrupa Yeşil Mutabakatı ortaya çıkmıştır. Bu çalışmada Türkiye'deki Organize Sanayi Bölgelerinin Avrupa Yeşil Mutabakatı'na ne derecede hazır oldukları incelenmiştir. Dünya gazetesinden elde edilen mülakatlar derlenmiştir. Derlenen mülakatlardan toplamda 8 Yeşil OSB bölgesi belirlenmiş olup bu bölgelerin yeşil dönüşüm için yapmayı planladıkları hedefler stratejik amaç ve yaptıkları eylemler ise eylem planı olarak adlandırılarak incelenmiştir. Bu bölgeler Diyarbakır OSB, Kütahya OSB, Eskişehir OSB, Bursa OSB, İzmir OSB, Dikili TDİOSB, Adana Hacı Sabancı OSB, Düzce Organize Sanayi Bölgelerini kapsamaktadır. Genel sonuçlara bakıldığında ise yenilebilir enerjiye geçiş, ağaç sayısını arttırmak, teknik tekstile geçiş ve elektrik alt yapısının iyileştirilmesi stratejik amaçlar arasında yer almaktadır. Organize Sanayi Bölgelerinde yapılan eylemler arasında karbon ayak izini ölçme çalışmalarına başlanması, güneş santrallerine yatırımın yapılması, atık suların arıtılması gibi faaliyetler yer almaktadır. Sonuç olarak iklim krizi ile mücadele açısından hem de AB ile ticaretimizi korumamız açısından yeşil mutabakat son derece önem arz etmektedir. Bunun sürdürülebilirliği açısından AB hedefleri doğrultusunda izlenecek politikaları yakından takip etmemiz gerekmektedir. Literatür incelendiğinde Türkiye'deki sanayi bölgelerinin Yeşil Mutabakata hazır olup olmadığı hususunu değerlendiren çok fazla araştırmaya rastlanamamıştır. Makalenin odağı çerçevesinde, Türkiye'deki Organize Sanayi Bölgelerinin Avrupa Yeşil Mutabakatına ne derece hazır oldukları, bunun için ne yapmayı hedefledikleri ve son olarak yaptığı eylemlerin ne olduğu sorusuna cevap aranmıştır.

Anahtar Kelimeler: Sürdürülebilirlik, Sera Gazı emisyonu, Net Sıfır Karbon

1. GİRİŞ

Avrupa Birliği iklim değişikliğine karşı sera gazı emisyonlarını azaltmak için birçok politika benimsemiştir. Fakat sera gazı emisyonlarını ikna edici bir şekilde azaltmayı başaramamış ve bazı sektörlerde emisyonların üstesinden gelmek için yeterli çabayı gösterememiştir. Ulaşımda sera gazı emisyonları artarken elektrik sistemlerinde kömür kalıcı bir rol oynamaya devam etmektedir. Binalardaki enerji verimliliğinin iyileştirmeleri yetersiz kalmıştır. Bu bağlamda iklim politikası en önemli konu haline gelmiştir. Enerji, çevresel, endüstriyel, ekonomik ve sosyal olarak kapsamlı bir politika çerçevesi iklimin olumsuz etkilerinden kurtulmak için son derecede önem arz etmektedir. Bunları da hayata geçirmek için Avrupa Yeşil Mutabakatı ortaya çıkmıştır.

2. AVRUPA YEŞİL MUTABAKATI'NIN GELİŞİM AŞAMASI

Avrupa Yeşil Mutabakatı, Avrupa Birliği tarafından 2050 yılına kadar karbon nötr hale gelmeyi hedefleyen bir projedir. Esasen AB ekonomisini sürdürülebilir kılmayı hedefleyen bu proje, özellikle iklim ve çevre konularındaki zorlukların üstesinden gelmeyi ve riskleri avantaja çevirmeyi hedeflemektedir. Yeşil mutabakat sürecine gelmek için Avrupa Birliği birçok anlaşmaya imza atmıştır.

- **1987** Avrupa Tek Senedi'nde çevre, ortak politika alanları arasında sayıldı ve böylece topluluk çevre politikaları yasal zemine kavuştu.
- **1990** Avrupa Çevre Ajansı kuruldu. Buradaki amaç çevre politikalarını geliştirmektir.
- **1993** Maastricht Antlaşması ile topluluk çevre kararları için nitelikli çoğunluk yeterli hâle getirildi.
- **1993** AB, BMİDÇS'yi onayladı (Birleşmiş Milletler İklim Değişikliği Çerçeve Sözleşmesi).
- **1999** Amsterdam Anlaşması ile “sürdürülebilir kalkınma” temel bir hedef hâline getirildi.
- **2001** Avrupa Parlamentosu, yasadışı emisyonlar, vahşi yaşam ticareti veya atıkların boşaltılması gibi ciddi suçları cezalandıran çevresel denetimler için asgari standartları kabul etti.
- **2002** AB, Kyoto Protokolü'nü onayladı.

- **2009** Lizbon Anlaşması ile “İklim değişikliği ile mücadele” ilk defa birliğin amaçlarından biri hâline geldi.
- **2016** AB, Paris İklim Anlaşmasını onayladı.
- **2019** AB, “Avrupa Yeşil Mutabakatını kabul etti.
- **2021** Avrupa İklim Yasası yürürlüğe girdi.
- **2021** Avrupa Komisyonu “55’e Uygun” (Fit for 55) paketini açıkladı.

Avrupa Birliği’nin karbon nötr olmasını gerektirecek İklim Yasasını uygulamaya koymaya gerek duymuşlardır. Bu iddialı hedefe ulaşmak için İklim Yasası önem arz etmektedir. Avrupa İklim Yasası önümüzdeki 30 yıllık bir dönemde gerçekleşecek olan iklim değişikliği ile ilgili bütün düzenlemelerin hukuki dayanağını ve ana çerçevesini oluşturan bir yasa metnidir. Yeşil mutabakatın ilk somut önlemini belirleyecek olan bir yasadır. 2050’ye kadar (en geç 2050’de) karbon nötrlüğüne ulaşmayı hedeflemektedir. Aynı zamanda 2050’de net sera gazı emisyonu olmaması hedefine ulaşmak için mevcut emisyon çabalarını hızlandırmak için gerekli olan bir yasadır (Cyales vd. 2019). Avrupa İklim Yasasının hedeflerine ulaşması için “Fit for 55” paketinin taslağı sunulmuştur. Pakette emisyonların 2030 yılına kadar 1990 seviyelerine kıyasla en az %55 oranında azaltmak hedeflenmektedir. Bunun için iki önemli kavram ortaya çıkmaktadır. Birincisi sınırda karbon düzenleme mekanizması ikincisi ise emisyon ticaret sistemidir. Emisyon ticaret sistemi Avrupa’da rekabetçiliğin korunması için gerekli olan bir sistemdir. Avrupa Birliği karbon kaçakçılığını önlemek için bu sistemi kurmuştur ve küresel emisyonlarının artışı önlemek amacıyla sınırda karbon düzenleme mekanizmasını geliştirmiştir. Bu sistemde ithalat fiyatlarının karbon içeriğini yansıtmalarını sağlanmaktadır. Böylece AB pazarlarına yapılacak ihracat kaynaklı karbon emisyonları için vergiler koyacaktır. Avrupa Birliği, birçok yeni sistem belirlemiştir, AB pazarlarına girmek için de ülkelerin yatırım yaparak ürünlerini ithal edeceklerdir. Aksi taktirde bu pazarlara girmek mümkün olmayacaktır. Örneğin AB ekolojik etiketleme ile çevreye, insana, doğaya zarar vermeyen ürünleri üreten ülkelerle ticaretine devam edecektir. Bu etiketleme sistemi olmadan AB pazarlarına giriş mümkün olmayacaktır. Türkiye ise AB ülkeleri ile dış ticaretini yoğun olarak yapmaktadır. Bu yüzden yeşil mutabakat Türkiye’yi önemli derecede etkilemektedir. Buna bağlı olarak Avrupa Birliği Yeşil Mutabakat kurallarının iyi analiz edilerek gereken önlemlerin alınması ve Türkiye’deki sektörlerin sanayi, enerji, tarım, ticaret politikalarını yeşil dönüşüm açısından değerlendirmesi gerekmektedir (Ecer vd. 2021). Bu bağlamda Türkiye’nin yapmayı hedeflediği ve yaptığı eylemler vardır.

2. YEŞİL MUTABAKAT VE TÜRKİYE

2.1.Stratejik Amaç

- Çevreye yaydığı zararlı etkilerden kurtulmak için yenilenebilir enerjiye yoğunlaşmak
- Sulama kanallarından elektrik üretilmesi
- Enerji verimliliğini arttırıcı önlemler almak, karbon ayak izini azaltıcı eylemlere yönelmek, şebeke emisyonlarını düşürmek
- Net sıfır emisyon
- Kaynakların verimli kullanılması, sürdürülebilir sanayi, yeşil inşaat, sürdürülebilir gıda, kirliliğin ortadan kaldırılması, sürdürülebilir ulaşım, biyoçeşitliliğin korunması
- Yeni bir sanayi alanı yapılırken güneş panellerinin olması, atık sularını arıtan, yeşil etiketli binaların olması
- Sertifikasyon sistemleri
- Ar-ge çalışmaları desteklenerek yeşil üretim için çeşitli teknolojiler geliştirilmesi amaçlanmaktadır.

2.2.Eylem Planı

- Kömür yakıtlı santraller üzerinde çalışılması
- Tekstil firmaları üzerinde yapılacak olan şeyler üzerinden bir yol haritası çıkarılması
- Su kaynaklı kirliliğin önlenmesi
- Suyu geri kazandıracak tesis yatırımının yapılması
- Karbon ayak izini küçültmeye yönelik çalışmaların yapılması, eylem planları arasında yer almaktadır.

Özetle; Türkiye yeşil mutabakata uyum sağlaması için birçok çalışma yapması gerekmektedir. Teknolojik alt yapının geliştirilmesi, sürdürülebilir ürün, çevre etiket sistemi ve Yeşil OSB'lerin teşviki bunlar arasında yer almaktadır.

3. YEŞİL OSB

Toplamda 8 Yeşil OSB bölgesi belirlenmiş olup bu bölgelerin yeşil dönüşüm için ulaşmak istediği hedefler ve yaptıkları eylemler incelenmiştir. Diyarbakır OSB bölgesinde teknik tekstile geçiş, elektrik alt yapısının iyileştirilmesi, ihracat ofislerinin sanayicilerin hizmetine açılacağı yönünde hedefler bulunmaktadır. Kütahya OSB pilot bölge olarak yenilenebilir enerjiye geçişi amaçlamaktadır. Kütahya'ya uygulanabilir olanların başında ise güneş enerjisi gelmektedir. Zafer OSB'de yatırımcılara güneş enerjisi sistemleri ve üretimi ile ilgili çalışmalar aktarılacaktır. İkinci etabı ise ileri teknoloji arıttırma. Kütahya OSB üretimi sıfır atık ile yapmayı planlamaktadır. Eskişehir OSB'nin hedefleri arasında ağaç sayısını arttırmak vardır. Yaptıkları eylemler arasında da firmaların karbon ayak izini ölçme çalışmalarına başlaması yer almaktadır. Bursa OSB güneş santrallerine yatırım yapmaktadır. Atık suları arıttırma. İzmir Atatürk OSB Atık su geri kazanım tesisi kurulmasını hedeflemektedir. Atık suların geri kazanımı ile ilgili proje kurulmuştur. Projenin üzerine kurulduğu Atık Su Geri Kazanım Tesisinin işletmeye geçmesiyle sağlanacak su tasarrufuyla; iklim değişikliği etkileri ve artan talep nedeniyle risk altında bulunan İzmir'in su kaynaklarının korunması, bölgenin firmalarının su tüketimi bazlı üretim maliyetlerinin düşürülmesi ve sanayicilerin rekabet gücünün önemli bir ölçüde artması hedeflenmektedir. Projenin 2023 yılı sonunda hayata geçmesi planlanmaktadır. Düzce OSB Türkiye'nin ilk yeşil OSB'sini kurmaktadır. Dikili OSB'nin hedefleri arasında su yönetiminin atık su tesisleriyle sağlanacağı, OSB'de tüm atıklar geri dönüşüm ile yeniden değerlendirilmesi vardır. Aynı zamanda bölgede kurulacak tarım organize sanayi bölgeleri ile tarım ürünleri bölgelerinde ihracatı 10 milyar dolara çıkarmayı hedeflemektedirler. Son olarak yüzde 100 yenilenebilir enerji kullanmayı hedeflemektedirler. Dikili TDİOSB'de ise hem Türkiye'nin hem Avrupa'nın en büyük yeşil OSB'sini kuracaktır. Üretimde ise yüzde yüz yenilenebilir enerji kullanmayı hedeflemektedir. Son olarak Adana Hacı Sabancı OSB sertifikalandırma sistemi getirilmesini amaçlamıştır.

4. SONUÇ

Sonuç olarak; hem iklim krizi ile mücadele açısından hem de AB ile ticaretimizi korumamız açısından yeşil mutabakat son derece önem arz etmektedir. Bunun sürdürülebilir olması için AB hedefleri doğrultusunda izlenecek politikaları yakından takip etmemiz gerekmektedir. Literatür incelendiğinde Türkiye'deki sanayi bölgelerinin Yeşil Mutabakata hazır olup olmadığı hususunu değerlendiren çok fazla araştırmaya rastlanamamıştır. Makalenin odağı çerçevesinde, Türkiye'deki Organize Sanayi Bölgelerinin Avrupa Yeşil Mutabakatına ne derece hazır oldukları, bunun için ne yapmayı hedefledikleri ve son olarak yaptığı eylemlerin ne olduğu sorusuna cevap aranmıştır.

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Türkiye’de Kamu, Özel ve Yabancı Sermayeli Bankaların Etkinliğinin Parametrik Olmayan Yöntemle Ölçülmesi

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Özet: 21. Yüzyılın pandemisi olarak kabul edilen COVID-19 salgını küresel ölçekte derin bir ekonomik ve sosyal kriz ortaya çıkarmıştır. COVID-19 salgınının birçok sektöre olumsuz etkileri olduğu gibi bankacılık sektörü üzerinde de önemli etkileri olmuştur. Pandemi sürecinde bankaların kredi ödemelerindeki aksamalar, likidite erişimindeki zorluklar ve sorunlu kredi oranlarındaki artış gibi çeşitli risklere maruz kaldığı görülmüştür. Bu çalışmada, Türkiye’de faal olan kamu, özel ve yabancı sermayeli 16 banka için pandemi süreci dikkate alınarak verimlilik düzeyleri ölçülmüştür. Çalışmanın uygulaması Veri Zarflama Analizi (VZA) metodu ve VZA’nın çözülmesinde DEAP 2.1 paket programı kullanılmıştır. Çalışmada, girdi değişkenleri beklenen zarar karşılıkları, faiz ve personel giderleri; çıktı değişkenleri faiz gelirleri ve dönem net karı olarak belirlenmiştir. Analiz sonucuna göre, Türkiye’de 2019-2020 yıllarında faaliyet gösteren 16 bankanın ortalama etkinliği %89,2 olarak tespit edilmiştir. Çalışmada, ortalama etkinlik yüzdesi 2019’da en fazla çıkan yabancı sermayeli bankalar iken, 2020 yılında ise kamu ve yabancı sermayeli bankalar olduğu saptanmıştır. Yabancı sermayeli bankaların büyük kısmı teknik olarak etkin çıktığı ve bu bankaların hem kaynak israfı yapmadığı hem de uygun ölçekte faaliyette bulunduğu anlaşılmıştır. Analiz dönemi boyunca, etkinsiz olan Yapı ve Kredi bankasının beklenen zarar karşılıkları, faiz ve personel giderleri girdileri için referans banka grubuna göre Potansiyel İyileştirme (PI) yapması gerektiği sonucuna ulaşılmıştır.

Anahtar Kelimeler: Banka, Etkinlik, Zarar, Kar, VZA.

Measuring the Efficiency of Public, Private and Foreign Capital Banks in Turkey by Non-Parametric Method

Abstract: The COVID-19 epidemic, which is considered to be the pandemic of the 21st century, has created a deep economic and social crisis on a global scale. The COVID-19 outbreak had negative effects on many sectors as well as on the banking sector. During the pandemic process, it has been observed that banks are exposed to various risks such as disruptions in loan payments, difficulties in accessing liquidity and an increase in problem loan rates. In this study, efficiency levels were measured for 16 banks with public, private and foreign capital operating in Turkey, taking into account the pandemic process. The application of the study was the Data Envelopment Analysis (DEA) method and the DEAP 2.1 package program was used to analyze the DEA. In the study, the input variables are expected loss provisions, interest and personnel expenses; output variables were determined as interest income and net profit for the period. According to the results of the analysis, the average efficiency of 16 banks operating in Turkey in the years 2019-2020 was determined as 89.2%. In the study, it was determined that while the average efficiency percentage was the highest in foreign capital banks in 2019, it was found that public and foreign capital banks were in 2020. It has been understood that most of the foreign capital banks are technically efficient and that these banks do not waste resources and operate at an appropriate scale. During the analysis period, it was concluded that the inefficient Yapı ve Kredi bank should make a Potential Improvement (PI) for expected loss provisions, interest and personnel expenses inputs according to the reference bank group.

Keywords: Bank, Efficiency, Loss, Profit, DEA.

1. GİRİŞ

Günümüzde Türk bankacılık sektöründe faaliyet gösteren bankalar, çağdaş, özerk, güçlü sermaye, etkin, denetleyici ve düzenleyici kurulların gözetiminde gelişim gösteren bir yapıya sahip olmaları ve finansal kaynakların toplanması, dağıtılması ve tasarrufları yatırıma dönüştürmesine aracılık ederek ülke ekonomisinin büyümesine ve kalkınmasına katkıda bulunan kuruluşlardır. Bankacılık sektörü, kısa sürede ulusal ve uluslararası düzeyde her türlü hareketlilikten etkilenmektedir. Bu nedenle, meydana gelen bu kısa süreli hareketliliklerdeki riskleri tespit etmek ve finansal etkinliği korumak önem arz etmektedir. Dolayısıyla, bankacılık sektöründe ortaya çıkması olası riskleri tespit etmek ve finansal etkinlikteki sürekliliği korumak için gözetim ve denetim sistemleri geliştirilmiştir.

2019’da Çin’de beliren ve dünyanın tamamını kısa sürede derinden etkileyen Covid-19 Pandemisi, küresel olarak ülkelerin sermaye hareketliliğinin hızını, boyutunu ve finansal kırılganlıklarını etkilediği olumsuz

etkilemekle birlikte ülkelerin yeni finansal araçların geliştirilmesine ve güçlü, etkin ve istikrarlı bir bankacılık sisteminin gerekliliğini ortaya koymuştur.

Bankaların verimli ve etkin çalışması işletmeler açısından önemli bir finansman kaynağı oluştururken, ülke ekonomisi içinde olumlu etkileri olmaktadır. Bankacılık sektörünün reel sektöre kaynak dağılımı yapması ve ülke ekonomisinin büyümesi ve kalkınmasında önemli bir rol oynamasından dolayı bu sektörde faaliyet gösteren bankaların etkinlik ve verimlilik analizlerinin yapılmasını önemli hale getirmektedir. Bu çalışmada, ülkemizde faal olan ve sermayesine göre kamu, özel ve yabancı nitelikli olarak hizmet üreten geleneksel bankaların etkinlik durumları, VZA metodu kullanılarak analiz edilmiştir. Bu ölçüde çalışmamızda, 2019-2020 pandemi dönemini kapsayacak şekilde faiz giderleri, personel giderleri ve beklenen zarar karşılıkları girdi, faiz gelirleri ve dönem net karı ise çıktı değerleri olarak kullanılmıştır. Çalışmada VZA yöntemi yardımıyla, konu bankaların performans ölçümü yapılarak, elde edilen bulgu sonuçlarına göre etkinlik ve verimlilik analizi yapılmıştır.

2. LİTERATÜR TARAMASI

Berg vd. (1991) çalışmalarında, 1985 yılına ait veri setini kullanarak Norveç'te faaliyet gösteren toplam 107 bankanın etkinlik ölçümünü, VZA yöntemiyle analiz etmişlerdir. Çalışmada, iş gücü, makine, bina ve malzemelerin maliyetleri girdi değişkenleri, , vadeli ve vadesiz mevduatlar, kısa ve uzun vadeli krediler, diğer hizmetler ise çıktı değişkenleri olarak kullanılmıştır. Çalışmanın bulgularına göre, Norveç'te faaliyet gösteren 101 bankanın 51 tanesi, yani %50,4'ü etkin iken, konu bankaların ortalama etkinlik skoru %81 olduğu sonucuna ulaşılmıştır.

Taylor vd. (1997) çalışmalarında, Veri zarflama (DEA) ve bağlantılı koni güvence bölgesi (LC-AR) modeller yardımıyla 1989-1991 yılları arasında Meksika'da faaliyet gösteren 13 bankanın etkinlik ve karlılık ölçümünü yapmışlardır. Çalışmada, mevduat kalemleri ile faiz dışı gelirler girdi şeklinde, faiz ve faiz dışı giderler de çıktı değişkeni şeklinde kullanılmıştır. Çalışmanın bulgularında, 1991 yılında 2 banka, 1990 yılında 3 banka ve 1989 yılında ise 6 bankanın etkin olduğu sonucuna ulaşılmıştır. Ayrıca, bankaların sırasıyla ortalama olarak 1989 yılında %83, 1990 yılında %80,9 ve 1991 yılında ise %69,8 verimlilik oranı elde ettiği tespit edilmiştir.

Mercan ve Yolalan (2000) çalışmalarında, veri zarflama modeliyle özel, yabancı ve kamu sermayeli bankaların etkinlik ölçümü yapılmıştır. Çalışmada, personel giderleri ve toplam giderler girdi, öz kaynak karlılıkları, ortalama öz kaynak karlılıkları ve portföyler ise çıktı değişkenleri olarak daha etkin olduğu, küçük ve orta ölçekli bankaların 1994 yılı sonrasında önceki yıllara nazaran performans etkinliğinin azaldığı, büyük bankaların ise performans etkinliğinin yükseldiği görülmüştür.

Leong vd. (2003) çalışmalarında, veri zarflama analizi ile 1993-1999 yılları arasındaki Singapur'daki ticari bankaların etkinliklerini ölçmüşlerdir. Çalışmada, girdi değişkenleri faiz ve faaliyet giderleri iken, faiz ve faiz dışı elde edilen gelirler ise çıktı değerleri şeklinde belirlenmiştir. Sonuç olarak analizde, endüstriyel regülasyonlarla banka etkinliğinin artacağı savına ulaşılmıştır.

Webb (2003) çalışmasında, İngiltere'de 1982-1995 yılları arasında faaliyet gösteren 7 büyük banka için, veri zarflama modelini kullanarak karlılık analizini yapmıştır. Çalışmanın veri seti, faiz gideri, işlem maliyeti ve mevduat girdi değişkeni, krediler ve toplam gelir ise çıktı değişkeni olarak belirlenmiştir. Çalışmanın bulgu sonuçlarına göre, incelenen bankaların 1991 yılından itibaren ortalama verimliliklerinde düşüş olduğu ve %99,46 ortalama verimlilik düzeyi ile en yüksek etkinliğe sahip bankanın İskoçya Merkez Bankası olduğu görülmüştür.

Atan ve Çatalbaş (2005) çalışmalarında, 2002:12-2004:09 dönemleri arasındaki üç aylık bilanço serileri kullanılarak Türk bankacılık sektöründe faaliyet gösteren geleneksel bankaların sermaye yapısının etkinlik ölçümü yapılmıştır. Çalışmanın veri setini banka büyüklüğü, banka karlılığı, sermaye yeterlilik rasyosu bağımlı değişken, bankanın mülkiyet durumu ise bağımsız değişken olarak seçilmiştir. Bulgu sonuçlarına göre, ülkemizde faal olan sermaye yapısı bakımında yabancı statülü olan bankaların, kamu bankalarına nazaran etkin üretim çizgisinde yer aldığı anlaşılmıştır.

Sufian (2008) çalışmasında, Malezya'da faaliyet gösteren ticari bankaların 2001-2003 yılları arasındaki serilerini kullanarak VZA yöntemiyle etkinlik analizi yapmıştır. Çalışmada özellikle risklerin ve sorunlu kredilerin bankaların verimliliği üzerindeki etkisi incelenmiştir. Çalışmanın sonucuna göre, küçük ve orta ölçekli bankaların pazardan daha fazla pay alarak performanslarındaki etkinlik düzeylerini artırdığı görülmüştür.

Behdioğlu ve Özcan (2009) çalışmalarında, Veri zarflama modelinin en yaygın varsayımlarından CCR ve BCC metodu ile Türkiye'de yer alana 29 bankaya ait etkinlik ölçümü yapılmıştır. Çalışmada, kullanılan girdiler faiz ve

faiz dışı giderler, çalışan sayısı ve şube sayısı iken çıktılarda ise, kredi oranı ile toplam mevduat miktarı kullanılmıştır. Analize göre, ülkemizde çalışma dönemi olan 1999-2005 boyunca faaliyet gösteren mevduat bankalarının ortalama etkinlik düzeyi %43,3 olarak bulunmuştur. Yine çalışmanın bulgularında yabancı sermayeli bankaların en yüksek etkinlik düzeyine sahip olduğu saptanmıştır. Çalışmada, 2005'te CCR yöntemine göre 9, BCC yöntemine göre ise 19 ticari bankanın etkin olduğu sonucuna varılmıştır.

Budak (2011) çalışmasında, veri zarflama ve malmquist toplam faktör metodu kullanarak ülkedeki kamu, özel ve yabancı sermayeli geleneksel bankaların etkinliklerini incelemiştir. Çalışmada girdi değerleri, çalışan sayısı, faiz ve faiz dışı giderler, çıktı değerleri, toplam krediler, faiz, faiz dışı gelirler, toplam mevduat ve net kar belirlenmiştir. Analiz sonucunda, yabancı sermayeli ve özel sermayeli bankalara nazaran kamu sermayeli bankaların etkinliğinin daha iyi olduğu ve bu bankalar içerisinde de ölçek büyüklüğünde büyük olan KVB'lerin ölçeği küçük ve orta olanlara göre daha etkin olduğu sonucuna varılmıştır. Aynı zamanda, geleneksel bankaların ortalama etkinlik düzeyi dikkate alındığında, dönem içinde bankaların toplam faktör verimliliğinde artış olduğu gözlenmiştir.

Çelik (2016) çalışmasında, veri zarflama metodunu kullanarak Türkiye bankacılık sektöründe yer alan bankaların 2008-2014 yılları arasındaki verimlilik ölçümlerini incelemiştir. Çalışmada, girdi ve çıktı değişkenleri literatürde yer alan diğer çalışmalarla büyük benzerlik göstermektedir. Buna göre girdi olarak faiz giderleri ile faiz dışı giderler ve toplam mevduat kullanılırken çıktı olarak da faiz ve faiz dışı gelirlerle toplam krediler seçilmiştir. Yapılan analiz sonucuna göre, genel olarak sabit ölçek getirisine sahip bankaların etkin ölçekte olduğu, aynı zamanda sabit ölçek getirisine sahip olmayan bankalarında etkin ölçekte olduğu ancak bu etkinlik oranının %5'i geçmediği tespit edilmiştir. Ayrıca, analiz döneminde Türk bankacılık sektöründe ortalama etkinlik düzeyi %92 oranı ile 2009 yılı olduğu sonucuna ulaşılmıştır.

Rashid ve Rustam (2014) çalışmalarında, Hindistan'da faaliyet gösteren yerli ve yabancı sermayeli toplam yirmi dört bankanın etkinliklerini veri zarflama analizi ile ölçmüşlerdir. Çalışmanın veri seti 2005-2011 yılları arasında kapsamaktadır. Çalışmanın bulgu sonuçlarında, değişken ölçekli getiri yöntemine göre yabancı sermayeli bankalar karşısında milli sermayeli bankaların daha verimli olduğu, sabit ölçekli getiri yöntemine göre ise, yabancı sermayeli bankalar daha verimli olmuştur.

Ahmad vd. (2015) çalışmalarında, 2007-2013 yılları arasındaki verileri kullanarak veri zarflama modeli yardımıyla Pakistan'da faaliyet gösteren on altı özel banka, dört kamu bankasının etkinlik analizini yapmışlardır. Çalışmanın girdi değişkenlerini duran varlıklar ve toplam mevduat oluştururken, çıktı değişkenlerini net faiz gelirleri, net yatırımlar ve avans kalemleri oluşturmuştur. Çalışmanın analiz sonucunda, kriz dönemlerinde Pakistan'da faaliyet gösteren ticari bankaların, kamu bankalarına göre daha etkin olduğu ve daha az etkilendiği sonucu çıkmıştır.

Özkan (2019) çalışmasında, Türkiye'de aktif olarak faal olan 20 geleneksel bankanın etkinlik ölçümü yapılmıştır. İlgili bankaların verimlilik ölçümleri girdi odaklı olarak VZA yöntemi CCR ve BCC varsayımları kullanılarak 2013-2018 yılları arasındaki serilerle analiz edilmiştir. Çalışmanın girdi değişkenleri mevduatlar, faiz ve diğer faaliyet giderleri iken, çıktılar ise krediler, alacaklar, faiz ve diğer faaliyet gelirleri ve net kardır. Elde edilen sonuçlara göre, beş yabancı, bir kamu ve üç özel sermayeli banka etkin bulunmuştur. Aynı zamanda çalışmada, hem özel hem de kamu sermayeli bankalara nazaran, yabancı sermayeli bankaların daha verimli çalıştığı tespit edilmiştir. Analiz döneminde ortalama banka etkinlik düzeyi %55,55 olarak çıkmıştır.

3. METODOLOJİ

Yapılan bu çalışmada Türkiye'de faaliyette bulunan bankalarının belirlenen girdi ve çıktılar doğrultusunda performans etkinlik ölçümü yapılması amaçlanmıştır. Çalışmada etkinlik analizlerinde sıkça tercih edilen Veri Zarflama Analizi(VZA) yöntemi tercih edilmiştir. VZA çoklu girdi ve çıktılarının bulunduğu üretim sürecinin göreceli etkinlik analiz tekniğidir (Dyson vd., 2001: 249, Telli & Serin, 2022: 730). VZA ölçeğe göre getiri varsayımı altında aynı zamanda girdi ve çıktı yönlü olmak üzere iki boyutlu olarak hesaplanabilmektedir. Yapılan çalışmalarda araştırmacının üretim sürecinde hangi değişkenler üzerinde değiştirmenin yapılabilmesine karar verilmesi çalışma modelinin de belirlenmesinde önemli bir etken olarak kabul edilmektedir. Çalışmamızda Türkiye'de faaliyette bulunan mevduat bankalarına ait veriler doğrultusunda VZA modeli ölçeğe göre değişken getirili ve girdi odaklı (BCC-I) olarak belirlenmiştir.

Çalışmada analize dâhil edilen Karar Verme Birimleri (KVB), VZA'nın analiz metoduna uygun olarak belirlenmiştir. Tablo 1 analizde yer alan KVB'leri ve sermaye yapılarını göstermektedir.

Tablo 1: Karar Verme Birimleri ve Sermaye Yapıları

Sıra	Bankalar	Sermaye Yapıları
1	TC Ziraat Bankası	Kamu Sermayeli Bankalar
2	TC Halk Bankası	
3	TC Vakıf Bank	
4	Akbank T.A.Ş.	Özel Sermayeli Bankalar
5	Anadolubank A.Ş.	
6	Fibabanka A.Ş.	
7	Şekerbank T.A.Ş.	
8	Türk Ekonomi Bankası A.Ş.	
9	Türkiye İş Bankası A.Ş.	
10	Yapı ve Kredi Bankası A.Ş.	Yabancı Sermayeli Bankalar
11	Denizbank A.Ş.	
12	ING Bank A.Ş.	
13	Türkiye Garanti Bankası A.Ş.	
14	Alternatifbank A.Ş.	
15	Burgan Bank A.Ş.	
16	QNB Finansbank A.Ş.	

Çalışmada, girdi değişkenleri faiz giderleri, personel giderleri ve beklenen zarar karşılıkları olarak belirlenirken, çıktı değişkenleri faiz gelirleri ve dönem net karı olarak belirlenmiştir.

Tablo 2: Girdi-Çıktı Değişkenleri ve Veri Kaynakları

	Değişkenler	Kaynak
Girdi Değişkenleri	Faiz Giderleri– (I)FGİ	Türkiye Bankalar Birliği (TBB)-2019-2020
	Personel Giderleri -(I)PG	Türkiye Bankalar Birliği (TBB)-2019-2020
	Beklenen Zarar Karşılıkları -(I)BKZK	Türkiye Bankalar Birliği (TBB)-2019-2020
Çıktı Değişkenleri	Faiz Gelirleri– (O)FGE	Türkiye Bankalar Birliği (TBB)-2019-2020
	Dönem Net Karı-(O)NDK	Türkiye Bankalar Birliği (TBB)-2019-2020

Analizde kullanılan girdi ve çıktılarına ait minimum ve maksimum değerler, ortalamaları ile korelasyon ilişkisi Tablo 3 ve Tablo 4 ile gösterilmektedir.

Tablo 3: Girdi-Çıktı İstatistikleri (2019-2020)

2019	FGİ	BKZK	PG	FGE	NDK
Max	40,29	490	717	65,602	387
Min	1,494	1,204	1,446	2,158	-684
Ortalama	14,4165	98,5984	133,967	23,4818	16,5286
Standart Sapma	12,523	167,731	206,424	19,6727	210,25
2020	FGİ	BKZK	PG	FGE	NDK
Max	34,985	752	721	69,476	415
Min	1,076	1,143	1,582	1,612	-267
Ortalama	11,6268	160,052	141,058	23,5594	35,7941
Standart Sapma	11,4411	228,968	211,236	21,1965	134,165

Tablo 3, 2019 ve 2020 yıllarında analize katılan tüm bankaların girdi ve çıktı değerinde en yüksek ve en düşük değerlerle birlikte ortalamada meydana gelen değişimleri göstermektedir. Tablo 3' göre ortalamada en fazla değişimin BKZK girdisinde yaşandığı dikkati çekmektedir.

Tablo 4: Girdi-Çıktı Değerlerine ait Korelasyon İlişkisi (2019-2020)

2019	FGİ	BKZK	PG	FGE	NDK
FGİ	1	-0,5538	-0,594	0,98042	-0,0779

BKZK	-0,5538	1	0,25587	-0,5828	0,60162
PG	-0,594	0,25587	1	-0,6168	-0,2327
FGE	0,98042	-0,5828	-0,6168	1	-0,0779
NDK	-0,0779	0,60162	-0,2327	-0,0779	1
2020	FGİ	BKZK	PG	FGE	NDK
FGİ	1	-0,5221	-0,5663	0,96831	-0,1995
BKZK	-0,5221	1	0,27931	-0,5726	0,02955
PG	-0,5663	0,27931	1	-0,6233	0,20514
FGE	0,96831	-0,5726	-0,6233	1	-0,2259
NDK	-0,1995	0,02955	0,20514	-0,2259	1

Girdi ve çıktılar arasında farklı durumlar görülebilir. Örneğin bir girdi tüm çıktılarla düşük korelasyona sahip olabilir. Bu durumda söz konusu girdi analiz açısından anlamsızdır ve analizden çıkarılır. Diğer yandan girdiler ile çıktılar arasında çok yüksek korelasyon olabilir. Bu durumda girdiler ile çıktılar birbirinin yerine kullanılabilir. Bu nedenle, yüksek korelasyonlu girdi veya çıktı analiz dışında bırakılabilir. Tablo 4'e göre tüm değişkenler arasında bu kısıtları karşılayan bir değişkene rastlanmamıştır.

4. BULGULAR

Araştırmada VZA analizi ile elde edilen bulgular tablolar halinde bu bölümde gösterilmektedir. Tablo 5, KVB'lerin 2019-2020 yıllarında teknik etkinlik skorlarını, ölçek yapıları ve etkinlik derecelerini ortaya koymaktadır.

Tablo 5: KVB'lerin Etkinlik Skorları ve Ölçek Durumları

No.	KVB'ler	2019	Ölçek	2020	Ölçek
1	TC Ziraat Bankası	1	Sabit	1	Sabit
2	Akbank T.A.Ş.	1	Sabit	1	Sabit
3	Anadolubank A.Ş.	1	Sabit	1	Sabit
4	Şekerbank T.A.Ş.	1	Artan	0,9347	Artan
5	Türk Ekonomi Bankası A.Ş.	1	Sabit	1	Artan
6	Türkiye İş Bankası A.Ş.	1	Sabit	1	Azalan
7	Denizbank A.Ş.	1	Artan	1	Artan
8	ING Bank A.Ş.	1	Sabit	1	Artan
9	Türkiye Garanti Bankası A.Ş.	1	Sabit	1	Sabit
10	Burgan Bank A.Ş.	1	Artan	1	Artan
11	QNB Finansbank A.Ş.	1	Sabit	1	Sabit
12	Fibabanka A.Ş.	0,9874	Artan	1	Artan
13	TC Halk Bankası	0,9824	Sabit	1	Sabit
14	Alternatifbank A.Ş.	0,9677	Artan	1	Artan
15	Yapı ve Kredi Bankası A.Ş.	0,9221	Artan	0,8294	Azalan
16	TC Vakıf Bank	0,9048	Artan	0,9964	Artan

*0,99 değeri çalışmada "1" olarak kabul edilmiştir.

Tablo 5'e göre 2019 yılında etkin olan KVB'ler TC Ziraat Bankası, Akbank T.A.Ş., Anadolubank A.Ş., Şekerbank T.A.Ş., Türk Ekonomi Bankası A.Ş., Türkiye İş Bankası A.Ş., Denizbank A.Ş., ING Bank A.Ş., Türkiye Garanti Bankası A.Ş., Burgan Bank A.Ş. ve QNB Finansbank A.Ş. olurken, Fibabanka A.Ş., TC Halk Bankası, Alternatifbank A.Ş., Yapı ve Kredi Bankası A.Ş. ve TC Vakıf Bank etkisiz olmuştur. Bu bankalardan TC Ziraat Bankası, Akbank T.A.Ş., Anadolubank A.Ş., Türk Ekonomi Bankası A.Ş., Türkiye İş Bankası A.Ş. ING Bank A.Ş., Türkiye Garanti Bankası A.Ş. ve QNB Finansbank A.Ş. sabit ölçekte faaliyette bulunurken, Şekerbank T.A.Ş., Denizbank A.Ş. ve Burgan Bank A.Ş. artan ölçekte faaliyette bulunmuştur. 2019 yılında etkin olmayan KVB'lerden Fibabanka A.Ş., Alternatifbank A.Ş., Yapı ve Kredi Bankası A.Ş. ve TC Vakıf Bank artan ölçekte faaliyette bulunurken TC Halk

Bankası sabit ölçekte faaliyette bulunmuştur. Buna göre 2019 yılında 11 banka etkin iken 5 banka etkinsiz olmuştur.

Tablo 5’den 2020 yılına bakıldığında ise 16 bankadan 14 tanesi etkin üretim gerçekleştirmiş, 2 banka ise etkin olmayan üretim çizgisinde faaliyette bulunmuştur. 2019 yılında etkin olan bankaların 2020 yılında da etkin olduğu görülürken bu bankalar içerisinde yalnızca Şekerbank T.A.Ş.’nin etkinsiz olduğu tespit edilmiştir. Buna karşın 2019 yılında etkin olmayan Fibabanka A.Ş., TC Halk Bankası, Alternatifbank A.Ş. ve Vakfı Bank’ın, 2020 yılına gelindiğinde etkin üretim çizgisine yükselerek etkin KVB’ler arasında yer aldığı görülmektedir. Çalışmamızda, sadece Yapı ve Kredi Bankası A.Ş.’nin hem 2019 hem de 2020 yıllarında etkinsiz olduğu görülmüştür. Ölçek durumuna göre 2020 yılında TC Ziraat Bankası, Akbank T.A.Ş., Anadolubank A.Ş., Türkiye Garanti Bankası A.Ş., QNB Finansbank A.Ş ve TC Halk Bankası sabit ölçekte, Şekerbank T.A.Ş., Türk Ekonomi Bankası A.Ş., Denizbank A.Ş., ING Bank A.Ş., Burgan Bank A.Ş., Fibabanka A.Ş., Alternatifbank A.Ş. ve TC Vakıf Bank artan ölçekte üretim yaparken Türkiye İş Bankası A.Ş. ve Yapı ve Kredi Bankası A.Ş. azalan ölçekte üretim gerçekleştirmiştir.

Etkin KVB’ler ve etkin olmayan KVB’ler için belirlenen referans durumları ile ilgili bulgular Tablo 6 yardımıyla gösterilmiştir.

Tablo 6: Referans KVB’ler ve Referans Değerleri

No	KVB	Skor	Referanslar (λ)							
1	TC Ziraat Bankası	1	TC Ziraat Bankası	1						
2	TC Halk Bankası	1	TC Halk Bankası	1						
3	TC Vakıf Bank	0,9964	TC Vakıf Bank	0,521	TC Halk Bankası	0,092	Türk Ekonomi Bankası A.Ş.	0,004	Denizbank A.Ş.	0,383
4	Akbank T.A.Ş.	1	Akbank T.A.Ş.	1						
5	Anadolubank A.Ş.	1	Anadolubank A.Ş.	1						
6	Fibabanka A.Ş.	1	Fibabanka A.Ş.	1						
7	Şekerbank T.A.Ş.	0,9347	Fibabanka A.Ş.	0,603	ING Bank A.Ş.	0,397				
8	Türk Ekonomi Bankası A.Ş.	1	Türk Ekonomi Bankası A.Ş.	1						
9	Türkiye İş Bankası A.Ş.	1	Türkiye İş Bankası A.Ş.	1						
10	Yapı ve Kredi Bankası A.Ş.	0,8294	Akbank T.A.Ş.	0,721	Türkiye İş Bankası A.Ş.	0,007	Türkiye Garanti Bankası A.Ş.	0,2	QNB Finansbank A.Ş.	0,072
11	Denizbank A.Ş.	1	Denizbank A.Ş.	1						
12	ING Bank A.Ş.	1	ING Bank A.Ş.	1						
13	Türkiye Garanti Bankası A.Ş.	1	Türkiye Garanti Bankası A.Ş.	1						
14	Alternatifbank A.Ş.	1	Alternatifbank A.Ş.	1						
15	Burgan Bank A.Ş.	1	Burgan Bank A.Ş.	1						
16	QNB Finansbank A.Ş.	1	QNB Finansbank A.Ş.	1						

Tablo 6, 2020 yılına ait referans KVB değerlerini göstermektedir. Buna göre etkin olan tüm KVB’ler kendisine en az bir defa olmak üzere referans olmuştur. TC Vakıf Bank, 0,9964 değerindeki etkinlik skoru ile “1” etkinlik değerine çok yakın yerde bulunmaktadır. Bu nedenle TC Vakıf Bank, etkin KVB’ler gibi davranmakta ve kendisine diğer KVB’lerle birlikte referans olmuştur. Tablo 6’ya göre TC Halk Bankası, Türk Ekonomi Bankası A.Ş., Denizbank A.Ş., ING Bank A.Ş., İş Bankası A.Ş., Türkiye Garanti Bankası A.Ş ve QNB Finansbank A.Ş kendisiyle birlikte 2’şer defa referans olmuştur.

5. SONUÇ

Bu çalışmanın amacı, 2019-2020 yıllarında Türkiye’de bulunan 16 geleneksel bankanın etkinliğini ve performansını ölçmektir. Bu çalışmada, belirlenen girdi ve çıktılar kullanılarak çift yönlü Veri Zarflama Analizi (VZA) yardımıyla bankaların etkinlik ve performans ölçümleri yapılmıştır. Çalışma KVB’leri, sermaye yapısı bakımında 3 kamu sermayeli, 7 özel sermayeli ve 6 yabancı sermayeli olacak şekilde 3 grupta belirlenerek her biri bağımsız olacak şekilde analiz edilmiştir. Çalışmamızın en önemli yönlerinden bir tanesi de farklı sermaye yapısına sahip banka gruplarının etkinliklerini karşılaştırmalı olarak incelemektir. Çalışmada VZA modellerinden ölçeğe göre değişken getirili ve girdi odaklı BCC-I yöntemi tercih edilip, girdi değişkeni olarak, faiz giderleri, personel giderleri ve beklenen zarar karşılıkları; çıktı değişkeni olarak ise, faiz gelirleri ve dönem net karı değerleri kullanılmıştır. Analiz sonucunda, 2019 yılında 16 banka içinde 11 bankanın etkin olduğu, 2020 yılında ise 14 bankanın etkin olduğu tespit edilmiştir. Çalışmamızda, 2019 yılında etkin olmayan banka gruplarına baktığımızda 2 kamu bankasının, 2 özel sermayeli bankanın ve 1 yabancı sermayeli bankanın olduğu tespit edilmiştir. 2019 yılındaki bulgu sonuçlarına göre, özellikle büyük ölçekli yabancı sermayeli bankaların kamu ve özel sermayeli bankalara nazaran daha etkin olduğu ortaya konmuştur. Ayrıca çalışmamızın bulgu sonuçlarına göre, ilgili yıllarda faaliyet gösteren 16 bankanın ortalama etkinliği %89,2 olarak bulunmuştur. Teknik anlamda etkinlik skorunda “1” değerini en fazla yakalayarak etkin KVB olan banka grubu, 2019-yılında yabancı sermayeli bankalar iken, 2020 yılında yabancı ve kamu sermayeli bankalar olarak belirlenmiştir. Çalışmada her iki dönemde de etkinlik sınırının altında yer alan ve diğer bankalara göre verimli olmayan özel sermayeli Yapı ve Kredi Bankası A.Ş’nin çıktı miktarına göre beklenen zarar karşılıkları ve personel giderleri girdilerinin yüksek olduğu gözlemlenmiştir. Çalışma dönemi boyunca etkisiz olan Yapı ve Kredi Bankası A.Ş ve diğer bankaların etkinlik sınırına ulaşması için analizde ortaya konulan Potansiyel iyileştirme (Pi) miktarınca ve referans KVB’ler doğrultusunda girdi miktarını azaltmaları gerekmektedir. VZA metodu ile yapılan bu çalışmanın literatüre en önemli katkısı, güncel seriler kullanılarak banka etkinliklerine ait ölçümlemelerin yeni bulgular aracılığıyla ortaya konulması ve böylece özellikle bankalar tarafından atıl kullanılan ve/veya israf edilen kaynak kullanımının minimize edilmesine yardımcı olacak politikaların geliştirilmesinde önemli rol oynamasıdır.

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Türk Eximbank'ın 2017-2021 Dönemi Faaliyetlerinin DuPont Yöntemine Göre Analizi

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Özet: Genel olarak Eximbank'lar, ihracat yapan şirketlere finansman kolaylıkları sağlayan diğer ülkeler karşısında ortaya çıkan rekabet avantajları eşitsizliğini giderme ve kendi ülke ihracat düzeylerini, ülkenin ihracat yapan şirketlerine finansman kolaylığı sağlayarak arttırmayı amaçlayan bankalardır. Türk Eximbank, 1987 yılında Devlet Yatırım Bankası'nın yeniden düzenlenmesi ile onun yerine kurulmuş bir bankadır. Türk Eximbank, ihracatın artırılması, ihraç edilen mal ve hizmetlerin çeşitlendirilmesi, ihraç mallarına yeni pazarlar kazandırılması, dış müteahhitlik hizmetlerinin desteklenmesi gibi hizmetler için kredi, sigorta ve garanti hizmetleri sunmaktadır. Sunulan bu finansal hizmetler çerçevesinde Türk Eximbank ihracat konusuna yönelmiş bir ihtisas bankası durumuna gelmiştir. Türk Eximbank, kalkınma ve yatırım bankaları grubunda sınıflandırılmakta olup, devlet destekli ihracat kredi kuruluşudur. Bir bankanın başarısını görmek için bankanın getiri ve risk ölçümleri analiz edilmelidir. Getiri analizi için karlılık verilerine ulaşılmasına imkan sağlayacak bilanço ve gelir tablosu bilgileri yeterli olacaktır. Getiri analizine, özsermaye karlılığı modeliyle başlanması uygun olacaktır. Yaygın olarak DuPont modeli olarak bilinen özsermaye karlılığı modeli, bir bankanın karlılığının kaynaklarını görmek için özsermaye karlılığını birkaç temel bileşene ayırır. Özsermaye karlılığını oluşturan bileşenler; aktif karlılığı ile özsermaye çarpanının çarpımından oluşmaktadır. Aktif karlılığı, kar marjı ile aktif verimliliği çarpımıyla elde edildiği dikkate alındığında özsermaye karlılığı; kar marjı, aktif verimliliği ve özsermaye çarpanının çarpılması ile de hesaplanabilmektedir.

Bu çalışmada, Türk Eximbank'ın 2017 – 2021 dönemi faaliyetleri DuPont modeli olarak bilinen özsermaye karlılığı yöntemi ile incelenmektedir. Türk Eximbank, 2017 ve 2018 yıllarında KYB ortalamasından yüksek bankacılık sektörü ortalamasından daha düşük özsermaye karlılığına sahipken sonraki üç yılda hem KYB ortalamasından hem de bankacılık sektörü ortalamasından önemli derecede yüksek orana sahip olduğu görülmektedir. Türk Eximbank'ın daha yüksek özsermaye karlılığına sahip olmasının nedeni; incelenen dönem boyunca hem KYB ortalamasından hem de bankacılık sektörü ortalamasından daha düşük aktif karlılığına sahip olmasına rağmen daha yüksek özsermaye çarpanına sahip olması olduğu görülmektedir.

Anahtar Kelimeler: Kalkınma ve Yatırım Bankaları, Türk Eximbank, DuPont, Özsermaye Karlılığı

1. GİRİŞ

Genel olarak Eximbank, Amerika'nın ihracatını finanse etmek için ABD Hükümetince 1934 yılında kurulmuştur. Eximbank kredilerinden, Amerikan mallarının satın alımında kullanılmak kaydıyla, yabancı özel ya da kamu şirketleri veya çokuluslu şirketlerin yararlanması amaçlanmıştır. Krediler, projeye bağlı veya cari ithalat güçlüklerini gidermeye yönelik krediler şeklinde kullanılması hedeflenmiştir. Eximbank'lar, ihracat yapan şirketlere finansman kolaylıkları sağlayan diğer ülkeler karşısında ortaya çıkan rekabet avantajları eşitsizliğini giderme ve kendi ülke ihracat düzeylerini, ülkenin ihracat yapan şirketlerine finansman kolaylığı sağlayarak arttırmayı amaçlayan bankalardır. Türk Eximbank, mal ve hizmetlerin dışalım ve satımı ile yurtdışı müteahhitlik hizmetlerinin dış yatırımların ve yurtiçi yatırım malı üretim ve satışlarının finanse, sigorta ve garanti edilmeleri ve bu yoldan uluslararası pazarlardaki rekabet güçlerinin artırılması ve politik ve ticari risk taşıyan pazarlarda güven içinde iş yapılabilmesi için kurulmuş, bu amaçlara ek olarak Devlet Yatırım Bankasının da yerini almıştır. Türk Eximbank, kalkınma ve yatırım bankaları grubunda sınıflandırılmakta olup, devlet destekli ihracat kredi kuruluşudur.

Bu çalışmada Türk Eximbank'ın 2017-2021 dönemi faaliyetleri DuPont yöntemine göre analiz edilmektedir. Çalışmanın giriş kısmından sonra Türk Eximbank'ın kuruluşu, amaçları ve sunduğu hizmetler anlatılmakta, üçüncü bölümde Türk Eximbank'ın fon kaynakları, dördüncü bölümde Türk Eximbank'ın 2017-2021 dönemine ilişkin finansal göstergeleri incelenmekte, beşinci bölümde Türk Eximbank'ın 2017-2021 dönemi faaliyetlerinin Dupont yöntemine göre analizi yapılmaktadır. Analiz kısmında aktif karlılığı ve özkaynak çarpanı bileşenlerinden oluşan özkaynak karlılığı, kar marjı ve aktif verimliliği bileşenlerinden oluşan aktif karlılığı ve kar marjı, aktif verimliliği ile özkaynak çarpanı bileşenlerinden oluşan özkaynak karlılığı incelenmektedir.

2. TÜRK EXİMBANK'IN KURULUŞU, AMAÇLARI VE SUNDUĞU HİZMETLER

Genel olarak Eximbank, Amerika'nın ihracatını finanse etmek için ABD Hükümetince 1934 yılında kurulmuştur. Eximbank kredilerinden, Amerikan mallarının satın alımında kullanılmak kaydıyla, yabancı özel ya da kamu şirketleri veya çokuluslu şirketlerin yararlanması amaçlanmıştır. Krediler, projeye bağlı veya cari ithalat güçlüklerini gidermeye yönelik krediler şeklinde kullanılması hedeflenmiştir. Kredilerin süresi 15-20 yıl arasında değişmektedir. ABD, Marshall Yardımları başlamadan önce, Avrupa'nın imarına katkıda bulunmak amacıyla bu ülkeden yapılacak ithalatın finansmanında kullanılmak üzere Avrupa ülkelerine bu kanaldan önemli ölçüde krediler açmıştır (Seyidoğlu, 1992: 245).

2.1. Kuruluş ve Amaçları

Türk Eximbank, “mal ve hizmetlerin dışalım ve satımı ile yurtdışı müteahhitlik hizmetlerinin dış yatırımların ve yurtiçi yatırım malı üretim ve satışlarının finanse, sigorta ve garanti edilmeleri” ve bu yoldan “uluslararası pazarlardaki rekabet güçlerinin artırılması” ve “politik ve ticari risk taşıyan pazarlarda güven içinde iş yapılabilmesi” için kurulmuş, bu amaçlara ek olarak Devlet Yatırım Bankasının da yerini almıştır. Bu kuruluş, “ihracat projelerinde”, büyük ihracat şirketleri aracılığıyla üretici kuruluşlara, “para piyasası koşullarından daha ucuz krediler sağlamakta” ve “dış yatırımların sigorta ve garanti edilmesi” işlevlerini üstlenmektedir (Yüksel vd., 2004: 30).

Türk Eximbank, 1987 yılında Devlet Yatırım Bankası'nın yeniden düzenlenmesi ile onun yerine kurulmuş bir bankadır. Devlet Yatırım Bankası, İktisadi Devlet Teşekküllerinin yıllık programlarında yer alan yatırım projelerinin finansman ihtiyaçlarını karşılamakla görevli bir banka iken 17.6.1987 tarih ve 87/11914 sayılı Bakanlar Kurulu Kararı ile bankanın Türk Eximbank olarak yeniden düzenlenmesi kabul edilmiştir. Bankanın yeni amaçları ihracatın geliştirilmesi doğrultusunda dış satımın finanse edilmesi ve dış satım sigortası sağlamak olmuştur. Buna göre Türk Eximbank, ihracatın artırılması, ihraç edilen mal ve hizmetlerin çeşitlendirilmesi, ihraç mallarına yeni pazarlar kazandırılması, dış müteahhitlik hizmetlerinin desteklenmesi gibi hizmetler için kredi, sigorta ve garanti hizmetleri sunmaktadır. Sunulan bu finansal hizmetler çerçevesinde Türk Eximbank ihracat konusuna yönelmiş bir ihtisas bankası durumuna gelmiştir (Seyidoğlu, 1992: 893). Türk Eximbank, kalkınma ve yatırım bankası (KYB) grubunda sınıflandırılmakta olup, devlet destekli ihracat kredi kuruluşudur (Türk Eximbank, 2021: 5).

Türk Eximbank'ın amaçları; ihracatın geliştirilmesi, ihraç edilen mal ve hizmetlerin çeşitlendirilmesi, ihraç mallarına yeni pazarlar kazandırılması, ihracatçıların uluslararası ticarete paylarının artırılması ve girişimlerinde gerekli desteğin sağlanması, ihracatçıları ile yurt dışında faaliyet gösteren müteahhitler ve yatırımcılara uluslararası piyasalarda rekabet gücü ve güvence kazandırılması ve yurt dışında yapılacak yatırımlar ile ihracata yönelik yatırım malları üretim ve satışının desteklenerek teşvik edilmesi olarak sayılabilmektedir (Türk Eximbank, 2021: 13)

2.2. Türk Eximbank'ın Sunduğu Hizmetler

Türk Eximbank'ın sunduğu hizmetler; yurt içi veya yurt dışı programlarla ihracatçılara nakdi ve gayri nakdi krediler kullandırmak, ihracatçılara kısa vadeli ile orta ve uzun vadeli krediler kullandırmak, ihracatçıların ve grup şirketlerinin alacaklarını ticari risklere karşı sigortalamak olarak sayılabilmektedir (Türk Eximbank, 2021: 5).

3. TÜRK EXİMBANK'IN FON KAYNAKLARI

3.1. Uluslararası Piyasalardan Döviz Cinsinden Fon Kaynağı Sağlanması

Türk Eximbank, ihracatçılara 2020 yılında uluslararası piyasalardan 3 milyar ABD \$ tutarında döviz cinsinden fon kaynağı sağlayarak TCMB kaynağı hariç toplam 9,5 milyar \$ düzeyinde fonu kullandırmıştır. 15,7 milyar ABD \$ seviyesindeki TCMB reeskont kaynağı ile birlikte kullanılan toplam fon tutarı bir önceki yıla göre TL krediler de dâhil olmak üzere %2 artırarak 25,6 milyar ABD \$ yükseltmiştir. Bununla birlikte yıl içerisinde yaklaşık 3,2 milyar ABD \$ tutarında kredi anapara ödemesi gerçekleştirmiştir (Türk Eximbank, 2021: 29).

3.2. TL Cinsinden Fon Kaynakları

Türk Eximbank 2020 yılında kullandığı TL kredilerinin tamamına yakınının fon kaynağı; ödenmiş sermaye ve faiz tahsilatları ile oluşan TL kaynaklarıdır. Türk Eximbank tarafından 2020 yılında borçlanma ile temin edilen fon kaynakları şu şekildedir (Türk Eximbank, 2021: 30):

- i. TL Reeskont Kredileri de dahil 31 Aralık 2020 tarihi itibarıyla TCMB tarafından sağlanan 15,7 milyar ABD \$ düzeyinde reeskont kredileri,
- ii. Bankalar konsorsiyumundan sağlanan 330 milyon ABD \$ kredi,
- iii. 465,5 milyon € ve 211 milyon ABD \$ 1 yıl vadeli sendikasyon kredisi
- iv. T.C. Hazine ve Maliye Bakanlığı'nın kontrgarantisi ve Uluslararası İmar ve Kalkınma Bankası'nın %50 anapara garantisi ile 10 yıl vadeli 380 milyon €,
- v. Sendikasyon kredisi kapsamında 1 yıl vadeli 397,9 milyon € ve 99,8 milyon ABD \$,
- vi. İslam Kalkınma Bankası'ndan 10 yıl vadeli 45 milyon ABD \$,
- vii. Karadeniz Ticaret ve Kalkınma Bankası'ndan 2 yıl vadeli 25 milyon € ve Çin Endüstri ve Ticaret Bankası'ndan 2 yıl vadeli 200 milyon €,
- viii. Yurt dışındaki bankalardan sağlanan 432,2 milyon ABD \$ diğer krediler,
- ix. Toplam Getiri Swap ve Repo işlemleri ile sağlanan 186 milyon ABD \$.

4. TÜRK EXİMBANK'IN 2017-2021 DÖNEMİNE İLİŞKİN FİNANSAL GÖSTERGELERİ

Ekonomik büyümenin ihracatın gelişimine, ihracatın da ekonomik büyümenin gelişimine katkı sağlamasından dolayı ihracatçıların finansman ihtiyaçlarının karşılanmasında Türk Eximbank önemli görevler üstlenmektedir. İhracatta meydana gelen olumlu gelişmeler Türk Eximbank'ın sağlamış olduğu kredilere talebi artırmaktadır (Bülbül ve Demiral, 2016: 36).

Bu başlık altında Türk Eximbank'ın, KYB'lerin ve mevduat bankalarının 2017-2021 dönemi toplam aktiflere göre ve toplam krediler ve alacaklara göre sektör payları ile toplam kredilerin toplam varlıklar içerisindeki payları incelenecektir.

Tablo 1, Türk Eximbank'ın, KYB'lerin ve mevduat bankalarının 2017-2021 dönemi toplam aktiflere göre sektör paylarını göstermektedir.

Tablo 1: Toplam Aktiflere Göre Sektör Payları (%)

	2017	2018	2019	2020	2021
Eximbank	2,8	3,8	3,9	3,6	3,8
Kalkınma ve Yatırım Bankaları	5,7	7,0	7,2	6,8	7,2
Mevduat Bankaları	94,3	93,0	92,8	93,2	92,8
Türk Bankacılık Sektörü	100,0	100,0	100,0	100,0	100,0

Kaynak: TBB, Türkiye'de Bankacılık Sistemi Seçilmiş Rasyolar 2011 - 2021, Temmuz 2022.

Tablo 1'e göre, 2017 yılında %2,8 olan pay, 2021 yılında %3,8'e kadar yükselmiştir. Aynı dönemde KYB'lerde benzer bir gelişme göstermiş, toplam aktiflere göre sektör payı 2017 yılında %5,7 iken 2021 yılında %7,2'ye kadar yükselmiş, bu gelişme doğrultusunda aynı dönemde mevduat bankalarının payı 2017'de %94,3'ten 2021'de %92,8'e gerilemiştir. Bu çerçevede Türk Eximbank'ın KYB'ler içerisinde toplam aktiflere göre en yüksek paya sahip KYB olduğu görülmektedir.

Tablo 2, Türk Eximbank'ın, KYB'lerin ve mevduat bankalarının 2017-2021 dönemi toplam krediler ve alacaklara göre sektör paylarını göstermektedir.

Tablo 2: Toplam Krediler ve Alacaklara Göre Sektör Payları (%)

	2017	2018	2019	2020	2021
Eximbank	3,9	5,5	5,2	5,0	5,9
Kalkınma ve Yatırım Bankaları	6,9	8,8	8,4	7,9	9,1

Mevduat Bankaları	93,1	91,2	91,6	92,1	90,9
Türk Bankacılık Sektörü	100,0	100,0	100,0	100,0	100,0

Kaynak: TBB, Türkiye'de Bankacılık Sistemi Seçilmiş Rasyolar 2011 - 2021, Temmuz 2022.

Tablo 2'ye göre Türk Eximbank'ın 2017-2021 dönemi toplam krediler ve alacaklara göre sektör payı KYB'ler ve mevduat bankaları ile karşılaştırmalı olarak incelendiğinde; toplam aktiflere göre sektör payına benzer gelişme göstermiştir. Türk Eximbank'ın 2017 yılında %3,9 olan sektör payı 2021 yılında %5,9'a yükselmiş, aynı dönemde KYB'lerin payı %6,9'dan %9,1'e yükselirken mevduat bankalarının payı %93,1'den %90,9'a kadar gerilemiştir. Toplam aktiflere göre sektör payında olduğu gibi toplam krediler ve alacaklara göre sektör payında da Türk Eximbank KYB'ler içerisinde en yüksek paya sahip olan KYB olmuştur.

Tablo 3: Toplam Krediler / Toplam Varlıklar (%)

	2017	2018	2019	2020	2021
Eximbank	94,0	92,9	88,0	87,7	89,4
Kalkınma ve Yatırım Bankaları	81,2	81,7	76,4	73,6	72,6
Mevduat Bankaları	66,1	63,4	64,7	63,0	56,3
Türk Bankacılık Sektörü	66,9	64,7	65,5	63,7	57,5

Kaynak: TBB, Türkiye'de Bankacılık Sistemi Seçilmiş Rasyolar 2011 - 2021, Temmuz 2022.

Tablo 3, Türk Eximbank'ın, KYB'lerin ve mevduat bankalarının toplam kredilerin toplam varlıklar içerisindeki payını göstermektedir. Tablo 3'e göre Türk Eximbank'ın oranı 2017 yılında %94 iken 2020 yılında %87,7'ye kadar gerilemiş, 2021 yılında %89,4'e yükselmiştir. KYB'ler için bu oran 2017 yılında %81,2'den 2021 yılında %72,6'ya kadar, mevduat bankaları için ise 2017'de %66,1'den 2021 yılında %56,3'e gerilemiştir. Bu durumda Türk Eximbank incelenen dönem boyunca hem mevduat bankalarından hem de KYB'lerden daha yüksek orana sahip olurken mevduat bankaları ise sektör ortalamasının altında orana sahip olmuştur.

Tablo 4, Türk Eximbank'ın, KYB'lerin ve mevduat bankalarının 2017-2021 dönemi bilanço hesaplarını ve hesapların yıllar itibarıyla değişimini göstermektedir.

Tablo 4: Türk Eximbank'ın 2017-2021 Dönemi Bilanço Hesapları ve Değişimi

Bilanço Hesapları (Milyon TL)	2017	2018	2017 - 2018 Değişim	2019	2018 - 2019 Değişim	2020	2019 - 2020 Değişim	2021	2020 - 2021 Değişim
Krediler	80.271	129.497	%61,3	142.892	%10,3	178.254	%24,8	287.474	%61,3
Toplam Aktifler	85.375	139.429	%63,3	162.883	%16,8	204.227	%25,4	322.378	%57,9
Alınan Krediler	67.369	108.731	%61,4	127.585	%17,3	160.631	%25,9	250.365	%55,9
İhraç Edilen Menkul Kıymetler (Net)	10.279	17.179	%67,1	18.792	%9,4	22.953	%22,1	37.284	%62,4
Sermaye Benzeri Borçlanma Araçları	32	2.995	%9358	4.026	%34,4	4.464	%10,9	5.524	%23,8
Para Piyasalarına Borçlar	152	139	%-8,6	-	-	1.376	-	6.518	%373,7
Özkaynaklar	5.774	7.654	%32,6	9.080	%18,6	11.414	%25,7	14.550	%27,5
Toplam Pasifler	85.375	139.429	%63,3	162.883	%16,8	204.227	%25,4	322.378	%57,9

Kaynak: Türk Eximbank Faaliyet Raporu 2021: 6, 71; 2019: 8; 2017: 6.

Tablo 4'e göre toplam aktifler bir önceki yıla göre 2017 yılında %25, 2018 yılında %63,3, 2019 yılında %16,8, 2020 yılında %25,4 ve 2021 yılında %57,9 değişmiştir. İncelenen dönem içerisinde en yüksek değişim oranı %63,3 ile 2018 yılında olurken en düşük değişim oranı %16,8 ile 2019 yılında gerçekleşmiştir. Aynı dönem için bir önceki yıla göre kredilerdeki değişim oranı incelendiğinde; 2017 yılında %30,3, 2018'de %61,3, 2019'da

%10,3, 2020 yılında %24,8 ve 2021 yılında %61,3 olarak gerçekleşmiştir. İncelenen dönem içerisinde kredilerdeki değişim oranının en yüksek olduğu yıl aktiflerdeki değişim oranına benzer biçimde %61,3 ile 2018 ve 2021 yıllarında, en düşük değişim oranı da yine aktiflerdeki değişim oranına benzer biçimde %10,3 ile 2019 yılında olmuştur. Bir önceki yıla göre kredilerdeki değişim oranı 2017 ve 2021 yıllarında toplam aktiflerdeki değişim oranının üzerinde gerçekleşirken 2018, 2019 ve 2020 yıllarında aktiflerdeki değişim oranının altında kalmıştır. Kredilerin toplam aktiflerdeki payı 2021 yılında %89,2 olarak gerçekleşmiştir. Bu da Türk Eximbank'ın fon kaynaklarının büyük çoğunluğunu kredi olarak kullanarak ilgili firmaları desteklediğini göstermektedir. Tablo 4'e göre Türk Eximbank'ın fon kaynaklarını (bilançonun pasifini); alınan krediler, ihraç edilen menkul kıymetler, sermaye benzeri borçlanma araçları, para piyasalarından alınan borçlar ve özkaynaklar hesapları oluşturmaktadır. Bankanın özkaynakları 2021 yılında toplam pasiflerin %4,5'ini oluştururken, alınan krediler %77,7'lik pay ile en yüksek fon kaynağını oluşturmaktadır. 2021 yılında toplam pasiflerde ihraç edilen menkul kıymetlerin payı %11,6, sermaye benzeri borçlanma araçlarının payı %1,7 olmuştur. Toplam pasifleri oluşturan hesapların 2017-2021 dönemi yıllar itibarıyla değişim oranı incelendiğinde; toplam pasiflerde en yüksek paya sahip olan alınan kredilerdeki değişim oranı ile ihraç edilen menkul kıymetlerdeki değişim oranı toplam aktifler ve kullanılan kredilerdeki değişim oranına benzer biçimde gelişmiştir. Toplam pasifleri oluşturan hesaplarda en istikrarsız değişim sermaye benzeri borçlanma araçlarında görülmektedir. 2017 yılında %-63,6 olan değişim 2018 yılında %9358 olmuş, 2019, 2020 ve 2021 yıllarında sırasıyla %34,4, %10,9 ve %23,8 olarak gerçekleşmiştir. Özkaynaklardaki değişim ise 2017 yılında %11 iken 2018 yılında %32,6, 2019, 2020 ve 2021 yıllarında sırasıyla %18,6, %25,7 ve %27,5 olmuştur (Arslan ve Bora, 2022: 108).

Tablo 5, Türk Eximbank'ın, KYB'lerin ve mevduat bankalarının 2017-2021 dönemi kredi faaliyetlerini ve bu faaliyetlerin yıllar itibarıyla değişimini göstermektedir.

Tablo 5: Kredi Faaliyetleri, 2017 – 2021, (milyon ABD \$)

Krediler (Milyon ABD \$)	2017	2018	2017 - 2018 Değişim	2019	2018 - 2019 Değişim	2020	2019 - 2020 Değişim	2021	2020 - 2021 Değişim	2021 Toplam / Grup içindeki payı
Kısa Vadeli Toplam Krediler	21.522	25.026	%16,3	25.155	%0,5	21.606	%-14,1	17.932	%-17	%39/%80
Orta ve Uzun Vadeli Krediler	2.586	2.225	%-14	1.523	%-32	6.892	%352	4.575	%-33,6	%10/%20
Toplam Krediler	24.108	27.251	%13,0	26.679	%-2,1	28.498	%6,8	22.507	%-21	%48,9
Toplam Sigorta	15.226	16.901	%11	17.430	%3,1	17.141	%-1,5	23.566	%37,5	%51,2
Toplam Kredi/Sigorta/ Garanti Desteği	39.324	44.152	%12,3	44.109	%-0,001	45.639	%3,5	46.073	%-1	%100

Kaynak: Türk Eximbank Faaliyet Raporu 2021: 6, 71; 2019: 8; 2017: 6.

Tablo 5'e göre Türk Eximbank'ın kredi faaliyetleri krediler, sigorta ve garanti desteklerinden oluşmaktadır. 2021 yılında toplam kredilerin toplam kredi/sigorta/ garanti desteği içerisindeki payı %48,9 olmuştur. Toplam krediler kendi içerisinde kısa vadeli krediler ile orta ve uzun vadeli krediler olmak üzere iki gruba ayrılmaktadır. 2021 yılında toplam krediler içerisinde kısa vadeli kredilerin payı %80, orta ve uzun vadeli kredilerin payı %20 olmuştur. Buna göre Türk Eximbank 2021 yılında ilgili firmalara kredi kullanırken ağırlıklı olarak kısa vadeli kredileri tercih etmiştir. Aynı yılda toplam kredi/sigorta/ garanti desteği içerisinde kısa vadeli kredilerin payı %39 olurken orta ve uzun vadeli kredilerin payı %10 olmuştur. Yıllar itibarıyla toplam kredi/sigorta/ garanti desteğindeki değişim oranı incelendiğinde, bir önceki yıla göre 2017 yılında %19,2, 2018 yılında %12,3 artarken 2019 yılında değişim olmamış, 2020 yılında %3,5 artarken 2021 yılında %1 azalmıştır. Yıllar itibarıyla toplam kredilerdeki değişim oranı incelendiğinde; bir önceki yıla göre 2017 yılında %9,8, 2018 yılında %13 artarken 2019 yılında %-2,1 azalmış, 2020 yılında %6,8 artmış ancak 2021 yılında %21 azalmıştır. Kısa vadeli krediler 2017 yılında %13,4, 2018 yılında %16,3, 2019 yılında %0,5 artarken 2020 yılında %14,1, 2021 yılında %17 azalmıştır. Aynı yıllarda orta ve uzun vadeli krediler kısa vadeli kredilerin tersine 2017 yılında %13, 2018 yılında %14 ve 2019 yılında %32 azalırken, 2020 yılında %352 artmış, ancak 2021 yılında %33,6 azalmıştır. Burada Türk Eximbank'ın yıllar itibarıyla vadeye göre kredi tercihi görülmektedir. 2017-2019 döneminde orta ve uzun vadeli krediler yerine kısa vadeli krediler tercih edilirken, 2020 ve 2021 yıllarında tercihte önemli değişiklik olmuş ve kısa vadeli krediler yerine orta ve uzun vadeli krediler tercih edilmiş ve önemli ölçüde de artırılmıştır (Arslan ve Bora, 2022: 109).

Tablo 6, Türk Eximbank'ın 2017-2021 dönemi kar – zarar hesaplarını göstermektedir.

Tablo 6: Türk Eximbank'ın 2017-2021 Dönemi Kar – Zarar Hesapları

Kar – Zarar Hesapları (Milyon TL)	2017	2018	2017 - 2018 Değişim	2019	2018 - 2019 Değişim	2020	2019 - 2020 Değişim	2021	2020 - 2021 Değişim
Faiz Gelirleri	2.238	3.391	%51,5	4.856	%43,2	5.012	%3,2	7.191	%43,5
Kredilerden Alınan Faizler	2.092	3.046	%45,6	4.342	%42,6	4.229	%-2,6	6.010	%42,1
Faiz Giderleri	-1.224	-2.532	%106,8	-3.742	%47,8	-3.789	%1,3	-4.388	%15,8
Net Faiz Geliri	1.014	860	%-15,2	1.115	%29,7	1.223	%9,7	2.802	%129,1
Net Komisyon ve Diğer Faaliyet Gelirleri	207	155	%-25,1	183	%18,1	239	%30,6	557	%133,1
Beklenen Zarar Karşılıkları	-77	-82	%6,5	-133	%62,2	-370	%178,2	-232	%-37,3
Personel Giderleri	-133	-170	%27,8	-226	%32,9	-261	%15,5	-301	%15,3
Diğer Faaliyet Giderleri	-162	-102	%37,0	-134	%31,4	-151	%12,7	-213	%41,1
Dönem Net Kârı	569	842	%48	1.432	%70,1	1.511	%5,5	3.107	%105,6

Kaynak: Türk Eximbank Faaliyet Raporu 2021: 6, 71; 2019: 8; 2017: 6.

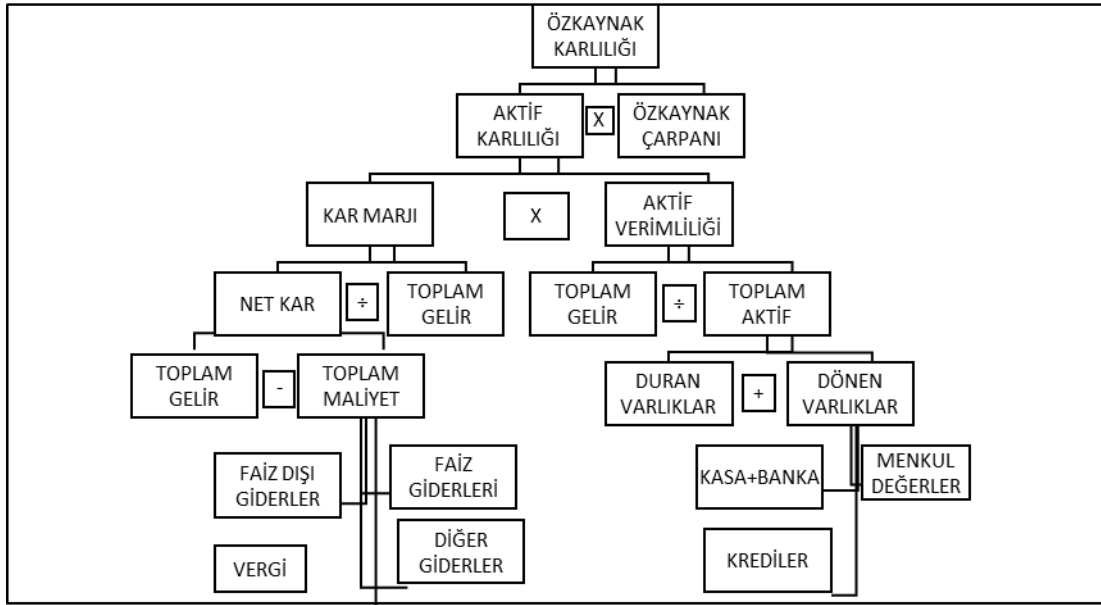
Tablo 6'ya göre faaliyet sonucunu gösteren dönem net karı bir önceki yıla göre 2017 yılında %35,2, 2018 yılında %48, 2019 yılında %70, 2020 yılında %5,5 artarken, 2021 yılında artış oranı %105,6 olarak gerçekleşmiştir. Net karın kaynakları ve etkileyen unsurlar incelendiğinde; temel kaynağın faiz gelirleri olduğu görülmektedir. Faiz gelirleri dışında net komisyon ve diğer faaliyet gelirleri, beklenen zarar karşılıkları, personel giderleri ve diğer faaliyet giderleri dönem net karını etkileyen diğer unsurlar olmaktadır. Faiz gelirleri bir önceki yıla göre 2017 yılında %36,2, 2018 yılında %51,5, 2019 yılında %43,2, 2020 yılında ise sadece %3,2 oranında artarken, 2021 yılında artış oranı %43,5 olmuştur. Aynı yıllarda faiz giderlerindeki artış faiz gelirlerindeki artışın üzerinde gerçekleşmiş, faiz giderlerinin bir önceki yıla göre artış oranı 2017 yılında %56,1, 2018 yılında %106,8, 2019 yılında %47,8 olurken 2020 yılında artış oranı %1,3, 2021 yılında %15,8 olarak gerçekleşmiştir. Bu çerçevede net faiz gelirindeki değişim 2017 yılında %18 artış iken 2018 yılında %15,2 net faiz giderinde artış olarak gerçekleşmiş, 2019, 2020 ve 2021 yıllarında tekrar faiz gelirinde artış olarak gerçekleşmiş ve faiz gelirindeki artış sırasıyla %29,7, %9,7 ve %129,1 olmuştur (Arslan ve Bora, 2022: 110).

5. TÜRK EXİMBANK'IN 2017-2021 DÖNEMİ FAALİYETLERİNİN DUPONT YÖNTEMİNE GÖRE ANALİZİ

5.1. DuPont Analiz Yöntemi

Bir bankanın yönetiminin hedeflerine ulaşip ulaşmadığını görmek için bankanın getiri ve risk ölçümleri analiz edilmelidir. Başlangıç aşamasında, analiz için karlılık verilerine ulaşılmasına imkan sağlayacak bilanço ve gelir tablosu bilgileri yeterli olacaktır. Analize, özsermaye karlılığı modeliyle başlanması uygun olacaktır. Yaygın olarak DuPont modeli olarak bilinen özsermaye karlılığı modeli, bir bankanın karlılığının kaynaklarını görmek için özsermaye getirisini birkaç temel bileşene ayırır. Ardından, bankanın geliştirmek isteyebileceği alanları belirlemek için bileşenler analiz edilir (Rose ve Fraser, 1988: 201).

Şekil 1: Bankacılık Sektörü Açısından DuPont Şeması



Kaynak: Hempel & Simonson, 1999: 60; Berk, 1999: 53; Tandon vd., 2016: 66.

DuPont analiz yöntemi, işletmelerin dönemsel faaliyetinin sonucunu özkaynak karlılığı ile ölçen çoklu finansal oran analizi yöntemi olarak da tanımlanabilmektedir. Şekil 1’de gösterilen bankacılık sektöründe özkaynak karlılığını oluşturan bileşenler aşağıdaki şekilde formüle edilebilmektedir (Rose ve Fraser, 1988: 201).

$$\text{Özkaynak Karlılığı} = \frac{\text{Net Kar}}{\text{Toplam Özkaynak}} \quad (1)$$

$$\text{Özkaynak Karlılığı} = \text{Aktif Karlılığı} \times \text{Özkaynak Çarpanı} \quad (2)$$

$$\text{Özkaynak Karlılığı} = \frac{\text{Net Kar}}{\text{Toplam Aktifler}} \times \frac{\text{Toplam Aktifler}}{\text{Toplam Özkaynak}} \quad (3)$$

$$\text{Aktif Karlılığı} = \text{Kar Marjı} \times \text{Aktif Verimliliği} \quad (4)$$

$$\text{Özkaynak Karlılığı} = \text{Kar Marjı} \times \text{Aktif Verimliliği} \times \text{Özkaynak Çarpanı} \quad (5)$$

Dönem sonu elde edilen net karın toplam özkaynaklara bölünmesi (1) ile özkaynak karlılığı hesaplanmaktadır. Ayrıca özkaynak karlılığı, aktif karlılığı ile özkaynak çarpanının çarpılması (2) sonucu da hesaplanabilmektedir. Aktif karlılığı, kar marjı ile aktif verimliliği çarpılarak elde (4) edildiği dikkate alındığında özkaynak karlılığı; kar marjı, aktif verimliliği ve özkaynak çarpanının çarpılması (5) ile hesaplanabilmektedir. İncelenen bankanın/bankaların özkaynak karlılığında bir problem varsa bu problemin kaynağının bulunması açısından bu formül yol gösterici olmaktadır. Buna göre, bir bankanın özkaynak karlılığı sektör ortalamasının altında kalmışsa bunun nedeninin kar marjından mı, aktif verimliliğinden mi yoksa özkaynak çarpanından mı kaynaklandığı kolayca belirlenebilmektedir (Arslan ve Bora, 2020: 543).

5.1. Özkaynak Karlılığı ve Bileşenleri (Aktif Karlılığı x Özkaynak Çarpanı)

Tablo 7, Türk Eximbank, KYB’ler ve bankacılık sektörü ortalamasına ait aktif karlılığı ile özkaynak çarpanının çarpımından oluşan özkaynak karlılığını 2017-2021 dönemi için göstermektedir.

Tablo7: Özkaynak Karlılığı ve Bileşenleri (Aktif Karlılığı x Özkaynak Çarpanı)

Özkaynak Karlılığı (Net Dönem Karı / Özkaynak) (%)						
	2017	2018	2019	2020	2021	Ortalama
Eximbank	10,4	12,5	17,1	14,7	23,9	15,7
KYB Ortalaması	10,3	11,7	13,7	12,5	16,9	13,0
Bankacılık Sektörü Ortalaması	14,9	13,8	10,6	10,5	14,0	12,8
Aktif Karlılığı (Net Dönem Karı / Aktifler) (%)						
	2017	2018	2019	2020	2021	Ortalama

Eximbank	0,7	0,7	0,9	0,8	1,2	0,9
KYB Ortalaması	1,8	1,8	2,0	1,8	2,0	1,9
Bankacılık Sektörü Ortalaması	1,7	1,5	1,2	1,1	1,2	1,3

Özkaynak Çarpanı (Toplam Aktifler / Özkaynaklar) (X)						
	2017	2018	2019	2020	2021	Ortalama
Eximbank	14,8	18,2	17,9	17,9	22,2	18,2
KYB Ortalaması	5,8	6,9	6,8	7,3	9,6	7,3
Bankacılık Sektörü Ortalaması	9,0	9,0	8,9	9,9	12,5	9,9

Kaynak: TBB, Türkiye'de Bankacılık Sistemi Seçilmiş Rasyolar, 2011-2021, Temmuz 2022; TBB, Türkiye'de Bankacılık Sistemi, 1959-2021, Haziran 2022; Türk Eximbank Faaliyet Raporu 2021: 6; 2019: 8; 2017: 6.

Türk Eximbank'ın 2017 – 2021 dönemi özkaynak karlılığı incelendiğinde; 2017 ve 2018 yıllarında KYB ortalamasından yüksek bankacılık sektörü ortalamasından daha düşük özkaynak karlılığına sahipken sonraki üç yılda hem KYB ortalamasından hem de bankacılık sektörü ortalamasından önemli derecede yüksek orana sahip olduğu görülmektedir. İncelenen dönem ortalamasına göre de Türk Eximbank hem KYB ortalamasından hem de bankacılık sektörü ortalamasından daha yüksek özkaynak karlılığı oranına sahip olmuştur. Türk Eximbank'ın daha yüksek özkaynak karlılığına sahip olmasının nedeni aktif karlılığı ile özkaynak çarpanı bileşenleri açısından incelendiğinde; Türk Eximbank'ın incelenen dönem boyunca hem KYB ortalamasından hem de bankacılık sektörü ortalamasından daha düşük aktif karlılığına sahip olmasına rağmen daha yüksek özkaynak çarpanına sahip olması olduğu görülmektedir. İncelenen 2017 – 2021 dönem ortalamasına bakıldığında hem Türk Eximbank'ın hem de KYB'lerin özkaynak karlılığı bankacılık sektörü ortalamasından daha yüksek olduğu görülmektedir. KYB'lerin özkaynak karlılığının yüksek olmasının nedeni aktif karlılığının hem Türk Eximbank'tan hem de bankacılık sektör ortalamasından yüksek olmasıdır. Türk Eximbank'ın özkaynak çarpanı ortalaması hem KYB'lerin ortalamasından hem de bankacılık sektör ortalamasından yüksek gerçekleşmiştir. Bu durumun temel nedeni Türk Eximbank'ın toplam aktiflerde kredilerin payının hem KYB'lerden hem de bankacılık sektöründen yüksek olmasıdır.

5.2. Aktif Karlılığı ve Bileşenleri (Kar Marjı x Aktif Verimliliği)

Tablo 8, Türk Eximbank, KYB'ler ve bankacılık sektörü ortalamasına ait kar marjı ile aktif verimliliği çarpımından oluşan aktif karlılığını 2017-2021 dönemi için göstermektedir.

Tablo 8: Aktif Karlılığı ve Bileşenleri (Kar Marjı x Aktif Verimliliği)

Aktif Karlılığı (Net Dönem Karı / Aktifler) (%)						
	2017	2018	2019	2020	2021	Ortalama
Eximbank	0,7	0,7	0,9	0,8	1,2	0,9
KYB Ortalaması	1,8	1,8	2,0	1,8	2,0	1,9
Bankacılık Sektörü Ortalaması	1,7	1,5	1,2	1,1	1,2	1,3

Kar Marjı (Net Kar / Toplam Gelir**) (%)						
	2017	2018	2019	2020	2021	Ortalama
Eximbank	14,4	22,6	25,3	24,8	36,2	24,6
KYB Ortalaması	33,1	28,8	31,1	31,6	33,7	31,7
Bankacılık Sektörü Ortalaması	17,4	13,0	10,4	12,0	12,5	13,1

Aktif Verimliliği (Toplam Gelir/Toplam Aktifler) (%)						
	2017	2018	2019	2020	2021	Ortalama
Eximbank	4,6	2,7	3,5	3,0	2,7	3,3
KYB Ortalaması	5,1	5,4	6,0	5,0	4,8	5,2
Bankacılık Sektörü Ortalaması	8,7	10,8	10,7	8,1	8,2	9,3

Kaynak: TBB, Türkiye'de Bankacılık Sistemi Seçilmiş Rasyolar, 2011-2021, Temmuz 2022; TBB, Türkiye'de Bankacılık Sistemi, 1959-2021, Haziran 2022; Eximbank Faaliyet Raporu 2021: 6; 2019: 8; 2017: 6.

**Toplam Gelir = "Faiz Gelirleri + Temettü Gelirleri + Net Ticari Kar/Zarar + Net Ücret Komisyon Gelirleri + Diğer Faaliyet Gelirleri"

Tablo 8'e göre incelenen dönem boyunca KYB'lerin hem Türk Eximbank'tan hem de bankacılık sektörü ortalamasından daha yüksek aktif karlılığına sahip olduğu görülmektedir. Türk Eximbank'ın ilgili döneme ait

aktif karlılığı gelişimi incelendiğinde; incelenen dönem boyunca hem KYB’lerin ortalamasından hem de 2021 yılı hariç bankacılık sektörü ortalamasından daha düşük aktif karlılığına sahip olmuştur. İncelenen dönem kar marjı açısından karşılaştırıldığında, KYB’lerin 2021 yılı hariç hem Türk Eximbank’tan hem de bankacılık sektörü ortalamasından daha yüksek kar marjına sahip olduğu, Türk Eximbank’ın 2017 ve 2021 yılları hariç ikinci sırada geldiği görülmektedir. Türk Eximbank’ın 2017 yılı hariç incelenen dönem boyunca bankacılık sektör ortalamasından daha yüksek kar marjına sahip olmasına rağmen daha düşük aktif karlılığına sahip olmasının nedeni, incelenen dönem boyunca hem KYB’lerden hem de bankacılık sektör ortalamasından daha düşük aktif verimliliğine sahip olmasıdır. İncelenen dönem aktif verimliliği açısından karşılaştırıldığında, bankacılık sektörünün hem Türk Eximbank’tan hem de KYB’lerden daha yüksek aktif verimliliğine sahip olduğu görülmektedir. İncelenen 2017 – 2021 dönem ortalamasına bakıldığında Türk Eximbank’ın en düşük aktif karlılığı ortalamasına sahip olduğu, KYB’lerden sonra ikinci sırada kar marjı ortalamasına sahip olmasına rağmen en düşük aktif verimliliği ortalamasına sahip olması nedeniyle bu sonucun ortaya çıktığı görülmektedir.

5.3. Özkaynak Karlılığı Bileşenleri (Kar Marjı X Aktif Verimliliği X Özkaynak Çarpanı)

Tablo 9, Türk Eximbank, KYB’ler ve bankacılık sektörü ortalamasına ait kar marjı, aktif verimliliği ve özkaynak çarpanı çarpımından oluşan özkaynak karlılığını 2017-2021 dönemi için göstermektedir.

Tablo 9: Özkaynak Karlılığı Bileşenleri (Kar Marjı X Aktif Verimliliği X Özkaynak Çarpanı)

Özkaynak Karlılığı (Kar Marjı X Aktif Verimliliği X Özkaynak Çarpanı) (%)						
	2017	2018	2019	2020	2021	Ortalama
Eximbank	10,4	12,5	17,1	14,7	23,9	15,7
KYB Ortalaması	10,3	11,7	13,7	12,5	16,9	13,0
Bankacılık Sektörü Ortalaması	14,9	13,8	10,6	10,5	14,0	12,8
Kar Marjı (Net Kar / Toplam Gelir**) (%)						
	2017	2018	2019	2020	2021	Ortalama
Eximbank	14,4	22,6	25,3	24,8	36,2	24,6
KYB Ortalaması	33,1	28,8	31,1	31,6	33,7	31,7
Bankacılık Sektörü Ortalaması	17,4	13,0	10,4	12,0	12,5	13,1
Aktif Verimliliği (Toplam Gelir/Toplam Aktifler) (%)						
	2017	2018	2019	2020	2021	Ortalama
Eximbank	4,6	2,7	3,5	3,0	2,7	3,3
KYB Ortalaması	5,1	5,4	6,0	5,0	4,8	5,2
Bankacılık Sektörü Ortalaması	8,7	10,8	10,7	8,1	8,2	9,3
Özkaynak Çarpanı (Toplam Aktifler / Özkaynaklar) (X)						
	2017	2018	2019	2020	2021	Ortalama
Eximbank	14,8	18,2	17,9	17,9	22,2	18,2
KYB Ortalaması	5,8	6,9	6,8	7,3	9,6	7,3
Bankacılık Sektörü Ortalaması	9,0	9,0	8,9	9,9	12,5	9,9

Kaynak: TBB, Türkiye’de Bankacılık Sistemi Seçilmiş Rasyolar, 2011-2021, Temmuz 2022; TBB, Türkiye’de Bankacılık Sistemi, 1959-2021, Haziran 2022; Eximbank Faaliyet Raporu 2021: 6; 2019: 8; 2017: 6.

Tablo 9’a göre 2017 ve 2018 yıllarında bankacılık sektörü ortalaması, 2019, 2020 ve 2021 yıllarında ise Türk Eximbank en yüksek özkaynak karlılığına sahip olmuştur. İlgili dönem özkaynak karlılığı bileşenlerini oluşturan kar marjı, aktif verimliliği ve özkaynak çarpanı açısından incelendiğinde 2021 yılı hariç KYB’ler en yüksek kar marjına, incelenen dönem boyunca bankacılık sektörü en yüksek aktif verimliliğine ve incelenen dönem boyunca Türk Eximbank en yüksek özkaynak çarpanına sahip olduğu görülmektedir.

6. SONUÇ

Genel olarak Eximbank’lar, ihracat yapan şirketlere finansman kolaylıkları sağlayan diğer ülkeler karşısında ortaya çıkan rekabet avantajları eşitsizliğini giderme ve kendi ülke ihracat düzeylerini, ülkenin ihracat yapan şirketlerine finansman kolaylığı sağlayarak arttırmayı amaçlayan bankalardır. Türk Eximbank, mal ve hizmetlerin dışalım ve satımı ile yurtdışı müteahhitlik hizmetlerinin dış yatırımların ve yurtdışı yatırım malı üretim ve

satışlarının finanse, sigorta ve garanti edilmeleri ve bu yoldan uluslararası pazarlardaki rekabet güçlerinin artırılması ve politik ve ticari risk taşıyan pazarlarda güven içinde iş yapılabilmesi için kurulmuş, bu amaçlara ek olarak Devlet Yatırım Bankasının da yerini almıştır. Bu kuruluş, ihracat projelerinde, büyük ihracat şirketleri aracılığıyla üretici kuruluşlara, para piyasası koşullarından daha ucuz krediler sağlamakta ve dış yatırımların sigorta ve garanti edilmesi işlevlerini üstlenmektedir. Türk Eximbank, kalkınma ve yatırım bankaları grubunda sınıflandırılmakta olup, devlet destekli ihracat kredi kuruluşudur.

Çalışmada incelenen 2017-2021 dönemi boyunca Türk Eximbank, KYB'ler içerisinde toplam aktiflere göre en yüksek paya sahip KYB olmuştur. 2021 yılında KYB'lerin toplam aktiflere göre bankacılık sektöründeki payı %7,2 iken bu oranın yaklaşık yarısı olan %3,8'i Türk Eximbank'a ait olmuştur. 2021 yılına ait toplam krediler ve alacaklara göre sektör payında da benzer bir durum ortaya çıkmış, KYB'lerin sektör payı %9,1 iken Türk Eximbank'ın sektör payı %5,9 olmuştur. Toplam varlıklar içerisinde toplam kredilerin payı incelendiğinde Türk Eximbank'ın incelenen yıllar itibarıyla %94 ile %89,4 arasında çok yüksek orana sahip olduğu, bu çerçevede yüksek özkaynak çarpanı kullandığı görülmektedir. Türk Eximbank'ın yüksek özkaynak çarpanı kullanması, düşük aktif karlılığına rağmen yüksek özkaynak karlılığı elde etmesini sağlamıştır.

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COVID-19 Salgınında Uzaktan Eğitim Bir Fırsat Mı Kayıp Mı?

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Özet: COVID-19 salgını sürecinde, zaruri olarak ve ivedilikle hayata geçirilen uzaktan eğitimin, yüz yüze eğitime kıyasla birçok dezavantaja sahip olduğu vurgulanmakla birlikte, avantajları da göz ardı edilemez. Bu çalışmada, uzaktan eğitimin öğrenciler açısından avantaj sağlayan bir uygulama olarak değerlendirilip değerlendirilmeyeceği tartışmasına odaklanılmıştır. Bu bağlamda, çalışmanın hedef kitlesi; zorunlu eğitim aşamasında bulunmayan, kendi isteğiyle ve uzaktan eğitim uygulanacağını bilerek başvuru yapan yüksek lisans öğrencileri olarak belirlenmiştir. Araştırmanın temel sorusu; yüksek lisans öğrencilerinin yüz yüze eğitimin sunduğu olanaklardan kısmen mahrum kalmayı göze alarak mı, yoksa uzaktan eğitimi bir fırsat olarak gördükleri için mi başvuru yaptıklarıdır. Araştırma kapsamında 501 yüksek lisans öğrencisinden online anket yoluyla derlenen veri seti analiz edilerek; COVID-19 salgını sürecinde uzaktan eğitim hakkındaki görüşleri ve tecrübeleri incelenmiştir. Gerçekleştirilen HOMALS analizleri sonucunda, öğrencilerin uzaktan eğitime bakış açıları ile eğitim gördükleri alan (sosyal, fen, sağlık bilimleri), program türü (tezli, tezsiz) ve yaş, medeni durum, bir işte çalışma durumu gibi demografik özellikleri arasında istatistiksel olarak anlamlı ilişkiler bulunmuştur.

Anahtar Kelimeler: COVID-19, Uzaktan Eğitim, Yüksek Lisans, Lisansüstü Eğitim, HOMALS

JEL Sınıflandırması: C19, C83, I23

Is Distance Education an Opportunity or Lost During the COVID-19 Pandemic?

Abstract: In the process of the COVID-19 pandemic, distance education, which has been implemented urgently and as a necessity, has many disadvantages compared to face-to-face education while its advantages cannot be ignored. In this study, it is focused on whether distance education can be evaluated as an advantageous practice for students. In this context, the target group of the study was determined as graduate students who are not in the compulsory education stage and who apply voluntarily and knowing that distance education will be applied. The main question of the research about the reason behind distance education application of postgraduate students is whether they see distance education as an opportunity or they risk being partially deprived of the opportunities offered by face-to-face education. Within the scope of the research, the data set compiled from 501 graduate students through an online survey was analyzed and their views and experiences about distance education during the COVID-19 pandemic were examined. As a result of the HOMALS analyzes carried out, statistically significant relationships were found between the students' approaches to distance education and their demographic characteristics such as the field of education (social, science, health sciences), the type of program (with or without thesis), age, marital status, and employment status.

Keywords: COVID-19, Distance Education, Masters Degree, Graduate Education, HOMALS

JEL Classification: C19, C83, I23

1. GİRİŞ

Ani bir biçimde tüm dünyayı etkisi altına alan COVID-19 salgınının, doğrudan etkilediği sektörlerin başında eğitim sektörü gelmektedir. Salgın sürecinde eğitimin sürdürülebilmesi için alınan kararlar ve uygulamalar; öğrenci, öğretmen, okul yöneticisi, veli ve diğer paydaşlar düşünüldüğünde, toplumun büyük kısmını ilgilendiren önemli bir gündem konusu olmuştur.

Salgın sürecinde öncelikli olarak, eğitimin kesintiye uğramaması hedeflenmiş ve dünya genelinde hızla uzaktan eğitim uygulamasına geçirilmiştir. Uzaktan eğitime geçiş sürecinde, ülkelerin gelişmişlik seviyelerine ve sosyo-ekonomik yapılarına bağlı olarak; internete erişim imkânı, bilgisayar vb. teknoloji olanakları, eğitim alan ve verenlerin önceki uzaktan eğitim deneyimleri, kurumların uzaktan eğitim alt yapıları, ders materyali vb. hususlarda çok sayıda sorunla karşılaşmıştır. Az gelişmiş ülkelerin birçok bölgesinde öğrenciler için uzaktan eğitime ulaşmak mümkün dahi olmazken; gelişmiş ülkelerde bile etkin bir uzaktan eğitim uygulamak güç olmuştur (Tadesse & Muluye, 2020)

Literatürde uzaktan eğitimin, yüz yüze eğitime kıyasla yüz yüze eğitimdeki sosyal etkileşimin uzaktan eğitimde olmaması, öğrencilerin duygusal bağlılığındaki azalma gibi dezavantajlara sebep olduğunu vurgulayan pek çok çalışma yer almaktadır (Adnan & Anwar, 2020; Salta, Paschalidou & Tsetseri, 2021). Bu çalışmada konuya farklı bir perspektiften yaklaşılarak, uzaktan eğitimin öğrenciler açısından avantaj sağlayan bir uygulama olarak değerlendirilip değerlendirilmeyeceği sorusuna odaklanılmıştır. Bu amaçla, araştırmanın hedef kitlesi olarak; zorunlu eğitim aşamasında bulunmayan, kendi isteğiyle ve uzaktan eğitim alacağını bilerek öğrenciliğini sürdürmeyi tercih eden yüksek lisans (YL) öğrencileri ele alınmıştır.

İzleyen bölümde ilgili literatür özetlenmiş; üçüncü bölümde çalışmanın amacı ve kapsamı hakkında detaylı bilgiler verilmiştir. Dördüncü bölümde, metodolojik bilgilere yer verilerek, ulaşılan analiz bulguları sunulmuştur. Son bölüm olan sonuç ve değerlendirme bölümünde, uzaktan eğitimin fırsatlar sunan bir eğitim biçimi olarak değerlendirilip değerlendirilemeyeceği tartışılmıştır.

2. LİTERATÜR ÖZETİ

Salgın öncesinde dünya genelinde çok az sayıda eğitim kurumunda uygulanan uzaktan eğitim sistemi, salgınla birlikte tüm dünyada ve Türkiye’de zorunlu olarak hayata geçirilmiştir. Bu süreçle birlikte, eğitim bilimcilerin, öğrencilerin ve eğitimcilerin gözünden uzaktan eğitim sürecinin değerlendirildiği akademik çalışmaların sayısı da artmaya başlamıştır.

İlgili uluslararası literatür incelendiğinde, yapılan çalışmaların büyük bir kısmının lisans öğrencilerinin uzaktan eğitim deneyimine yönelik olduğu anlaşılmaktadır. Bu çalışmalarda genellikle, yüz yüze veya geleneksel eğitim yöntemlerinin daha verimli olup olmadığı tartışılmış; akademisyenlerin performansının öğrenme başarısı üzerindeki etkisi incelenmiştir (Salas-Pilco, Yang, & Zhang, 2022; Gopal, Singh, & Aggarwal, 2021; Henriksen, Creely, & Henderson, 2020).

Lisansüstü öğrencilere yönelik sınırlı sayıda çalışmada, uzaktan eğitimin yüksek lisans ve doktora düzeyindeki öğrenciler için kendi kendilerine öğrenme becerilerinin gelişmesine fayda sağladığı vurgulanmaktadır (Fuente, Guadagnin, Kunzler, & Carpes, 2021; Cárdenas Zea, Carranza Quimi, Plua Panta, Solís García, & Morales Torres, 2021). Bununla birlikte; teknoloji kullanımı sayesinde eğitimin daha ulaşılabilir hale gelmesi, uzaktan eğitimin avantajları arasında görülmektedir (Althurki & Aldraiweesh, 2022). Ayrıca; eğitim materyaline ve öğretim elemanlarına ulaşım kolaylığının avantaj olduğu, öğrenciler ve hocalar arasındaki ilişkilerin iyi olmasının uzaktan eğitim başarısını artırdığı belirtilmektedir (Bazán-Ramírez, Quispe-Morales, Huauya-Quispe, & Ango-Aguilar, 2020; Omar, Ali, & Belbase, 2021).

Lisansüstü öğrencilerin çoğunun iş hayatında yer alması sebebiyle uzaktan eğitimi tercih ettikleri görülmüştür (Sheperis, Coker, Haag, & Salem-Pease, 2020; Berteau, 2009). Bir diğer araştırma sonucuna göre, salgınla başlayan uzaktan eğitim uygulaması; erkek, uygulamalı bilimlerde eğitim gören, düşük yaşam standardına sahip, yarı zamanlı çalışan ve az gelişmiş ülkelere yaşayan öğrenciler üzerinde daha etkili bulunmuştur (Aristovnik, Keržic, Ravšelj, Tomaževic, & Umek, 2020).

Didenko vd. tarafından gerçekleştirilen araştırma kapsamında, YL öğrencilerinin akademik olarak deneyimli ve yetkin olmaları, öğretim elemanlarından daha az talepte bulunmaları, alt yapı bilgilerinin online araştırmaya imkan vermesi, analitik düşünme ve muhakeme becerilerinin gelişmiş olması gibi faktörler nedeniyle, uzaktan eğitimden yüksek düzeyde memnuniyet duydukları sonucuna varılmıştır (Didenko, Filatova, & Anisimova, 2021).

Pregowska vd. tarafından yayınlanan bir diğer çalışmada, öğrenciler uzaktan eğitim sayesinde üniversite eğitimlerini tam zamanlı bir işle birlikte yürütebilmektedir. Uzaktan eğitim; zaman ve para tasarrufu sağlamakla birlikte, internete erişim sıkıntısı yaşayanlar ve iletişim olanaklarının kısıtlı olması yönünden dezavantajlıdır. Uzaktan eğitimin kimya, tıp, mühendislik gibi uygulamalı bilimlerde yüz yüze eğitimin yerini tutamayacağı belirtilmiştir (Pregowska, Masztalerz, Garlinska, & Osial, 2021).

Lisansüstü öğrenciler açısından salgın döneminde uzaktan eğitime dair ulusal literatür incelendiğinde; uzaktan eğitimden memnuniyette en önemli faktörün ulaşım harcanan zaman ve paradan tasarruf edilmesi olduğu, zaman tasarrufunun özellikle lisansüstü öğrencilerin çoğunun bir işte çalışıyor olması nedeni ile önem arz ettiği ve bu faktörlerin (uygulamalı derslere kıyasla teorik derslerde daha fazla olmak üzere) uzaktan eğitimin tercih edilme sebebi olduğu vurgulanmaktadır (Genç, Engin, & Yardım, 2020; Sarı, Bulut, Karatel, Bayramlar, & Yakut, 2021; Arar, Öneren, & Yurdakul, 2021; Akgün, 2020). Bir diğer araştırma sonucuna göre de lisansüstü öğrenciler, lisans öğrencilerine kıyasla uzaktan eğitimden daha memnun olup; bunun sebebi olarak lisansüstü öğrencilerin profesyonel hayatta da yer alması işaret edilmiştir (Tüzün & Yörük Toraman, 2021). Uzaktan eğitim bir işte çalışan öğrenciler için istedikleri zaman, istedikleri ortamda ders takibi yapabilmeleri yönünden

avantajlı; ders çalışma gereği nedeniyle dinlenme zamanı kalmaması yönünden dezavantajlıdır (Avcı, 2020). Bir başka çalışmada da profesyonel hayatta çalışmak, dersleri düzenli takip etmek açısından dezavantajlı olarak bulunmuştur (Pınarcıoğlu, Kanbak, & Şiriner Öner, 2021).

Erkek öğrencilerin kız öğrencilere kıyasla uzaktan eğitim ders memnuniyetlerinin daha fazla olduğu görüldüğü çalışmalar mevcuttur (Buluk & Eşitti, 2020; Liaw & Huang, 2011). Pedagojik formasyon eğitimi alan öğrencilerin uzaktan eğitime ilişkin tutumlarını inceleyen bir çalışmada, uzaktan eğitimden memnuniyet açısından yaş grupları arasında anlamlı fark saptanmıştır (Yıldız, 2016).

Öte yandan; uzaktan eğitimin belli başlı dezavantajının teknoloji ve teknik altyapı yetersizlikleri olduğu vurgulanmıştır (Arar, Öneren, & Yurdakul, 2021; Altun Ekiz, 2020).

3. ARAŞTIRMANIN AMACI VE KAPSAMI

Türkiye’de salgın döneminde eğitim süreci, Millî Eğitim Bakanlığı (MEB) ve Yükseköğretim Kurulu (YÖK) idaresinde yürütülmüştür. 12 yıllık zorunlu eğitim kademelerindeki öğrenci ve eğitimciler, MEB kararları doğrultusunda hareket etmişler; bireysel olarak inisiyatif kullanma olanakları sınırlı düzeyde kalmıştır. Üniversitelerdeki lisans öğrencileri de, YÖK kararları doğrultusunda uzaktan eğitime devam etmişlerdir. Bu çerçevede, zorunlu eğitim aşamasında bulunmayan, kendi istek ve iradeleri ile eğitim almak üzere başvuran YL öğrencilerinin uzaktan eğitime ilişkin değerlendirmeleri tarafımızca incelenmeye değer bulunmuştur.

Uzaktan eğitim uygulanacağını bilerek bir YL programına başvuran öğrenciler, acaba salgın sürecinin süresini öngörmek mümkün olmadığından, eğitim planlarını ertelemek amacıyla ve/veya yüz yüze eğitim olanaklarından kısmen mahrum kalmayı göze alarak mı başvuru yapmıştır? Yoksa eğitimin uzaktan yapılacak olması, YL öğrencileri için teşvik edici bir unsur olarak mı değerlendirilmelidir? Bir başka ifade ile uzaktan eğitim uygulanacak olması, YL yapma olanağı bulma ya da daha kolay YL yapma fırsatı mı doğurmuştur?

İfade edilen araştırma soruları doğrultusunda hedef kitle, 2020-2021 Akademik Yılı Bahar Dönemi’nde Marmara Üniversitesi bünyesindeki bir programa kayıt olan YL öğrencileri olarak belirlenmiştir. Marmara Üniversitesi; çok sayıda ve farklı bilimsel alanlarda YL eğitimi verilen, aynı zamanda sosyo-ekonomik ve demografik yönden öğrencilerin heterojen bir yapı sergilediği devlet üniversitelerinden biri olması sebebiyle tercih edilmiştir. Araştırma kapsamında, salgın başladıktan bir yıl sonraki (öğrencilerin uzaktan eğitim yapılacağını bilerek başvuru yaptığı) dönem veri toplanmasına karar verilmiştir.

Veri setini derlemek amacıyla uygulanan online ankete, gönüllü olarak katılan ve tüm soruları eksiksiz olarak yanıtlayan öğrenci sayısı 501’dir. Öğrenciler 23-56 yaş aralığında olup; %55’i 23-27 yaş grubunda, %22’si 28-32 yaş grubunda, %23’ü 33 yaş ve üzerindedir. %59’u erkek, %41’i kadındır. %54’ü tam zamanlı, %12’si yarı zamanlı bir işte çalışmaktadır. Evli öğrencilerin oranı %24’tür.

Öğrencilerin %74’ü tezli, %26’sı tezsiz bir YL programına kayıtlıdır. %71’i sosyal bilimler, %19’u fen bilimleri, %8’i sağlık bilimleri alanlarındaki programlara kayıtlıdır. Örneklemde güzel sanatlar alanından 11 öğrenci bulunduğu için, istatistiksel olarak ilgili alanı temsil etmede yeterli olmayacakları düşüncesiyle, analizlere dahil edilmemişlerdir.

4. METODOLOJİ

501 öğrenciden derlenen veri seti analiz edilerek; YL öğrencilerinin COVID-19 salgını sürecinde uzaktan eğitime dair görüşleri ve memnuniyet durumları tespit edilmiştir. COVID-19 salgını döneminde YL yapma kararının; eğitimin yüz yüze ya da uzaktan yapılacak olması, program türü (tezli ve tezsiz), YL programının ilgili olduğu alan (sosyal, fen, sağlık, güzel sanatlar) ve yaş, cinsiyet, medeni durum, bir işte çalışma durumu gibi demografik kriterler ile ilişkili olup olmadığı incelenmiştir. Öğrencilerin uzaktan eğitime dair görüşleri ile demografik özellikleri arasındaki ilişkileri incelemek amacıyla HOMALS Analizi uygulanmıştır.

Optimal Ölçekleme tekniklerinden biri olan HOMALS Analizi, nominal ve ordinal ölçekli kategorik değişkenleri ve kategorilerini Öklid uzayında bir araya getirmeye ve haritalar üzerinde göstermeye odaklanmaktadır (Michailidis & Leeuw, 1998). Haritaların daha rahat yorumlanabilmesi için mümkün olduğunca düşük boyutlu olarak elde edilmesi hedeflenmektedir (Leeuw & Mair, 2009). Geometrik açıdan HOMALS, belirli kısıtlar altında, gösterge matrisinden hareketle elde edilen kayıp fonksiyonunun minimize edilmesi esasına dayanmaktadır.

X: p boyutlu alt uzayda n gözlemleri (nxp) boyutlu nesne skorları matrisi

Y: j’inci değişkenin kategorilerinin, R^p uzayındaki (haritalanacak uzay) koordinatlarını gösteren matris (kxp)

G_j : Satırlarda gözlemlerin, sütunlarda ise ilgilenilen değişken kategorilerinin (j) gösterildiği, 0 ve 1’lerden oluşan gösterge matrisi olmak üzere j tane kategorik değişkene sahip, k_j kategorili n adet gözlem için kayıp matrisi aşağıda tanımlanmıştır (Ata, 2007).

$$\sigma(X; Y_1, Y_2, \dots, Y_n) = j^{-1} \sum_{j=1}^j SSQ(X - G_j Y_j)$$

$$SSQ(H) = tr(H'H)$$

İncelenen değişkenin ilgili kategorisinde “1”, diğer kategoriler için “0” olarak kodlanır. G matrisinin kendi transpozu ile çarpılması ile elde edilen C matrisi, ikili marjinaler matrisi olarak adlandırılır.

$$C = G \times G^T$$

Bu matrisin esas köşegen elemanları tekli marjinal frekansları (D), geri kalan elemanlar ise ikili marjinal frekansları göstermektedir. HOMALS Analizi aşamaları sonucunda kategori noktalarının konumları elde edilmiş olur (Greenacre, 2002). Kategori noktalarının birbirinden uzak olması ayırım gücünün iyi olduğunu göstermektedir.

Kategori noktaları, nesne skorlarının ağırlık merkezini oluşturmaktadır (Giray Yakut & Serdarer Kuzu, 2021). Bu nedenle yakın konumlanan kategori noktaları arasında korelasyonun yüksek olduğu söylenebilir. Boyutların açıklanan varyans yüzdelerinin yüksek çıkması kategorilerin indirgenen boyutlarda iyi açıklandığı anlamına gelmektedir. HOMALS Analizi’nde özdeğerler, gerçek harita ile indirgenmiş harita arasındaki uyum iyiliğinin bir ölçüsü olarak değerlendirilir (Ata, 2007).

5. BULGULAR

Araştırmaya katılan YL öğrencilerine öncelikle, COVID-19 salgınının eğitim süreçlerine etkisi sorulduğunda; olumlu etki ettiğini düşünenler %42, olumsuz etki ettiğini düşünenler %45 oranında olmak üzere iki büyük gruba ayrıldıkları tespit edilmiştir. Öğrencilerin %13’ü ise kararsız olduğunu belirtmiştir. Öğrencilere yöneltilen “YL programının uzaktan eğitimle gerçekleştirilmesi, YL yapma kararınızda etkili oldu mu” sorusuna ise; öğrencilerin yaklaşık 1/5’i uzaktan eğitim yapılacağı için YL yapmaya karar verdiğini belirtmiştir (Yıldırım & Arıkan Kokkaya, 2020).

Öğrencilerin salgının eğitim süreçlerine etkisi konusundaki görüşleri ile medeni durum, bir işte çalışma durumu ve YL program türü bilgileri birlikte analiz edilmiştir. Elde edilen HOMALS istatistikleri Tablo 1’de verilmiştir.

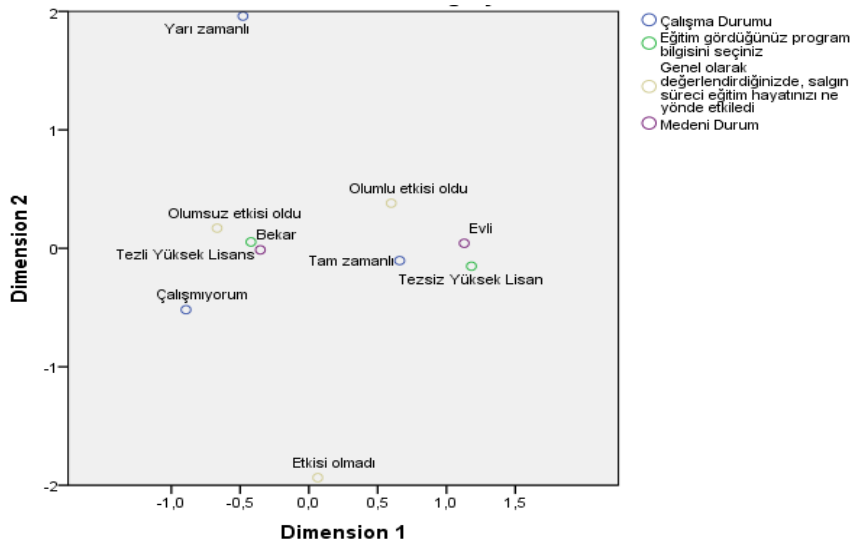
Tablo 1: Salgının Eğitim Sürecine Etkisi HOMALS İstatistikleri

Boyutlar	Cronbach Alpha	Hesaplanan Varyans		
		Özdeğer	Inertia	% Varyans
1	,584	1,780	,445	44,503
2	,133	1,110	,278	27,760
Total		2,891	,723	

Tablo 1’de birinci boyutun Cronbach Alpha değeri 0,584, toplam öz değeri 1,78; ikinci boyutun Cronbach Alpha değeri 0,133 toplam öz değeri 1,11 çıkmıştır. İki boyutun toplam açıklama oranı %72’dir.

Şekil 1’de görüldüğü üzere; evli, tam zamanlı çalışan ve tezsiz YL yapan öğrenciler, salgının eğitim süreçlerine olumlu etkisi olduğunu düşünürken; bekâr, bir işte çalışmayan ve tezli YL yapan öğrenciler olumsuz etkisi olduğunu düşünmektedir.

Şekil 1: Salgının Eğitim Sürecine Etkisi HOMALS Sonucu



Uzaktan eğitim uygulanacak olmasının YL kararına etkisi ile program türü, programın ilgili olduğu alan ve öğrencinin bir işte çalışma durumu birlikte analiz edildiğinde elde edilen HOMALS istatistikleri Tablo 2’de verilmiştir.

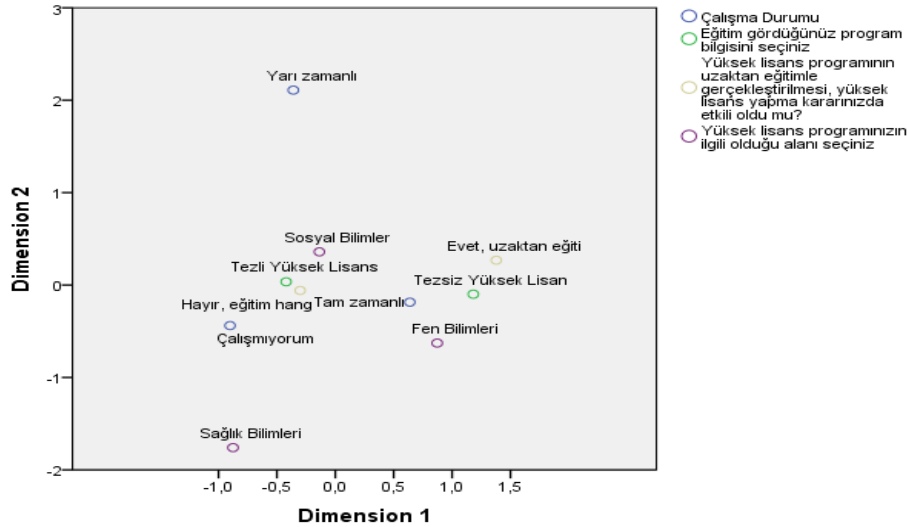
Tablo 2: Uzaktan Eğitim Uygulanacak Olmasının YL Kararına Etkisi HOMALS İstatistikleri

Boyutlar	Cronbach Alpha	Hesaplanan Varyans		
		Özdeğer	Inertia	% Varyans
1	,523	1,646	,411	41,141
2	,057	1,045	,261	26,114
Total		2,690	,673	

Tablo 2’de birinci boyutun Cronbach Alpha değeri 0,523, toplam öz değeri 1,646; ikinci boyutun Cronbach Alpha değeri 0,057 toplam öz değeri 1,045 çıkmıştır. İki boyutun toplam açıklama oranı %67’dir.

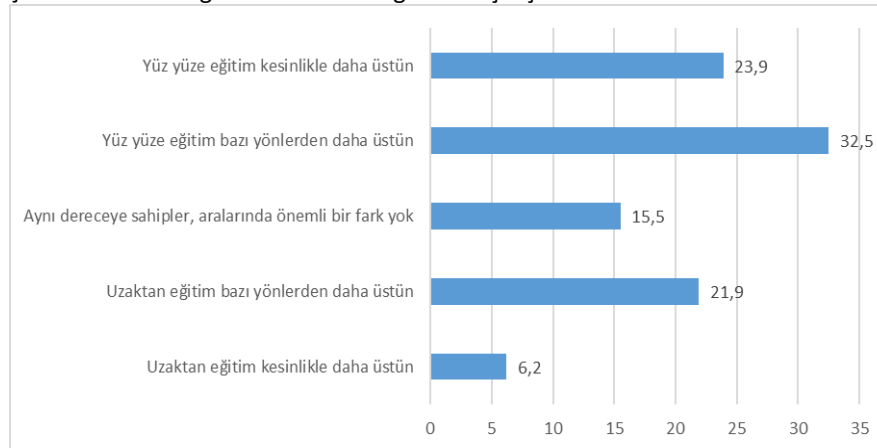
Şekil 2’de görüldüğü üzere, özellikle tezsiz YL yapan, fen bilimleri alanında YL yapan ve tam zamanlı bir işte çalışanlar uzaktan eğitim yapılacağı için YL yapma kararı almışlardır. Tezli YL yapan, sosyal bilimler alanında YL yapan ve bir işte çalışmayan öğrenciler ise eğitim biçimi ne olursa olsun YL yapma kararı aldıklarını belirtmişlerdir.

Şekil 2: Uzaktan Eğitim Uygulanacak Olmasının YL Kararına Etkisi HOMALS Sonucu



Öğrenim sürecinin tamamlanmasının ardından öğrencinin ne bileceğini, ne anlayabileceğini veya ne yapabileceğini ifade eden yeterlilikler, “öğrenme çıktıları” biçiminde tanımlanarak; öğrencilerden ‘öğrenme çıktıları bakımından uzaktan eğitimi yüz yüze eğitimle karşılaştırmaları’ istenmiştir. Şekil 3’te görülebileceği gibi, öğrencilerin çoğu (%57) yüz yüze eğitimi daha üstün bulurken, uzaktan eğitimi üstün olarak değerlendirenlerin %28 ağırlığa sahip olması dikkat çekicidir.

Şekil 3: Uzaktan Eğitim – Yüz Yüze Eğitim Karşılaştırması



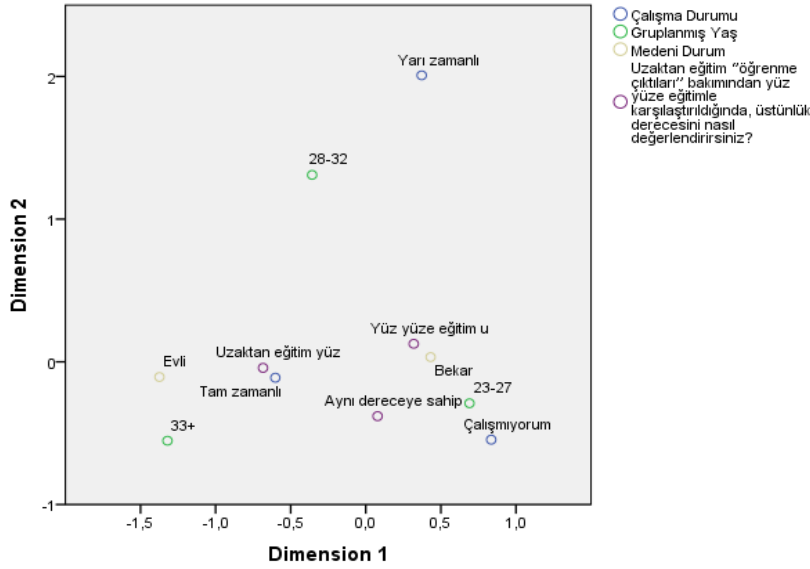
Öğrenme çıktıları yönünden görüşler; program türü (tezli/tezsiz) ve programın ilgili olduğu alan yönünden istatistiksel olarak anlamlı bir fark ortaya koymamaktadır. Ancak öğrencilerin yaşları, medeni durumları ve bir işte çalışma durumları ile öğrenme çıktıları yönünden görüşler ile birlikte analiz edildiğinde elde edilen HOMALS istatistikleri Tablo 3’te verilmiştir.

Tablo 3: Öğrenme Çıktıları Yönünden Görüşler HOMALS İstatistikleri

Boyutlar	Cronbach Alpha	Hesaplanan Varyans		
		Özdeğer	Inertia	% Varyans
1	,639	1,922	,480	48,042
2	,148	1,125	,281	28,121
Total		3,047	,762	

Tablo 3’te birinci boyutun Cronbach Alpha değeri 0,639, toplam öz değeri 1,922; ikinci boyutun Cronbach Alpha değeri 0,148 toplam öz değeri 1,125 çıkmıştır. İki boyutun toplam açıklama oranı %76’dır.

Şekil 4: Öğrenme Çıktıları Yönünden Görüşler HOMALS Sonucu



Şekil 4'te görüldüğü gibi, 33+ yaş grubunda, evli, tam zamanlı çalışanlar öğrenme çıktıları yönünden uzaktan eğitimi üstün bulurken; 23-27 yaş grubunda, bekar ve çalışmayanlar yüz yüze eğitimi tercih etmekte ya da farklılık bulmamaktadır.

Öğrencilerin yaşları, medeni durumları ve bir işte çalışma durumları ile uzaktan eğitimin sağladığı ekstra zamanı değerlendirme biçimleri birlikte analiz edildiğinde elde edilen HOMALS istatistikleri Tablo 4'te verilmiştir.

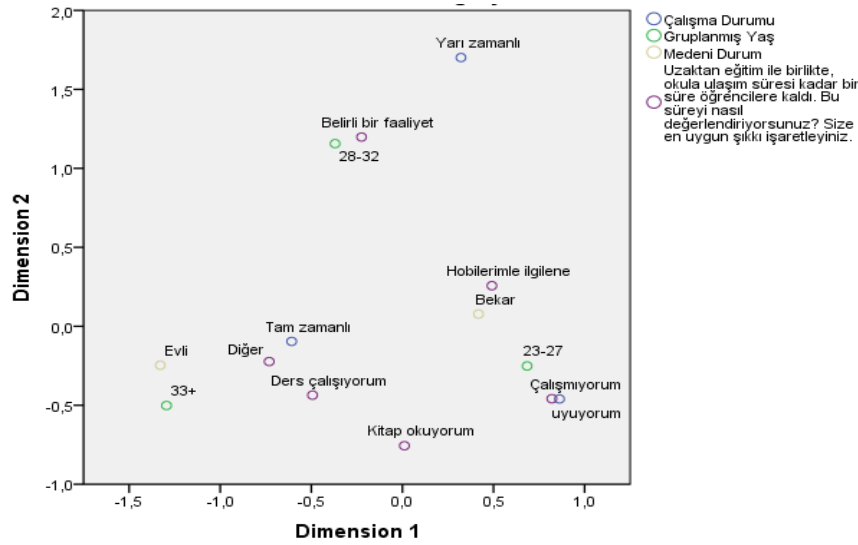
Tablo 4: Ekstra Zamanı Değerlendirme HOMALS İstatistikleri

Boyutlar	Cronbach Alpha	Hesaplanan Varyans		
		Özdeğer	Inertia	% Varyans
1	,588	1,645	,548	54,825
2	,260	1,209	,403	40,310
Total		2,854	,951	

Tablo 4'te birinci boyutun Cronbach Alpha değeri 0,588, toplam öz değeri 1,645; ikinci boyutun Cronbach Alpha değeri 0,26 toplam öz değeri 1,209 çıkmıştır. İki boyutun toplam açıklama oranı %95'tir.

Şekil 5'te görüldüğü gibi, 33+ yaş grubunda, evli, tam zamanlı çalışanlar ekstra zamanlarını ders çalışarak ya da kitap okuyarak değerlendirirken; 28-32 yaş grubunda ve yarı zamanlı bir işte çalışanlar belirli bir faaliyette bulunmamakta; 23-27 yaş grubunda, bekar ve çalışmayanlar uyuyarak ya da hobileriyle ilgilenerek değerlendirmektedir.

Şekil 5: Ekstra Zamanı Değerlendirme HOMALS Sonuçları



Öğrencilerin %68'i aldıkları YL eğitiminden genel olarak memnun olduğunu ifade etmiştir. Detaylı olarak incelendiğinde; sırasıyla “öğretim elemanlarının yetkinliği”, “eğitim programının içeriği”, “öğretim elemanlarının uzaktan eğitim performansı”, “başarı ölçme-değerlendirme sistemi” ve “sınıftaki diğer öğrencilerin akademik seviyesi” yönünden öğrencilerin verdikleri ortalama puanları en az 7/10 olarak değerlendirilmiştir.

Öğrencilerin aldıkları YL eğitiminden memnuniyetleri, yaş, çalışma durumu ve YL programının alanı birlikte analiz edildiğinde, elde edilen HOMALS istatistikleri Tablo 5'te sunulmuştur.

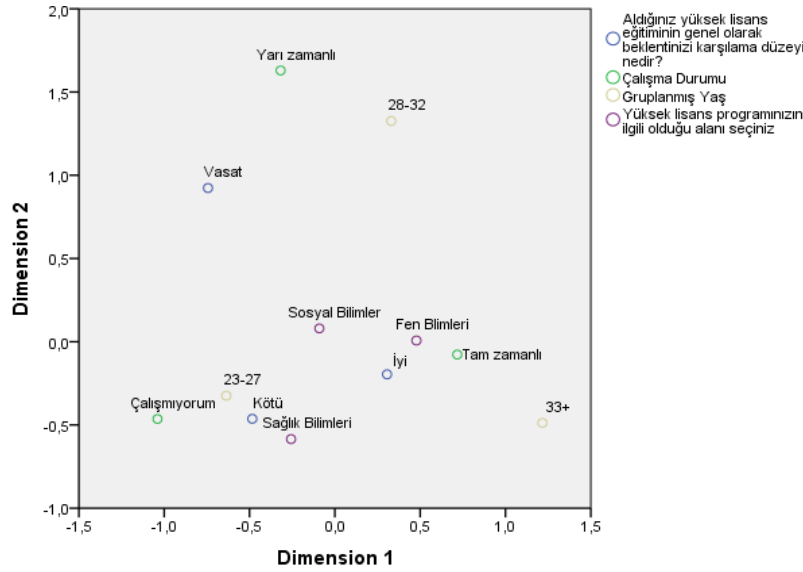
Tablo 5: YL Eğitiminden Memnuniyet HOMALS İstatistikleri

Boyutlar	Cronbach Alpha	Hesaplanan Varyans		
		Özdeğer	Inertia	% Varyans
1	,444	1,500	,375	37,491
2	,183	1,159	,290	28,977
Total		2,659	,665	

Tablo 5'te birinci boyutun Cronbach Alpha değeri 0,444, toplam öz değeri 1,50; ikinci boyutun Cronbach Alpha değeri 0,183 toplam öz değeri 1,159 çıkmıştır. İki boyutun toplam açıklama oranı %67'dir.

Şekil 6'da görüldüğü gibi, 33+ yaş grubundakiler, bir işte çalışanlar, sosyal bilimler ve fen bilimleri öğrencileri aldıkları eğitimden memnunken; 23-27 yaş grubundakiler, bir işte çalışmayanlar, sağlık bilimleri öğrencileri aldıkları eğitimden memnun değildir.

Şekil 6: YL Eğitiminden Memnuniyet HOMALS Sonuçları



Salgın süreci sona erdiğinde, tercih edecekleri eğitim biçimi sorulduğunda, öğrenciler arasında gözlemlenen en büyük grubun hibrit (yüz yüze + uzaktan) eğitimi tercih edenler (%48) olduğu anlaşılmıştır. Yüz yüze eğitim yapılmasını tercih edenlerin oranı %34, uzaktan eğitimi tercih edenlerin oranı %18'dir (Yıldırım & Arıkan Kokkaya, 2020).

Salgın sonrası eğitim biçimi tercihi ile medeni durum, bir işte çalışma durumu, program türü ve programın ilgili olduğu alan birlikte analiz edildiğinde elde edilen HOMALS istatistikleri Tablo 6'da verilmiştir.

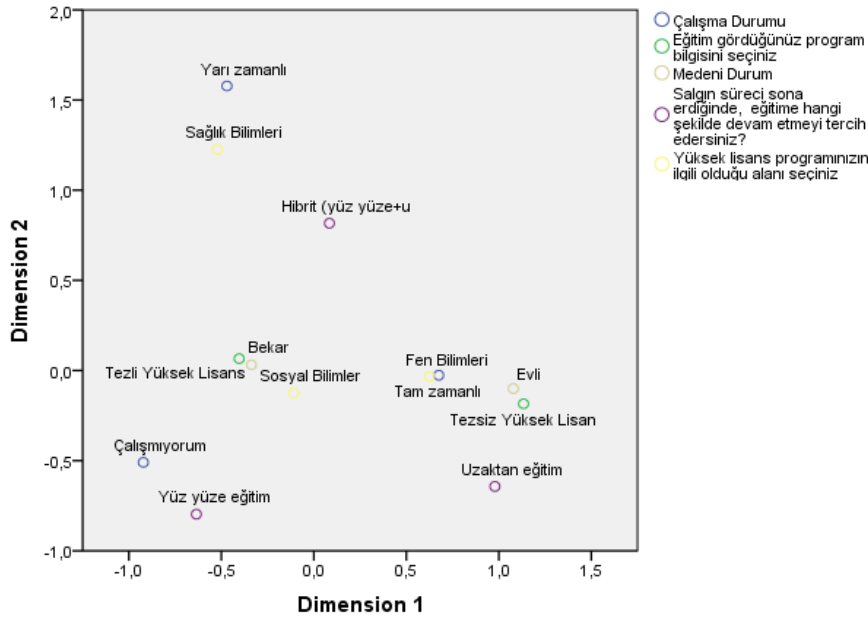
Tablo 6: Salgın Sonrası Eğitim Biçimi Tercihi HOMALS İstatistikleri

Boyutlar	Cronbach Alpha	Hesaplanan Varyans		
		Özdeğer	Inertia	% Varyans
1	,557	1,805	,361	36,092
2	,152	1,138	,228	22,769
Total		2,943	,589	

Tablo 6'da birinci boyutun Cronbach Alpha değeri 0,557, toplam öz değeri 1,805; ikinci boyutun Cronbach Alpha değeri 0,152 toplam öz değeri 1,138 çıkmıştır. İki boyutun toplam açıklama oranı %59'dur.

Şekil 7'de görüldüğü gibi, evli, tam zamanlı bir işte çalışan, tezsiz YL yapan öğrenciler, fen bilimleri öğrencileri gelecekte uzaktan eğitimi tercih edecekken; bekar, bir işte çalışmayan, tezli YL yapan öğrenciler, sosyal bilimler öğrencileri yüz yüze eğitimi tercih edecektir. Yarı zamanlı çalışanlar, sağlık bilimleri öğrencileri hibrit eğitimi tercih etmektedir.

Şekil 7: Salgın Sonrası Eğitim Biçimi Tercihi HOMALS Sonuçları



Öğrencilerin %70'i mezuniyetleri sonrasında iş hayatında, YL eğitiminin yüz yüze ya da uzaktan yapılmasının bir fark yaratmayacağını düşünmektedir. İş hayatında YL eğitimi değerlendirilirken yüz yüze eğitimin tercih edileceğini düşünenlerin oranı %24'tür (Yıldırım & Arıkan Kokkaya, 2020).

6. SONUÇ VE DEĞERLENDİRME

COVID-19 salgını sürecinde, zorunlu eğitim aşamasında bulunmayan, kendi isteğiyle, keyfi olarak eğitim alacak olan YL öğrencileri için eğitimin uzaktan uygulanmasının YL yapma talebini arttıran bir faktör olduğu anlaşılmıştır. Özellikle tezsiz YL yapan, fen bilimleri alanında YL yapan ve tam zamanlı bir işte çalışanlar; uzaktan eğitim yapılacağı için YL yapma kararı almışlardır. Tezli YL yapan, sosyal bilimler alanında YL yapan ve bir işte çalışmayan öğrenciler ise eğitim biçimi ne olursa olsun YL yapmayı planladıklarını belirtmişlerdir.

YL öğrencilerinin uzaktan eğitim deneyimlerindeki farklılıklarda cinsiyetin etkili bir faktör olmadığı görülmüştür. Bununla birlikte; medeni durum, bir işte çalışma durumu ve yaş kriterleri istatistiksel olarak anlamlı bulunmuştur. 33+ yaş grubundaki öğrencilerin çoğu evli ve tam zamanlı bir işte çalışan kişiler olup, salgının eğitim süreçlerine olumlu etkisi olduğunu belirtmiş ve uzaktan eğitimi bir fırsat olarak görerek YL yapmayı tercih etmişlerdir. 23-27 yaş grubundaki öğrencilerin çoğu bekar ve bir işte çalışmayan öğrenciler olup, salgının eğitim hayatlarına olumsuz etkisi olduğunu düşünmekte; salgın sürecinin süresini öngörmek mümkün olmadığından, eğitim planlarını ertelememek amacıyla ve sosyallik, iletişim başta olmak üzere yüz yüze eğitim olanaklarından kısmen mahrum kalmayı göze alarak YL yapmaya karar vermişlerdir.

33+ yaş grubundakiler, bir işte çalışanlar, sosyal bilimler ve fen bilimleri alanındaki öğrenciler aldıkları eğitimden memnunken; 23-27 yaş grubundakiler, bir işte çalışmayanlar, sağlık bilimleri öğrencileri aldıkları eğitimden memnun değildir. Evli öğrenciler, tam zamanlı bir işte çalışanlar, tezsiz YL yapanlar, fen bilimleri öğrencileri gelecekte uzaktan eğitimi tercih edecekken; bekarlar, bir işte çalışmayanlar, tezli YL yapanlar, sosyal bilimler öğrencileri yüz yüze eğitimi tercih edeceklerini ifade etmişlerdir.

Hemen hemen tüm eğitim kurumlarında ve eğitim kademelerinde COVID-19 salgını ile birlikte hayata geçen uzaktan eğitim uygulamasının, salgın sonrasında kısmen de olsa kalıcı olacağı açıktır. Bu araştırma kapsamında elde edilen bulgular, salgın sonrası için YL programlarının planlanmasında yol gösterici niteliktedir. Ayrıca; tüm eğitim kademeleri için salgın sürecindeki öğrenci, öğretmen ya da öğretim elemanı, kurum yöneticisi ve veli tecrübelerini ele alan araştırmalara ihtiyaç vardır.

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geçerek, çarpık kentleşme ve nüfus baskısını azaltmak gibi, sosyal fonksiyonları üstlenmektedir. Bir ülkenin milli geliri açısından hayvancılığın önemi ise, ülkenin dengeli kalkınmasına katkıda bulunmak, milli geliri artırmak ve diğer sektörlerle hammadde sağlamaktır.

Koyun, farklı çevre şartlarına kolaylıkla uyum gösteren bir hayvan olup sürü halinde yetiştirilebildiğinden çeşitli bölgelerde kolaylıkla üretilmekte ve düşük kalitedeki meralar ile sığırların yararlanamadığı bitki örtüsünü oldukça iyi bir şekilde değerlendirmekte, bakım ve beslemesi kolay, daha az emek ve sermayeye ihtiyaç duymaktadır (Paksoy ve Özçelik, 2008; Semerci ve Çelik, 2016). Tarım sektörüne istihdam olanağı sağlayan koyunculuktan et, süt, yapağı, deri ve gübre gibi ürünler elde edilirken; koyunların bağırsakları, sucuk ve sosis kılıflarının, operasyon yaralarının dikilmesinde kullanılan dikis ipliklerinin (katgüt) imalinde, kemik, boynuz ve tırnakları; düğme, tarak, tutkal ve boya imalinde, yün yağı ise ilaç ve kozmetik sanayin de kullanılmaktadır (Akçapınar, 2000; Günaydın, 2009; Tamer, 2014). Koyunculuktan elde edilen süt hem süt ürünlerine dönüştürülmekte ve hem de kuzuların beslenmesinde kullanılmaktadır (Sezenler vd., 2016). Ayrıca koyunculuk özellikle yılın her döneminde gelir sağlaması ve köyden kente göçü engellemesi açısından önemli bir gelir kaynağıdır.

Türkiye, coğrafi özellikler bakımından hayvansal ürün üretimi için uygun bir ortam sağlamakta olup, önemli bir potansiyele sahip bir ülkedir. Türkiye’de hayvancılığın gelişmesi ancak doğru tarım politikaları, ırkların ıslah edilmesi, yem bitkisi tarımına yeterli önemin verilmesi ve sınırlarımızın ciddi kontrolü ile kırmızı etin iç piyasaya girmesine izin verilmemesi ile olacaktır. Bu şekilde, ihracatçı konumunda olan Türkiye, yeniden eski durumuna kavuşabilecektir. Türkiye’de koyun yetiştiriciliği hayvancılık açısından önemli bir yer teşkil etmektedir. Kırmızı et ve süt üretiminin bir kısmı ile, yapağı koyunlardan sağlanmaktadır. Daha az sermaye ve yatırım gerektiren ayrıca işgücünün değerlendirilmesinde önemli bir yere sahip olan koyunculuk, Türkiye koşullarında devam ettirilmesi gereken bir hayvancılık faaliyetidir. (Sönmez vd. 1990b; Kaymakçı vd. 2000; Kaymakçı vd. 2005).

Tablo1: Türkiye de son 12 yıllık koyun sayıları

Yıl	Koyun - Yerli Baş	Koyun - Merinos Baş
2010	22 003 299	1 086 392
2011	23 811 036	1 220 529
2012	25 892 582	1 532 651
2013	27 485 166	1 799 081
2014	29 033 981	2 106 263
2015	29 302 358	2 205 576
2016	28 832 669	2 151 264
2017	31 257 408	2 420 228
2018	32 513 293	2 681 679
2019	34 199 467	3 076 583
2020	38 579 748	3 547 033
2021	41 182 899	3 994 791

(TUİK 2021)

Tablo incelendiğinde Türkiye genelinde son 12 yılda koyun sayılarında artış görülmektedir.2010 yılında Türkiye genelinde 22 003 299 koyun varken 2021 yılında bu sayı 41 182 899 olmuştur. Sivas İli Şarkışla ilçesinde Şarkışla İlçe Tarım ve Orman Müdürlüğü verilerine göre 2022 yılında toplam 35 000 adet koyun olduğu belirtilmiştir. Bu çalışmada Sivas İli Şarkışla İlçesi köylerinde bulunan koyunculuk işletmelerinin üretim ve pazarlama sorunlarının belirlenmesi amaçlanmıştır.

2. MATERYAL VE YÖNTEM

Araştırmanın ana materyalini Sivas İli Şarkışla İlçesine bağlı köylerde koyunculuk yapan 50 köyün % 20’sini temsil eden toplam 10 köy belirlenmiş olup, bu köylerde bulunan 500 işletmenin %20’si olan 100 adet işletmeyle yüz yüze görüşülerek anket çalışması yapılmıştır. Anket çalışması 2022 yılı Ekim ayında gerçekleştirilmiş olup, aynı üretim dönemine aittir. Araştırmada işletmelerden elde edilen bilgiler anket formu

ile toplanmış olup, bir anket formu 37 adet sorudan oluşmakta ve yüz yüze yapılan görüşme ile anket formunun doldurulması yaklaşık olarak 15-20 dakika sürmektedir.

3. BULGULAR

3.1 Üreticilere Ait Genel Bilgiler

Araştırma kapsamındaki işletme sahiplerinin %99'unu erkekler oluşturmaktadır. Yaş ortalamasının 44,5 olduğu ve yetiştiricilerin "orta yaş" sınıfındaki kişilerden oluştuğu tespit edilmiştir. Eğitim seviyeleri incelendiğinde %62'sinin ilkökul mezunu olduğu belirlenmiştir. Araştırmaya katılan işletme sahiplerinin % 88'nin evli olduğu % 84'ünün asıl mesleğin çiftçilik olduğu tablo2'de görülmektedir.

Tablo 2 : Üreticilere ait bilgiler

Cinsiyet	Frekans	Yüzde (%)
Erkek	99	99,00
Kadın	1	1,00
Toplam	100	100,00
Medeni Durum	Frekans	Yüzde (%)
Evli	88	88,00
Bekar	12	12,00
Toplam	100	100,00
Eğitim Durumu	Frekans	Yüzde (%)
Okur Yazar Değil	0	0,00
Okur Yazar	0	0,00
İlkokul	62	62,00
Ortaokul	17	17,00
Lise	15	15,00
Yüksekokul	2	2,00
Fakülte	4	4,00
Toplam	100	100,00
İşletmecinin Asıl Mesleği	Frekans	Yüzde (%)
Çiftçi	84	84,00
Esnaf	0	0,00
İşçi	4	4,00
Memur	0	0,00
Emekli	2	2,00
İşsiz	10	10,00
Toplam	100	100
Yaş		
Ortalama Yaş		44,5

3.2 İşletmelerin Gelir Düzeyleri ve Tecrübeleri

Araştırmaya katılan işletmelerin bir yıllık hane halkı gelirlerinin bitkisel gelir olarak ortalama 34 700 ,00 TL. hayvansal gelirlerinin bir yıllık ortalama 104 350 00 TL. ve toplam gelirlerinin yıllık ortalama 139 050 00 TL. olduğu tablo3 incelendiğinde görülmektedir. Ayrıca çalışmaya katılan işletme sahiplerinin ortalama 15,32 yıldır

koyunculuk yaptıkları ve en çok 50 en az 1 yıllık işletme sahibinin olduğu işletmelerde ortalama 233 adet koyun varlığının bulunduğu ve bir işletme de en çok 600 en az 100 koyun bulunduğu tablo 3’de görülmektedir.

Tablo3:İşletmelerin gelir tecrübe ve koyun sayılarını gösterir tablo

Ortalama Gelir (1 Yıllık)

Ortalama Bitkisel gelir	34 700 00
Ortalama Hayvansal gelir	104 350 00
Ortalama Toplam gelir	139 050 00

Kaç yıldır koyunculuk yapıldığı

Ortalama	15,32
En çok	50
En az	1

İşletmelerdeki Ortalama Koyun sayısı

Ortalama koyun sayısı	233
En çok koyun sayısı	600
En az koyun sayısı	100

3.3 İşletmelerin Damızlık Bulma Sorunları

Koyunculuk işletmelerinde damızlık hayvan bulma konusu son derece önemlidir. Kaliteli damızlık hayvanlarla üretim yapmak işletmelerin verimini ve işletme karını artırır. Sivas ili Şarkışla İlçesine bağlı araştırmamıza konu olan köylerdeki koyunculuk işletmelerinin % 62’si damızlık koyun ihtiyacını kendi işletmesinden karşılarken % 38’nin ise hayvan pazarlarından karşıladığı tablo 4 de görülmektedir. Ayrıca işletmelerin % 6’sının damızlık koyun bulmada sorun yaşadığı % 78’nin ise herhangi bir sorun yaşamadığı görülmektedir.

Tablo 4: İşletmelerin damızlık temini ve damızlık koyun bulma sorunları

Damızlık koyun temini	Frekans	Yüzde (%)
Kendi işletmemden	62	62,00
Komşu işletmelerden	0	0,00
Üretim çiftliklerinden	0	0,00
Hayvan pazarlarından	38	38,00
Toplam	100	100,00

Damızlık koyun bulma sorunları	Frekans	Yüzde (%)
Evet	6	6
Hayır	78	78
Bazen	16	16
Toplam	100	100

3.4 İşletmelerde Beslenme Koyun Besleme Sorunları

Küçükbaş hayvancılık işletmelerinde hayvanların yeterli ve kaliteli beslenmesi son derece önemlidir. Araştırmaya katılan işletmelerden %19’u kaba yem olarak pancar küspesi, %22,04’ü kuru ot, %15,59’u mısır silajı ve %43,01 ise kuru yonca’yı kaba yem olarak kullandıklarını belirtmişlerdir. Ayrıca çalışmaya katılan üreticilerden %34’ü kaba yem bulmada sorun yaşadığını belirtirken %66’sı sorun yaşamadığı tablo 5 incelendiğinde görülecektir. İşletmelerin yoğun yem kullanma durumlarıyla ilgili olarak %66’sının arpa, % 31’inin yulaf, %3’ünün kepek ve %42’sinin ise karma yem bulmakta sorun yaşadığı görülmektedir.

Bilindiği üzere Küçükbaş hayvan üretiminde mera alanı varlığı ve meradan faydalanma durumu son derece önemlidir. Sivas İli Şarkışla İlçesi köylerinde koyunculuk yapan işletmelerin bulunduğu yerlerdeki mera varlığı

durumu ve bu meraların koyunculuk faaliyetleri için yeterli olup olmadığı konusunda ilgili olarak çalışmaya katılan işletmelerin %66'sı yeterli mera alanın var olduğunu % 34'ü ise işletmesinin bulunduğu yerde yeterli mera alanı bulunmadığını belirtmiştir. Ayrıca çalışmaya katılan üreticilerden %67'si var olan mera alanlarının koyun otlatılmasına uygun olduğunu belirtirken %33'ü koyun otlatılmasına uygun olmadığını belirtmiştir.

Tablo 5: İşletmelerde beslenme durumu

İşletmelerinde kaba yem kullanma durumu	Frekans	Yüzde (%)
Pancar Küspesi	36	19,35
Kuru Ot	41	22,04
Mısır Silajı	29	15,59
Kuru Yonca	80	43,01
Toplam	186	100,00
Kaba yem bulma sorunu	Frekans	Yüzde (%)
Evet	34	34
Hayır	66	66
Toplam	100	100
Yoğun yem kullanma durumu	Frekans	Yüzde (%)
Arpa	66	66,00
Yulaf	31	31,00
Kepek	3	3,00
Karma yem	42	42,00
Toplam	142	100,00
İşletmelerin bulunduğu yerde mera alanı yeterlilik durumu	Frekans	Yüzde (%)
Evet	66	66,00
Hayır	34	34,00
Toplam	100	100,00
Mera alanlarının yeterlilik durumu	Frekans	Yüzde (%)
Evet	67	67,00
Hayır	33	33,00
Toplam	100	100,00

3.5 Hayvan Sağlığı ve Çoban Bulma Durumu

Koyunculuk işletmelerinde aşı bulma ve aşılama son derece önemli bir yere sahiptir. Bu konuyla ilgili yapmış olduğumuz çalışmada çalışmaya katılan üreticilerden %4'ü aşılamayla ilgili sorun yaşadığını belirtirken %96'sı aşılamayla ilgili herhangi bir sorun yaşamadığını belirtmiştir. Yine küçükbaş hayvan sağlığıyla ilgili olarak koyun hastalıklarının tedavisi ile ilgili kullanılan ilaçların zamanında bulunması ile ilgili sorulan anket sorusuna katılımcılardan %2' evet derken katılımcılardan %90 hayır cevabını vermiştir tablo 6 incelendiğinde üreticilerin koyun hastalıklarının tedavisinde kullanılan ilaçların bulunmasında genel anlamda bir sorun yaşamadıkları görülmektedir.

Sivas ili Şarkışla İlçesi Köylerinde koyunculuk yapan işletmelerin çoban bulma durumları ve çoban sorunlarıyla ilgili olarak çoban aileden mi sorusuna %67 oranında evet %33 oranında hayır cevabı verilmiş olup tablo 6 incelendiğinde koyunculuk işletmelerinde çoban ihtiyacının büyük ölçüde aile fertlerinden karşılandığı tespit edilmiştir. Aynı zamanda çoban ihtiyacının aile dışı kaynaklardan karşılanması durumunda üreticilerin %59'u çoban bulmakta sorun yaşadığını belirtirken %17'si sorun yaşamadığını belir ve %24'nün ise bazen bu sorunu yaşadığı görülmektedir.

Tablo 6: Koyunculuk işletmelerinde hayvan sağlığı ve çoban bulma durumu

Aşı sorunu	Frekans	Yüzde (%)
Evet	4	4
Hayır	96	96
Toplam	100	100
İlaç bulmada sorun yaşama durumu	Frekans	Yüzde (%)
Evet	2	2,00
Hayır	90	90,00
Bazen	8	8,00
Toplam	100	100,00
Çobanın aileden olup olmamama durumu	Frekans	Yüzde (%)
Evet	67	67
Hayır	33	33
Toplam	100	100
Çoban bulma sorunu	Frekans	Yüzde (%)
Evet	59	59,00
Hayır	17	17,00
Bazen	24	24,00
Toplam	100	100,00

3.6 İşletmelerin Üretim ve Pazarlama Sorunları

Araştırmaya katılan koyunculuk işletmelerinin üretim ve pazarlama işlevlerini doğrudan etkileyen sorunlardan biri olan kredi bulma konusunda sorun yaşıyor musunuz sorusuna üreticilerin %5'i sorun yaşıyorum %55'i kredi kullanım şartların çok fazla olduğu için gerekli şartları sağlamakta zorlandığını, %48'i kredi kullanım faiz oranlarının yüksek olduğunu ve %2'si ise kredileri zamanında alamadığını belirtmiştir. Yine kredi kullanımı kadar önemli olan diğer bir konu olan destekleme konusunda üreticilerin %40 desteklerin yeterli olduğunu belirtirken %60'ı desteklerin yetersiz olduğunu belirtmiştir. Bu araştırmada İşletmelerin üretim dalıyla ilgili sorulan soruya üreticilerden %57'et üretimi olarak belirtirken süt üretimi %8 kalmış olup, her ikisini de diyen üreticilerin sayısı % 35 olmuştur. Hangi pazarlama zincirinin kullanıldığı konusunda ise %16'sı süt ve süt ürünleri pazarlama, %81'i et ve et ürünleri pazarlama ve %3'ü ise her ikisini de pazarlama cevabını vermiştir. Verilen cevaplar doğrultusunda üreticilerin daha çok et ve et pazarlama zincirini kullandıkları tespit edilmiştir. Damızlık hayvan ve kuzu pazarlama kanalları ile ilgi olarak üreticilerin hangi pazarlama kanallarını kullanma eğiliminde olduklarını belirlemek için sorulan çalışma sorusunda %85 oranında hayvan pazarı, %19 çevre ve %8 diğer işletmeler sonucuna ulaşılmıştır. Yine üreticilerin koyun ve kuzu pazarlamada sorun yaşayıp yaşamadıklarıyla ilgili olarak düzenlenmiş soruya verdikleri cevapta %12' sinin pazarlamada sorun yaşadığı %88'ininse pazarlamada sorun yaşamadığı tablo 7 incelendiğinde görülmektedir.

Tablo 7: İşletmelerin üretim ve pazarlama sorunları

Kredi bulma sorunları	Frekans	Yüzde (%)
Bankalardan kredi alımında sorun yaşıyorum.	5	5

Kredi kullanım şartları çok fazla olduğu için gerekli şartları sağlamakta sorun yaşıyorum	55	55
Kredi kullanım faiz oranları çok yüksek.	48	48
Küçükbaş hayvancılık kredisini zamanında alamıyorum.	2	2,00
Toplam	108	100,00
Üretici desteklerinin yeterli olup olmama durumu	Frekans	Yüzde (%)
Evet	40	40
Hayır	60	60
Toplam	100	100
Koyunculuk işletmesinde üretim dalı	Frekans	Yüzde (%)
Et üretimi	57	57,00
Süt üretimi	8	8,00
Hepsi	35	35,00
Toplam	100	100,00
Ürün pazarlama zinciri	Frekans	Yüzde (%)
Süt ve süt ürünleri pazarlama	16	16,00
Et ve et ürünleri pazarlaması	81	81,00
Her ikisinin de pazarlanması	3	3,00
Toplam	100	100,00
Küçükbaş hayvan pazarlama kanalları	Frekans	Yüzde (%)
Hayvan pazarı	85	85,00
Çevre	19	19,00
Diğer işletmeler	8	8,00
Toplam	113	113
Küçükbaş hayvan pazarlamada sorun yaşama durumu	Frekans	Yüzde (%)
Evet	12	12,00
Hayır	88	88,00
Toplam	100	100,00

3.7 İşletmelerin Süt ve Kuzu Üretimi

Sivas İli Şarkışla İlçesine bağlı köylerde koyunculuk yapan işletmelerin ortalama süt üretimi 291 kg. civarında olduğu tespit edilmiştir. Üretmiş oldukları bu sütlerin %10'luk kısmını pazarlarda satarken %90'nını çevre kanalıyla pazarladıkları görülmektedir. Üreticilerin %10 kısmı süt pazarlamada sorun yaşadığını belirtirken %47'kısımlı süt pazarlamada sorun yaşamadığını belirtmiştir. Tablo 8 incelendiğinde Şarkışla İlçesine bağlı köylerde koyunculuk üretimi yapan üreticilerin süt üretimin oldukça düşük olduğu görülmektedir. Araştırmaya katılan üreticilerin yıllık ortalama 193 adet kuzu üretimi yaptıkları ve bu üretmiş oldukları kuzuların ortalama 123 adedini pazarladıkları belirlenmiştir. Kuzu besleme yöntemi olarak yavru döneminde %100 oranında doğal emzirme yöntemini kullandıkları tespit edilmiştir. Üreticilerin kuzu büyütme sorunlarıyla ilgili olarak kuzu büyütmede hangi sorunları yaşadıkları ile ilgili soruya % 76'sı kuzu yemi maliyetlerinin yüksek olmasını %66'sı kuzu hastalıklarını %12'si ilaç fiyatlarını ve %4'ü ise yeterli mera alanının olmamasını belirtmiştir. Kuzu pazarlama konusunda sorun yaşanıp yaşanmadığı sorusuna ise üreticilerin %2 'si sorun yaşadığını %80'i sorun yaşamadığını belirtmiştir.

Tablo 8: İşletmelerin süt ve kuzu üretim durumları

Yıllık süt üretimi

Ortalama yıllık süt üretimi	291	Kg.
Süt pazarlama kanalları	Frekans	Yüzde (%)
Pazar	10	10,00
Süt birlikleri	0	0,00
Market	0	0,00
Toptancı	0	0,00
Çevre	90	90,00
Toplam	100	100,00
Süt pazarlamada sorun yaşanıp yaşanmadığı durumu	Frekans	Yüzde (%)
Evet	10	10,00
Hayır	47	47,00
Bazen	43	43,00
Toplam	100	100,00
Ortalama yıllık kuzu üretimi	193,00	Adet
Ortalama yıllık kuzu satışı	123,00	Adet
Kuzu besleme yöntemi	Frekans	Yüzde (%)
Emzirme	100,00	100,00
Yapay emzirme	0,00	0,00
Toplam	100,00	100,00
Kuzu büyütmede hangi sorunların yaşandığı	Frekans	Yüzde (%)
Kuzu yemi maliyetlerin yüksek olması	76	76,00
Kuzu hastalıkları	66	66,00
İlaç fiyatları	12	12,00
Yeterli mera alanı olmaması	4	4
Toplam	158	100
Kuzu pazarlama sorunu	Frekans	Yüzde (%)
Evet	2	2,00
Hayır	80	80,00
Bazen	18	18,00
Toplam	100	100,00

3.8 İşletmelerin Genel Sorunları

Üreticilerin koyunculuk faaliyetlerinden elde etmiş oldukları ürünleri pazarlamayla ilgili yaşamış oldukları sorunlar konusunda sorulan soruya % 94'ü fiyatların ucuz olmasını, % 5 'i pazara ulaşım sorunu ve % 1 ise tanıtım sorunu olarak belirtmişlerdir. En çok hangi ürünün pazarlanmasında sorun yaşadıkları konusunda ise çalışmaya katılan üreticilerin tamamı üretmiş oldukları yünleri pazarlamada sorun yaşadıklarını belirtmişlerdir.

Genel olarak üreticilerin % 39'nun yem bulmada, %5'nin damızlık koyun bulmakta, % 10'nun barınak bulmakta, % 60'nın hayvan beslemeye uygun mera alanı bulmakta, % 88'nin çoban bulma konusunda, %32'nin destekler konusunda ve % 4'nün veterinerlik hizmetleri konusunda sorun yaşadıkları belirlenmiştir.

Araştırmaya katılan üreticiler öncelikli olarak % 4'ü Pazar sorunun çözümünü, % 19'u kredi sorunun çözümünü, % 4'ü barınak sorunun çözümünü, % 53'ü mera sorunun çözümünü, %56'sı çoban sorunun çözümünü ve % 20'ise destek sorunun çözümünün öncelikli olarak çözülmesi gerektiğini belirtmişlerdir.

Tablo 9: İşletmelerin üretim ve pazarlama alanında genel sorunları

Ürün pazarlama sorunları	Frekans	Yüzde (%)
Fiyatların ucuz olması	94	94,00
Üretilen ürünlerin pazara ulaştırılamaması	5	5,00
Elde edilen ürünlerin saklanma ve bozulma sorunu	0	0,00
Üretilen ürünlerin yeterince tanıtılamaması ve reklam sorunu	1	1
Toplam	100	100
En çok hangi ürünün pazarlanmasından sorun yaşandığı	Frekans	Yüzde (%)
Süt	0	0,00
Peynir	0	0,00
Yoğurt	0	0,00
Yün	100	100
Toplam	100	100
Genel sorunlar	Frekans	Yüzde (%)
Yem bulma sorunu	39	39,00
Damızlık koyun bulma sorunu	5	5,00
Barınak sorunu	10	10,00
Mera sorunu	60	60
Çoban bulma sorunu	88	88
Desteklerin zamanında verilmeme sorunu	32	32
Veterinerlik hizmetler	4	4
Toplam	238	100
Öncelikli çözülmesi istenen sorunlar	Frekans	Yüzde (%)
Pazar sorunun çözümü	4	4,00
Kredi sorununu çözümü	19	19,00
Barınak sorunun çözümü	4	4,00
Mera sorununun çözümü	53	44
Çoban bulma sorunun çözümü	56	56
Destek sorunun çözümü	20	20
Hayvan sağlığı sorunun çözümü	0	0
Toplam	100	100

4. SONUÇ

Sivas İli Şarkışla İlçesine bağlı köylerde koyunculuk yapan işletmelerin üretim ve pazarlama konusunda yapılan bu çalışmada işletmelerin çeşitli sorunlar yaşadıkları tespit edilmiştir. Koyunculuk faaliyeti ile uğraşan işletmecilerin % 62'sinin ilkökul düzeyinde eğitime sahip olmaları bu bireylerin hayvancılık faaliyetlerini yetersiz teknik bilgi düzeyi ve geleneksel yöntemlerle yaptıklarını göstermektedir. Bu sebepten bölge koyun üreticisinin

eğitim düzeyinin yükseltilmesi yönünde tedbirler alınmalıdır. Bölgede koyunculuk yapan işletme sahiplerinin yaş ortalamasının 44 civarında olduğu görülmektedir. Çeşitli teşvik yöntemleriyle Gençlerinde bu sektörde yer almaları sağlanmalıdır. Koyunculuk yetiştiriciliğindeki en önemli sorunlar yem fiyatlarının yüksek olması, sulama sorunu ve yem bitkileri üretiminde karşılaşılan problemler olarak belirlenmiştir. Bölge koyun yetiştiricilerinin sorunlarının çözümünde yem desteğinin artırılması gerekmektedir. Ayrıca mera ıslahlarının yapılması, et ithalatının durdurulması ve daha verimli hayvan ırklarının bölge üreticisine kazandırılması sağlanmalıdır. Bölge koyunculuk faaliyetinin geliştirilmesi için koyunculuk işletmelerine verilen girdi desteğinin artırılması, koyun yetiştiriciliği ve yem bitkileri üretimi konusunda teknik eğitim verilmesi gereklidir.

Bölgede üretim yapan işletmelerin en önemli sorunlarından birisinin de pazarlama sorunu olduğu belirlenmiştir. Bu sorunun çözülmesi küçükbaş hayvancılığın önündeki en önemli sorunlardan birisidir. Sivas İli Şarkışla İlçesine bağlı köylerde koyunculuk yapan işletmelerin tamamına yakını üretmiş oldukları yünleri pazarlayamadıklarını ve bu yünleri hiçbir şekilde değerlendiremediklerini belirtmişlerdir. Bu konuyla ilgili gerekli çalışmalar yapılarak bölgede yün hammaddesini sanayiye kullanacak hale getirecek işletmelere ihtiyaç olduğu belirlenmiştir. Yine Bölgede üretim yapan işletmelerin koyun sayılarının fazla olmasına rağmen süt üretimlerinin düşük olduğu görülmüştür. Bu durumun nedeni araştırıldığında üreticilerin ürettikleri koyun sütlerini pazarlamada büyük oranda sorun yaşadıkları görülmüştür. Bu sorunla ilgili olarak bölgede koyun sütünü işleyip farklı ürünlere dönüştürecek küçük işletmeler kurulmalıdır. Genel sorunlar ve beklentiler bakımından; Üreticilerin koyunculuk faaliyetlerinden elde etmiş oldukları ürünleri pazarlamayla ilgili yaşamış oldukları sorunlar konusunda sorulan soruya % 94'ü fiyatların ucuz olmasını, % 5 'i pazara ulaşım sorunu ve % 1 ise tanıtım sorunu olarak belirtmişlerdir. En çok hangi ürünün pazarlanmasında sorun yaşadıkları konusunda ise çalışmaya katılan üreticilerin tamamı üretmiş oldukları yünleri pazarlamada sorun yaşadıklarını belirtmişlerdir. Genel olarak üreticilerin % 39'nun yem bulmada, %5'nin damızlık koyun bulmakta, % 10'nun barınak bulmakta, % 60'nın hayvan beslemeye uygun mera alanı bulmakta, % 88'nin çoban bulma konusunda, %32'nin destekler konusunda ve % 4'nün veterinerlik hizmetleri konusunda sorun yaşadıkları belirlenmiştir. Araştırmaya katılan üreticiler öncelikli olarak % 4'ü Pazar sorunun çözümünü, % 19'u kredi sorunun çözümünü, % 4'ü barınak sorunun çözümünü, % 53'ü mera sorunun çözümünü, %56'sı çoban sorunun çözümünü ve % 20'ise destek sorunun çözümünün öncelikli olarak çözülmesi gerektiğini belirtmişlerdir. Mera ve çayır alanlarının azalması ve yem fiyatlarının pahalı olmasından dolayı işletme sahipleri ekonomik olarak olumsuz etkilenmektedir.

Pazar sorunu, işletmelerin en önemli sorunları olarak gösterilebilmektedir. Küçükbaş hayvancılık diğer üretim kollarından geri kalmış durumdadır. Küçükbaş hayvancılığın önündeki pazar sorunu çözülürse, hali hazırda yüksek et fiyatlarının önlenebileceği söylenebilir. Hayvan başına verilen desteklemenin düşük olması, başka önemli sorunlardan bir tanesidir. Hayvan başına verilen destek miktarlarının artırılması Şarkışla bölgesindeki üreticilerin gelirini artırarak bu bölgede üretimin doğrudan artmasına katkı sağlayacaktır. Bütün bu bilgiler değerlendirildiğinde genel sonuç olarak; işletmelerle yapılan yüz yüze görüşmeler ve gözlemler sonucunda çalışma kapsamındaki köylerde bu üretim dalının çeşitli sorunlarının olduğu gerekli önlemler alınmadığı taktirde daha sonraki yıllarda da bu sorunların devam edeceği söylenebilir.

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Mobbingin Kişilik Özelliklerine Göre İncelenmesi

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Abstract: Mobbing is an emotional attack that is systematically applied in the form of psychological violence, pressure, siege, harassment, humiliation, threat, and similar forms by the abuse of existing power or position. Bullies are weak, and instead of investing their energies in professionalizing their work or personal growth, they engage in targeted persecution of people whose strength may reveal that weakness. Mobbing can be violent, verbal, reckless, and many more. In addition to insults and poor performance, victims of bullying often suffer from severe physical and mental problems such as sleep disturbances, difficulty concentrating, and irritability. Mobbing is a phenomenon that harms the physical, psychological, and social health of individuals. This study aims to examine the personality traits of mobbing victims. The study sample comprises 400 individuals selected by a simple random sampling method. In the study, the personality traits of the mobbing victims were measured with the five-factor personality model. It was concluded that women are more extroverted and docile, while men have higher self-control/responsibility and emotional stability/consistency. As a result of the study, it was found that showing agreeableness is associated with being exposed to mobbing.

Key Words: Mobbing, Psychological Stress, Personality Traits

Examination of Mobbing According to Personality Traits

Özet: Mobbing, mevcut gücün ya da pozisyonun kötüye kullanılmasıyla sistematik olarak psikolojik şiddet, baskı, kuşatma, taciz, aşağılama, tehdit ve benzeri şekillerde uygulanan duygusal bir saldırdır. Zorbalar zayıftır ve enerjilerini işlerini veya kişisel gelişimlerini profesyonelleştirmeye harcamak yerine, güçleri bu zayıflığı ortaya çıkarabilecek insanlara hedefli eziyet etmeye girişirler. Mobbing şiddetle, sözle, umursamazlıkla ve daha birçok farklı şekilde olabilir. Hakaretlere ve düşük performansa ek olarak, zorbalığın kurbanları genellikle uyku bozuklukları, konsantrasyon zorluğu, sinirlilik gibi ciddi fiziksel ve zihinsel problemlerden muzdariptir. Mobbing, bireylerin fiziksel, psikolojik ve sosyal sağlığına zarar veren bir olgudur. Bu çalışmada, mobbing mağdurlarının kişilik özelliklerini incelemeyi amaçlamıştır. Araştırmanın örneklemini basit tesadüfi örnekleme yöntemi ile seçilen 400 bireyden oluşmaktadır. Araştırmada mobbinge uğrayanların kişilik özellikleri beş faktör kişilik envanteri ile ölçülmüştür. Kadınların daha dışadönük, yumuşak başlı olduğu, erkeklerin ise öz denetim / sorumluluk ve duygusal denge / tutarlılıklarının daha yüksek olduğu sonucuna ulaşılmıştır. Çalışma sonucunda yumuşak başlı özellik göstermenin mobbinge maruz kalma ile bağlantılı olduğu bulunmuştur.

Anahtar Kelimeler: Mobbing, Psikolojik Stres, Kişilik Özellikleri

1. INTRODUCTION

Mobbing has emerged as a form of psychosocial stress characterized by prolonged repetitive destructive actions against a victim and gradual exclusion from social conditions in the workplace, in studies of conflicts in their organization as part of changes in the social and organizational work environment (Leymann, 2002).

Mobbing refers to a person being constantly harassed, bullied, passively avoided as a denial of contact, often also in the workplace and other organizations, or otherwise violating his dignity. There is no generally accepted definition. According to Seydl (2007), most researchers emphasize the following:

- **Behavior Patterns:** Bullying refers to a behavior pattern rather than a single action. Actions are systematic; that is, they are constantly repeated.
- **Negative actions:** Bullying behaviors are swearing verbal and nonverbal. Such acts are typically considered hostile, offensive, destructive, and unethical.
- **Unequal power relations:** Interested parties have different possibilities to influence the relevant situation. Someone is inferior or superior to another. No order difference is necessary for this; it may be because of integers: one versus many.
- **Victim:** During the plot, a victim appears. He has difficulty defending himself due to the unequal distribution of power.

Some expressions used instead of mobbing emotional lynching in the workplace, psychological terror in the workplace, workplace trauma, workplace bullying, workplace psychological harassment, emotional attack in

the workplace, intimidation, emotional harassment, and bullying. Expressions such as aggressor, harasser, emotional aggressor, mobbing harasser, and bully can be used against people who use mobbing (Çobanoğlu, 2005).

Mobbing practitioners' narcissists are people who have a complicated personality structure, see everything as their right due to being in the top management, are inflated egocentric, have had problems in childhood, have been exposed to family and social pressure, or have experienced different events that they cannot overcome (Atman, 2012). Generally, successful, creative personalities, those with solid working principles and values, and who do their jobs very well are mobbed (Kehribar et al., 2017).

When the personalities of mobbing attackers are examined, it is seen that people are overly controlling, cowardly, neurotic, and power-hungry. Also, many of these people are surrounded by feelings of insecurity, fear, and jealousy. People resort to emotional abuse to compensate for their shortcomings. Forcing a rule to accept pressure, seeking pleasure in boredom, and personality disorders can lead to mobbing behavior (Leymann, 1990).

Mobbing in the workplace seriously affects the health and well-being of employees, organizational performance, and social context (Arenas et al., 2015). Studies suggest that mobbing is a common problem in contemporary working life (Nielsen et al., 2010). Based on mobbing epidemiological data, It can be considered one of the biggest threats to the well-being of employees (Phek et al., 2017). Mobbing causes sad consequences for businesses and employees (Nielsen et al., 2012).

Mobbing is a situation that consists of repetitive harmful actions that occur over a long period and have adverse effects on both victims and businesses (Einarsen et al., 2011). Mobbing is a psychological terror that one or more people systematically apply against another person with hostile and immoral methods (Leymann, 1990). Workplace mobbing is defined as "negative communicative acts directed at a person (by one or more people), occurring very frequently and over a long period, thus characterizing the relationship between the perpetrator and the victim" (Leymann, 2002). The roles of victims and perpetrators solidify over time, and the frequency and damaging nature of the acts increase. Attacks can be carried out by a single perpetrator or by several individuals. This process is determined by the relevant situational and personal circumstances (Knorz and Zapf, 1996). Destructiveness develops in a procedure under certain conditions; negative actions may seem harmless when taken individually. Still, the specific nature of bullying as a destructive action is only revealed when it occurs in general. Accordingly, acts of bullying affect in a way known from research on critical life events. However minor, experiencing many recurring disturbing events can have more severe consequences than a single extremely distressing event. In this sense, daily attacks and burdens (daily difficulties, daily dangers, and experiences are called individual life events, while their psychological effects are called distant stressors (Lazarus and Folkman, 1987). Mobbing's status relations, subjective stress, and discrimination or social isolation of the victim. Mobbing is a form of conflictual communication between co-workers, superiors, and subordinates in the workplace, where the attacked person is below. Mobbing is systematically used by one or more people, often and for long periods, with the aim and effect of dismissal. Being directly or indirectly attacked and discriminated against (Leymann, 1995).

Differences arise from the different perspectives of perpetrators and victims. While victims interpret actions cumulatively and experience their effects, perpetrators often seem unaware of the overall consequences of their actions. This concerns the interpretation of the behavior itself and the effects of actions. Such inconsistency is particularly evident where several individuals act as perpetrators (Zapf, 2004).

Employees generally have difficulty defining the problem they experience at the beginning of the mobbing process and determining the causes of the pain due to its slow development. The behavior and lifestyle of the employee in the organization for a long time and at regular intervals are ridiculed in front of other people, the employee is humiliated, the employee is prevented from communicating with others, or his work is criticized (Erkoç, 2021).

Mobbing in the workplace is defined as acts perceived as hostile, humiliating, or intimidating by a group or individual. Actions must occur frequently and continue for a long time. The person concerned should also be unable to defend himself or escape this situation because of his perceived social, economic, physical, or psychological characteristics. Mobbing can be defined as one or more people being exposed to negative actions (harassment, isolation, insult, etc.) more frequently and for a certain period by another person. Also, there must be an imbalance of power for the victim of mobbing to have difficulty defending himself. When two

people of the same strength engage in a conflict or have minor episodes of conflict, there is no mention of mobbing (Niedl, 1995).

The progressive deterioration of the victim's resources is one of the characteristic features of mobbing. The "unethical" behavior of the perpetrator leads to the devaluation of the victim on a professional, social and personal level (Schlaugat, 1999).

Mobbing is an escalating condition in which the individual falls into a lower position and systematically becomes the target of violent and deliberate actions and is associated with negative consequences on the individual's perceived quality of life (Glambek et al., 2018). The forms of this phenomenon can be direct, indirect, verbal, or nonverbal and can be seen as threats or actual aggression, resignation demands, verbal attack or mockery, and gossip (Nielsen and Einarsen, 2012). For a situation to be considered mobbing, it must be repeated, regular, and for a certain period (Alfano et al., 2021). In addition to the hopelessness caused by the mobbing situation as a runaway process, the social isolation and exclusion of the victim are considered as follows: Mobbing is the process of events in the business world in which various types of destructive acts are repeated and perpetrated against individuals over a more extended period, perceived as harm and damage by those affected and uncontrolled. This process causes their mental state and health to deteriorate increasingly, their isolation and exclusion in the workplace increase, and their chances of finding a satisfactory solution decrease, which regularly leads to the loss of their previous professional domains (Esser and Wolmerath, 2003).

Mobbing in working life includes hostile and unethical communication directed mainly at an individual by one or a few people, pushed into a weak and vulnerable position due to mobbing, and kept there by constant mobbing activities. Because of the high frequency and longevity of hostile behavior, this maltreatment results in significant psychological, psychosocial, and social misery (Leymann, 1996). In the working environment, conflicts and organizational stress that may cause pressure on employees' health with similar psychosomatic symptoms may arise. The consequences of mobbing as an "extreme social stressor" are expected to be in this symptom area (Leymann and Gustafsson, 1996). Stress responses and stress-causing conditions in the workplace are based on the transactional stress model, harmful aspects of the work content, organization, environment, and so on. Stress comes from poor alignment with our work, conflicts between our roles at work and outside, and not having reasonable control over our work and our own lives. Stress can occur when work environment demands exceed employees' ability to cope with them. Identifying stress focuses on work-related causes and necessary control measures (Mikkelsen and Einarsen, 2002).

From this perspective, destructive actions can be assigned to social stressors in the workplace, whereby their specific nature is characterized by the attacks' systematic frequency and duration. In addition, mobbing primarily acts as stress against a particular victim. Actions are usually directed at one person over a long period" (SECO, 2002, p. .55). Another feature of mobbing is the progressive degradation of the victim's resources during the bullying process, which underpins the assumption of a low chance of success for possible coping strategies.

As an extreme form of psychosocial stress, the effect of mobbing is discussed based on its health effects on those affected in the form of psychosomatic complaints, depression, and irritability (Zapf et al, 1996). The term "psychosocial risks" includes job design, organization, and management of work and their roles within the organization, career progression and professional perspective, freedom of decision, interpersonal relationships at work, work-life balance, working conditions, and equipment in the workplace that have the potential to cause psychological or physical harm, social and environmental aspects such as job duties and scope, working hours. Psychosocial hazards can directly or indirectly affect an individual's mental and physical health through the experience of stress. (Cox et al., 2000)

Mobbing is a complex phenomenon with many aspects that deserves more academic attention (Nielsen et al., 2016). Many studies focus on the organizational perspective, emphasizing less on the possible link between perceptions of harassment and the victim's characteristics (Einarsen and Nielsen, 2015). For this reason, it is essential to understand the various factors associated with workplace bullying perceptions and outcomes, such as having specific personal characteristics and tendencies (Djurkovic et al., 2006). Mobbing is related to the deterioration of psychological well-being and increased work-related stress, which may be associated with the victim's physical symptoms and psychological disorders. It causes burnout (Lo Presti et al., 2019). It is seen that different factors play a buffer role in the relationship between mobbing and psychological quality of life in the workplace. Among these, it has been proven that having specific personal characteristics and personalities has a significant effect (Deniz and Ertosun, 2010).

Aggression directed against any person through irrationality, irrational harassment, and destructive behavior, regardless of age, race, or gender, is perceived as mobbing (Kehribar et al., 2017). Mobbing is individual, or group behavior used to resist change in work and social norms. Occupation, gender, race, and age are factors associated with the risk of being a mobbing victim (Sloan et al., 2010). Socio-demographic factors affect how we perceive mobbing (Bettencourt and Miller, 1996).

Individual factors such as the demographic characteristics of the victim (age, education), personality traits, personality traits of mobbing practitioners, and many factors arising from the organizational structure and social system are among the causes of mobbing. It is stated that the victims have different personality traits, such as refraining from seeking their rights and defending themselves, avoiding conflict, having low self-esteem, being anxious, indecisive, conscientious, obedient, doing their job well, not compromising their principles, being honest, reliable, and creative (Zapft et al., 1996). Characteristics of the victim, such as race, gender, religion, and ethnicity, are also among the causes of mobbing. In the studies conducted, qualities such as hunger for attention, excessive need for praise, inflated self-perception, powerless, insecure, excessively fearful, excessively controlling, prejudiced, and self-seeking are stated among the personality traits of mobbing practitioners (Davenport et al., 2003). Mobbing applicants resort to mobbing to compensate for their inadequacies (Leyman, 1993). Weak management and leadership understanding in organizations, excessive workload and control, insufficient communication, lack of promotion opportunities, low level of job security, and intensity of competition are the organizational factors that cause mobbing (Salin, 2003).

The causes of mobbing originating from the social system are associated with social values. Values such as excessive competition, excessive productivity pressure, selfishness, individuality, loss of moral principles and values, and constant change, which are dominated by the capitalist culture, trigger intimidation. Values that support racial, class, and gender-based inequalities in society also have an effect that increases the possibility of the powerless, minorities, and women being victims of mobbing (Bayrak-Kök, 2006).

Studies show that women exposed to mobbing are more likely to be affected than men (Escartin et al., 2011). Specifically, it appears to be associated with differences in perceptions of gender, adverse actions, and personality traits. Women victims of mobbing show higher levels of anxiety and more psychosomatic problems than men (Zapf et al., 2010). Many studies examining the relationship between gender and mobbing show that women are more exposed to mobbing than men (Yılmaz et al., 2008). The anatomical-biological features that reinforce gender discrimination are the discriminatory perspective that exists at the social, cultural, and political levels. However, many women claim that there is no discrimination or mobbing in the workplace. The culture formed in the workplace can cause women to adopt this and accept that it is the right thing (Türeli and Dolmacı, 2013). Research on personality differences (sense of consistency, self-efficacy, positive affect, negative affect, and self-victimization) helps explain why not all victims of bullying behaviors respond to the same degree (Vie et al., 2011). Personality is a significant variable in determining how mobbing is experienced, handled, and treated (Zapf and Einarsen, 2005). Personality traits determine “who” is more likely to be mobbed in an organization (Alfano et al., 2021). Sad, rigid, moody personalities are more victims of mobbing (Matthiesen and Einarsen, 2007). Victims exposed to mobbing behaviors do not have a specific personality type, but four types of employees are generally encountered in work environments. These; are lonely, different, successful newcomers and are more likely to discover mobbing behaviors (Tetik, 2010). Overall, existing studies do not clarify the role of personality differences between victims and non-victims (Long et al., 2004). Anxiety, depression, somatization, and similar personality traits are more common in mobbing victims (Akıncı et al., 2018). Thus, other studies show that personality traits play a relatively limited role in workplace conflict situations (Einarsen and Mikkelsen, 2003).

Some studies have pointed out that mobbing may negatively affect the victim's personality, conscientiousness, friendliness, and open-mindedness (Bolger and Schilling, 1991). Studies suggest that the personality traits of the victim may be affected by perceived negative actions in the workplace (Lahelma et al., 2012). Research has revealed that victims display a personality profile that tends to affect emotional and psychological distress (Matthiesen and Einarsen, 2001). There may be certain fragility/resilience factors among mobbing victims. When people with psychological problems experience mobbing, they are more likely to be exposed to long-term mental problems due to bullying and violent personal conflicts. People with psychological problems, low self-esteem, and anxiety in social situations are more likely to feel bullied and harassed. These people may not be able to defend themselves when exposed to mobbing (Alfano et al., 2021). This study aimed to examine the personality traits of mobbing victims.

2. METHOD

2.1. Participants

The population of the research consists of adult individuals living in Istanbul. The sample study consists of 400 individuals selected by a simple random sampling method among these individuals. Simple random sampling method is a reliable method of obtaining information in which each member of a population is chosen at random only by chance.

2.2. Data Collection Tools

Sociodemographic data form: Gender, age, marital status, education level, title, seniority, mobbing status questions.

Five-Factor Personality Model: It is scored with a 5-point Likert scale (1= totally agree - 5= not at all appropriate). To examine the scale's construct validity, Principal Components Factor Analysis was performed on the total scores of the 15 sub-dimensions in the scale, and Varimax rotation was applied (Somer, Korkmaz ve Tatar, 2000).

The short form of the Five Factor Personality Inventory (FFPI) developed by Tatar (2005) was used to assess personality traits. It is an 85-item personality inventory with subscales designed to evaluate the five main personality traits: Extraversion, Agreeableness, Self-Control / Responsibility, Emotional Balance / Emotional Consistency and Openness to Experience. Item responses were made on a 5-point scale. Cronbach's alpha coefficients were .85 for Extraversion, .87 for Agreeableness, .81 for Conscientiousness, .91 for Neuroticism and .82 for Openness to Experience.

As a result of these analyzes, it was seen that the 15 dimensions were grouped under five factors by taking their highest loadings from the dimensions they were expected to belong to, and the first five factors explained 74.3% of the total variance. The internal consistency reliability coefficient of the general factor was also determined as $\alpha = 0.84$ (Somer, Korkmaz, & Tatar, 2000).

2.3. Data Analysis

A total of 400 participants were included in the study. Before starting the data analysis, the collected data were sent to the computer environment, and statistical analysis was made with the SPSS 25 program. The first step of the study's normality test was applied, and the kurtosis-skewness values were checked. Since the Kurtosis-Skewness values are between -2 and +2, it was decided that there is a normal distribution (George and Mallery, 2010). The confidence level was determined as 95%. The t-Test was applied to analyze the difference between two independent variables.

3. RESULTS

Table 1: Descriptive Analysis Results of Sociodemographic Characteristics of the Sample Group

		Frequency	Percent
Gender	Female	238	59,5
	Male	162	40,5
	Total	400	100,0
Age	18-25	141	35,3
	26 to 35	85	21,3
	36 to 45	86	21,5
	45 and over	88	22,0
	Total	400	100,0
Marital Status	Married	141	35,3
	Single	259	64,8
	Total	400	100,0

Education Level	Primary school	29	7,2
	Secondary school	140	35,0
	High school	157	39,3
	University	74	18,5
	Total	400	100,0
Appellation	Administrator	67	16,8
	Assistant	94	23,5
	Employee	177	44,3
	Servant	62	15,5
	Total	400	100,0
Seniority	1 Year	32	8,0
	2 Years	249	62,3
	3 Years	49	12,3
	4 Years and above	70	17,5
	Total	400	100,0
Mobbing Status	Yes	132	33,0
	No	268	67,0
	Total	400	100,0

Table 1 contains demographic information about the people who participated in the research. The sample of the study consisted of 400 individuals, of which 59.5% (N=228) were female and 40.5% (N=162) were male. When the ages of the participants were examined, it was seen that 35.3% (N=141) individuals between the ages of 18-25, 21.3% (N=85) individuals between the ages of 26-35, 21.5% (N=86) individuals between the ages of 36-45 and 22.0% (N=88) individuals over the age of 45 were individuals. When the marital status of the participants is examined, it is seen that 35.3% (N=141) are married and 64.8% (N=259) are single. When the education level of the participants is examined, it is seen that 7.2% (N=29) are primary school graduates, 35.0%, (N=140) secondary school, 39.3%, (N=157) high school and 18.5%, (N=74) University graduates. When the title status of the participants is examined, 16.8% (N=67) are administrators, 23.5% (N=94) are assistants, 44.3% (N=177) are employee, 15% ,5 (N=62) appear to have worked in the position of servant. When the seniority status of the participants was examined, 8.0% (N=32) 1 year, 62.3% (N=249) 2 years, 12.3% (N=49) 3 years and 17.5% (N=70) are 4 years or more. When the mobbing status of the participants is examined, it is seen that 33.0% (N=132) were exposed to mobbing and 67.0% (N=268) were not exposed to mobbing.

Table 2: Descriptive Statistical Analysis Results of Five Factor Model

Variables	N	Minimum	Maximum	Mean	Std.		Skewness	Wormosis	
					Deviation				
Extraversion	400	8,00	40,00	35,9600	5,19141	-2,006	,122	2,303	,243
Agreeableness	400	11,00	40,00	31,1900	7,10635	-,583	,122	-,575	,243
Self-Control / Responsibility	400	8,00	33,00	13,8350	3,41275	2,004	,122	1,239	,243
Emotional Balance / Emotional Consistency	400	8,00	33,00	22,8925	3,75249	,063	,122	1,158	,243
Openness to Experience	400	6,00	26,00	10,2100	4,24334	,943	,122	,264	,243
Valid N (listwise)	400								

As can be seen in Table 2, the minimum value of the Extraversion scores, which is the Five Factor Model sub-dimension of the sample group, is 8 maximum value 40 and the average value is $\bar{X}=35.9600$, the minimum value of the Agreeableness points is 11 maximum value is 40 and the average value is $\bar{X}=31.1900$, the minimum value of the Self-Control/Responsibility scores is 8 maximum value is 33 and the average value is $\bar{X}=13.8350$, The minimum value of the Emotional Balance / Emotional Consistency scores is 8 maximum value 33 and the average value is $\bar{X}=22.8925$ and the minimum value of the Openness to Experience scores is 8 maximum value 33 and the average value is $\bar{X}= 22.8925$. The normality test, which is the first stage of the analysis, was applied and the flatness-skewness values were checked. Since the flatness-skewness values are between -2 and +2, it was decided that there was a normal distribution.

Table 3: T-Test Analysis Results of Five Factor Model Sub-Dimensions According to Gender Variable of Participants

Variables	Gender	N	Mean	Ss	t	Df	Sig.
Extraversion	Female	238	37,2143	4,49194	6,119	398	,000
	Male	162	34,1173	5,59879			
Agreeableness	Female	238	33,6218	5,76252	9,108	398	,000
	Male	162	27,6173	7,39493			
Self-Control / Responsibility	Female	238	12,8277	1,96589	-7,654	398	,000
	Male	162	15,3148	4,41268			
Emotional Balance / Emotional Consistency	Female	238	22,4118	3,55644	-3,140	398	,002
	Male	162	23,5988	3,92865			
Openness to Experience	Female	238	9,3992	3,46354	-4,756	398	,000
	Male	162	11,4012	4,95628			

As a result of the t-Test conducted when Table 3 is examined, there is a statistically significant difference in the extraversion scores between men and female from the five factor model sub-dimensions according to the gender variable of the participants ($t(398)=6,119$; $p<.05$). This finding shows that female participants have higher Extraversion scores than male participants.

According to the gender variable of the participants, there was a statistically significant difference between men and female in the Agreeableness k scores from the five factor model sub-dimensions ($t(398)=9,108$; $p<.05$). This finding suggests that female participants had higher Agreeableness scores than male participants.

According to the gender variable of the participants, there was a statistically significant difference between men and women in the Self-Control/Responsibility scores from the five factor model sub-dimensions ($t(398)=-7.654$; $p<.05$). This finding suggests that female participants had lower Self-Control/Responsibility scores than male participants.

According to the gender variable of the participants, there was a statistically significant difference in the Emotional Balance / Emotional Consistency scores between men and female from the five factor model sub-dimensions ($t(398)=-3,140$; $p<.05$). This finding suggests that female participants had lower Emotional Balance/Emotional Consistency scores than male participants.

Table 3: T-Test Analysis Results of Five Factor Model Sub-Dimensions According to the Mobbing Variable of the Participants

Variables	Mobing Status	N	Mean	Ss	t	Df	Sig.
Extraversion	Yes	132	36,4091	4,95006	1,215	398	,225
	No	268	35,7388	5,30130			
Agreeableness	Yes	132	32,2045	6,81236	2,012	398	,045
	No	268	30,6903	7,20676			
Self-Control / Responsibility	Yes	132	13,5606	3,56458	-1,129	398	,260

	No	268	13,9701	3,33395			
Emotional Balance / Emotional Consistency	Yes	132	22,6591	3,56366	-,873	398	,383
	No	268	23,0075	3,84337			
Openness to Experience	Yes	132	9,8258	4,13050	-,896	398	,371
	No	268	10,3993	4,29279			

As a result of the t-Test conducted when the table was examined, there was no statistically significant difference between the five factor model sub-dimensions of Extraversion, Self-Control/Responsibility, Emotional Balance / Emotional Consistency and Openness to Experience scores between those who were exposed to mobbing and those who were not exposed to mobbing according to the mobbing variable of the participants ($p > .05$).

As a result of the t-Test conducted when the table was examined, there was a statistically significant difference in the Agreeableness scores of the five factor model sub-dimensions between those who were exposed to mobbing and those who were not exposed to mobbing according to the mobbing variable of the participants ($t(398) = -2.012$; $p < .05$). This finding shows that the Agreeableness scores of the participants exposed to mobbing were higher than the participants who were not exposed to mobbing. In other words, showing agreeableness feature is linked to exposure to mobbing.

4.CONCLUSION

This study aimed to examine the personality traits of mobbing victims. In the study, the personality traits of the mobbing victims were measured with the five-factor personality model. It was concluded that women are more extroverted and docile, while men have higher self-control/responsibility and emotional stability/consistency. As a result of the study, it was found that showing agreeableness is associated with being exposed to mobbing.

Based on some studies, Baş Oral (2012) stated that the majority of those exposed to mobbing are agreeableness, intelligent, successful, dedicated, well-intentioned, honest, trusting people, non-political, loyal to their institution, tending to be introverted in social life, internally stated that they have very self-respecting characteristics. Mathisen et al. (2011) examined the relationship between the personal characteristics of managers and mobbing in the workplace. According to the research findings, a connection was found between agreeableness and mobbing in situations with low-stress levels. Glaso et al. (2007) studied the differences between the personality traits of people exposed to mobbing and those who were not. According to the research results, while the victims have more emotional stability than the non-victims, they are less adaptable, responsible, and extroverted. It has been stated that mobbing victims also experience emotional instability more than non-victims. Coyne et al. (2000), according to the results of their study to understand the victimization of mobbing in the workplace from personal characteristics, victims are less independent, extroverted, and more responsible than non-victims. Mitsopoulou and Giovazolias (2015) conducted a meta-analysis study on personal characteristics, empathy, and mobbing behaviors. The study found a direct correlation between a low level of agreeableness and conscientiousness and a high level of emotional stability, extraversion, and mobbing behaviors. These findings support the findings of the study.

Many mental disorders may occur with the duration and severity of mobbing. Boredom, anger, pessimism, sleep problems, depressive symptoms, anxiety symptoms, and behavioral problems can be seen. Adjustment disorders where depression, anxiety, and behavioral issues can coexist; anxiety disorders such as depression, generalized anxiety, and panic disorder; somatoform disorders that express themselves with somatic symptoms (somatization, conversion, pain disorders), psychosomatic diseases in which psychological factors play a role in their emergence and course (skin). Diseases, hypertension, etc. can be seen. In addition, as a self-healing effort, there may be a turn to alcohol, drugs, or drugs. Substance use disorders may develop. "Post-Traumatic Stress Disorder" is one of the most severe mental disorders that can occur due to experiences threatening the individual's physical integrity, leaving him helpless, and creating a sense of horror. The quality of becoming chronic, disrupting functionality, and creating disability is much higher in those that occur due to traumas (such as torture, rape, and war trauma) deliberately created by human hands.

It is necessary to carry out studies to ensure that the employees are in complete biological, psychological, and social well-being for equality, justice, and fairness, to prevent the mobbing phenomenon of the employees, and to minimize the effects of the experienced cases.

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Tarımsal Kooperatifler ile İlgili Yapılmış Bilimsel Yayınların Bibliyometrik Analiz ile İncelenmesi

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Özet: Tarımsal kooperatifler kırsal alanların hem ekonomik hem de sosyal olarak gelişmesinde oldukça önemli rol oynamaktadır. Küçük ölçekli işletmelerin ortak hareket edebilmelerini ve piyasada temsil edilebilmelerini sağlayan tarımsal kooperatifler, üretici gelirinin arttırılmasında önemli araçlardan biridir. Dünyada ve Türkiye’de tarımsal kooperatifler ile ilgili yapılan çalışmalar gün geçtikçe artmakta ve giderek önem kazanmaktadır. Bu çalışmada tarımsal kooperatifçilik alanında 1976-2022 yılları arasında yayımlanan 586 çalışma incelenmiş ve alandaki eğilim ve trendler ortaya konulmuştur. Bu kapsamda, Web of Science Core Collection veri tabanında “Agricultural cooperatives” konu başlıklarında tarama gerçekleştirilmiş ve çalışmalara ait bibliyometrik verilere ulaşılmıştır. Alandaki çalışmalar arasında önemli kavram, çalışma ve yazarların birbirleri ile olan ilişkilerini görselleştirmeye yarayan sosyal ağ analizi yöntemi kullanılarak görselleştirme yapılmıştır. Çalışmanın sosyal ağ analizinin gerçekleştirilmesinde CiteSpace yazılımı kullanılmıştır. İncelenen 586 çalışma yayın yılları, yayın türleri, yayın dilleri, ülke işbirlikleri, ortak atıf ağları, konu kümelenmeleri ve kelime analizi bağlamında incelenmiştir. Analiz sonucuna göre çalışmaların ağırlıklı olarak makale türünde ve İngilizce dilinde yapıldığı görülmüştür. Tarımsal kooperatifler ile ilgili yapılan çalışmaların özellikle 2006 yılından sonra ciddi artış gösterdiği tespit edilmiştir. Ülke iş birlikliklerinde ve atıf patlaması konusunda Amerika Birleşik Devletleri (ABD)’nin öne çıktığı belirlenmiştir.

Anahtar Kelimeler: Tarımsal Kooperatifçilik, Sosyal Ağ Analizi, Bibliyometrik Analiz

Bibliometric Analysis of Scientific Publications on Agricultural Cooperatives

Abstract: Agricultural co-operatives play an important role in both the economic and social development of rural areas. Agricultural cooperatives, which enable small-scale enterprises to act jointly and to be represented in the market, are important for increasing farmers’ income. Publications related to agricultural cooperatives increase day to day and are important in both Turkey and world. This study analyses 586 studies published in the field of agricultural co-operatives between 1976 and 2022 and identifies tendencies and trends in the field. In this regard, Web of Science Core Collection database was searched using the keyword “Agricultural cooperatives” and relevant bibliometrical data were obtained. Visualisation was made using the social network analysis method, which is used to visualise the relationships between important concepts, studies and authors among the studies in the field. CiteSpace software was used in the social network analysis of the study. The 586 studies were analysed in terms of publication years, publication types, publication languages, country collaborations, co-citation networks, subject clusters and word analysis. According to the results of the analysis, it was determined that the studies were predominantly in article type and in English. It has been shown that research on agricultural cooperatives has greatly risen, particularly after 2006. It has been determined that the United States of America (USA) stands out in country collaborations and citation explosion.

Key Words: Agricultural Cooperatives, Social Network Analysis, Bibliometric Analysis

1. GİRİŞ

Kooperatifçilik, insanoğlunun var oluşundan itibaren dayanışma ve yardımlaşma şeklinde ortaya çıkan bir kavramdır. Tarih boyunca insanoğlu ihtiyaçlarının bir kısmını tek başına karşılamasına rağmen birçok ihtiyacını karşılamak için diğer insanlara ihtiyaç duymuştur. Kooperatifçiliğin kökeninde ‘imece’ denilen, toplumsal dayanışmaya ve karşılıklı yardımlaşmaya dayanan bir örgütlenme süreci yatmaktadır. Bu nedenledir ki, kooperatifi kooperatif yapan niteliklerin başında ‘kendine yardım ve karşılıklı yardımlaşma örgütü’ olması gelmektedir (Geray, 2014).

Kooperatif hem üretici hem de tüketici olarak herkesin içinde bulunduğu, yabancı olmadığı bir konudur. Kamu ve özel sektörün yanında üçüncü bir sektör olarak adlandırılan kooperatifler, kapitalist sektöre karşı bireyleri birleştirerek ekonomik yönden savunmasını sağlamakla birlikte, ortak amaç doğrultusunda birleşen bireylerin ekonomik bağımsızlıklarını da artırmaktadır (Mülayim, 1995).

Tarımsal kooperatifler kırsal alanların hem ekonomik hem de sosyal olarak gelişmesinde oldukça önemli rol oynamaktadır. Küçük ölçekli işletmelerin ortak hareket edebilmelerini ve piyasada temsil edilebilmelerini sağlayan tarımsal kooperatifler, üretici gelirinin arttırılmasında önemli araçlardan biridir. Temelde üretim ve tüketim dengesini koruma fonksiyonu üstelene kooperatifler, bu iki zıt güç arasında yarar yaratma amacına

yönelmiştir. Kooperatifler, sermaye şirketleri ile karşılaştırıldığında sürdürülebilirlik açısından daha üstün işletmelerdir (Vural, 2014).

Dünyada çeşitli sektörlerde yer alan kooperatifler belirli kriterlere göre her yıl Uluslararası Kooperatifler Birliği (ICA) tarafından rapor edilerek incelenmektedir. Ciro sıralamasına göre en iyi 300 kooperatifin 2019 yılı toplam cirosu 2,180.01 milyar dolardır. Bu kooperatiflerin sektörel dağılımı incelendiğinde ilk sırada sigorta, ikinci sırada ise tarım sektörünün geldiği görülmektedir (ICA, 2021). Tarım sektöründe ise özellikle Uzak Doğu ülkeleri ile Amerika'nın öne çıktığı dikkat çekmektedir.

Dünyada ve Türkiye'de tarımsal kooperatifler ile ilgili yapılan çalışmalar gün geçtikçe artmakta ve giderek önem kazanmaktadır. Bu çalışmanın amacı, tarımsal kooperatifler ile ilgili yapılmış çalışmaların bibliyometrik analiz ile incelenerek, bu konudaki eğilimlerin belirlenmesidir. Bibliyometrik analizde temel amaç, çeşitli dönemlerde yayınlanmış yayınların belli kriterlere göre bilimsel dökümantasyonun, bilimsel iletişime ilişkin bulguların iyileştirilmesi amacı ile sayısal yöntemler ile analiz edilmesidir (Osareh, 1996; Kocabaş ve Alkan, 2020). Literatürde bibliyometrik analiz kullanılarak yapılan farklı konularda bir çok çalışma yer almaktadır (Güzeller ve Çeliker, 2017; Güzeller ve Çeliker, 2018; Doğru ve ark., 2019; Kocabaş ve Alkan, 2020; Gülmez ve ark., 2020; Finger et al., 2021; Seyhan ve Öztürk, 2021; Zhang et al., 2021). Özellikle tarımsal kooperatifler ile ilgili çalışmaları inceleyen kapsamlı ve güncel bir çalışmaya rastlanmamıştır. Bu nedenle, bu çalışmanın literatürde yer alan boşluğu dolduracağı ve bundan sonra yapılacak çalışmalara yol gösterici olacağı düşünülmektedir.

2. YÖNTEM

Bu çalışmada tarımsal kooperatifçilik alanında uluslararası atıf indekslerinde taranan çalışmaların bibliyometrik özelliklerinin belirlenmesi amaçlanmıştır. Araştırmanın verileri Web of Science Core Collection veri tabanı kullanılarak elde edilmiştir. Veri tabanında konu başlıklarında "Agricultural cooperatives" olarak tarama gerçekleştirilmiş ve bu çalışmalara ait bibliyometrik verilere ulaşılmıştır. 1976-2022 yılları arasında yayımlanan 586 çalışma yayın yılları, yayın türleri, yayın dilleri, ülke işbirlikleri, ortak atıf ağları, konu kümelenmeleri ve kelime analizi bağlamında incelenmiştir. Ayrıca atıf açısından alanda önemli bir gösterge olan Hirsch indeksi (h-indeksi) hesaplanmıştır. H-indeksi genel anlamıyla, en az h sayıda atıf almış h yayının o kadar h-indeksine sahip olacağı anlamına gelmektedir (Hirsch, 2005).

Alandaki çalışmalar arasında sosyal ağ analizi kullanılarak önemli kavram, çalışma ve yazarların birbirleri ile olan ilişkileri görselleştirilmiştir. Çalışmanın sosyal ağ analizinin gerçekleştirilmesinde CiteSpace V yazılımı kullanılmıştır. Sosyal ağ analizi kısaca; sosyal yapıları oluşturan aktörler arasındaki ilişkilerin ağlar ve düğümler vasıtasıyla örüntü halinde sunulması ve incelenmesidir. Web of Science Core Collection veri tabanında "Agricultural cooperatives" konu başlıklarında tarama yapılarak elde edilen 586 çalışmaya ait veriler, CiteSpace V programına uygun hazırlanarak analizler yapılmıştır. CiteSpace programı Java tabanlı bir görselleştirme programıdır. Bilimsel literatürdeki eğilimleri ve değişiklikleri analiz ederek görselleştirmeye yarayan bir uygulamadır (Chen vd., 2010). Bu uygulama ile yapılan analizler sonucunda ağın yoğunluğu, modularity değeri ve mean silhouette değeri hesaplanmıştır.

Ağ yoğunluğu, bir ağın potansiyel olarak kullanılabilecek bağlantıların ne kadarının kullanılabildiğini göstermektedir (Al ve Doğan, 2012; 354). Bir ağın modülerliği, bir ağın birden fazla bileşene veya module ne ölçüde ayrıştırılabileceğini ölçer. Bu metrik, ağın belirli bir ayrışmasının genel netliğine ilişkin bir referans sağlar. 0-1 arasında bir değer almakta ve yüksek modülerlik değeri iyi yapılandırılmış bir ağı ifade etmektedir (Chen, 2016: 32). Mean silhouette değeri kümelerin homejenliğini gösteren ve -1 ile 1 arasında değişen bir değer almaktadır. Değerin 1'e yaklaşması kümelenmenin güçlü olduğunu göstermektedir (Chen et al., 2010: 8).

Çalışmada yıllara göre, yazarlara göre ve dergilere göre atıf patlamaları tespit edilmiştir. Atıf patlamaları belirli bir frekans fonksiyonuna dayanan ve incelenen toplam süre içerisinde kısa bir zaman aralığında meydana gelen dalgalanmaların istatistiksel olarak önemli olup olmadığını belirlemektedir (Chen vd., 2010: 8). Ayrıca makalelerin konu yönelimlerinin belirlenmesinde log olasılık oranı (LLR) algoritmasından yararlanılarak trend konular ortaya konulmuştur.

3. BULGULAR

3.1. Genel İstatistikler

Çalışmanın bu bölümünde “Tarımsal kooperatifler” ile ilgili 1976-2022 yılları arasında yayımlanan 586 çalışma yayın yılları, yayın türleri, yayın dilleri ve atıf analizi ele alınarak incelenmiş ve elde edilen sonuçlar yüzde ve frekans dağılımı olarak tablolaştırılmıştır.

Yayınların yıllara göre dağılımı incelendiğinde, “Tarımsal Kooperatifler” ile ilgili yapılmış çalışmaların özellikle 2006 yılından sonra ciddi oranda artış gösterdiği dikkat çekmiştir. 1976 – 1985 yılları arasında yapılan çalışmaların sayısı 46 iken, bu sayı son 6 yılda 274’e yükselmiştir (Tablo 1).

Tablo 1: Yayınların Yıllara Göre Dağılımı

Yıllar	Frekans (n)	Yüzde (%)
1976-1985	46	7.85
1986-1995	89	15.19
1996-2005	39	6.66
2006-2015	138	23.55
2016-2022	274	46.76
Toplam	586	100.00

Yayın türlerine göre çalışmaların dağılımları incelendiğinde en fazla yapılan yayın türünün makale olduğu görülmüştür. Makaleleri, bildiri ve kitap incelemeleri takip etmektedir. Not, mektup ve reprint ise en az yayınlanan türler arasındadır (Tablo 2).

Tablo 2: Yayınların Türlerine Göre Dağılımı

Yayın Türü	Frekans (n)	Yüzde (%)
Makale	398	67.92
Bildiri	77	13.14
Kitap İncelemesi	42	7.17
Toplantı Özeti	23	3.92
Kitap Bölümü	19	3.24
Editöryal Materyal	13	2.22
Derleme	9	1.54
Not	3	0.51
Mektup	1	0.17
Reprint	1	0.17
Toplam	586	100.00

İncelenen çalışmaların %77.30’unun İngilizce dilinde, %9.56’sının ise İspanyolca dilinde yayınlandığı görülmüştür. Portekizce, Almanca ve Fransızca yapılan çalışmalarında literatürde yer aldığı görülmüştür. Diğer dillerde yapılan çalışmaların da varlığı görülmekte fakat sayılarının oldukça az olduğu dikkat çekmektedir. Türkçe olarak yapılan çalışmaların sayısı ise 4’tür (Tablo 3).

Tablo 3: Yayınların Dillerine Göre Dağılımı

Dil	Frekans (n)	Yüzde (%)
İngilizce	453	77.30
İspanyolca	56	9.56
Portekizce	19	3.24
Almanca	17	2.90
Fransızca	14	2.39
Çekçe	5	0.85
İtalyanca	4	0.68
Rusça	4	0.68
Slovakça	4	0.68
Türkçe	4	0.68
Macarca	3	0.51
Çince	2	0.34

Japonca	1	0.17
Toplam	586	100.00

“Tarımsal Kooperatifler” alanında 1976-2022 yılları arasında yayımlanan 586 çalışmaya yapılan toplam atıf sayısı 3760’dır. 586 yayın içerisinde çalışma başına ortalama atıf sayısı 6.42’dir. En fazla alınan atıf sayısının 2006 – 2015 yılları arasında olduğu görülmektedir (Tablo 4).

Tablo 4: Yıllara Göre Alınan Atıf Sayıları

Yıllar	Alınan Atıf Sayısı	Yüzde (%)
1976-1985	96	2.55
1986-1995	647	17.21
1996-2005	247	6.57
2006-2015	1878	49.95
2016-2022	892	23.72
Toplam	3760	100.00

Yayın sayısına göre atıf sayıları incelendiğinde 586 çalışmanın %53.24’ünün (312) çalışmanın hiç atıf almadığı görülmüştür. 100 ve üzeri atıf alan ise 5 adet yayın bulunmaktadır (Tablo 5). Atıf analizi kapsamında “Tarımsal Kooperatifler” alanının h-indeksi 29 bulunmuştur. Buna göre, her biri en az 29 kez alıntılanmış, 29 yayının bulunduğu söylenebilir.

Tablo 5: Yayın Sayısına Göre Atıf Sayıları

Atıf Sayısı	Yayın Sayısı	Yüzde (%)
100 ve üzeri	5	0.85
81 -99	5	0.85
51-80	9	1.54
21-50	22	3.75
11-20	33	5.63
1-10	200	34.13
0	312	53.24
Toplam	586	100.00

3.2. Ülke İş Birliklikleri

Çalışmanın bu bölümünde farklı ülkelerde yapılan çalışmaların birbirleri ile ilişkilerinin belirlenmesi amacıyla sosyal ağ analizi kullanılmıştır. Buna göre, ülkelerin isimleri merkezilik derecelerine göre boyutlandırılarak Şekil 1’de verilmiştir. Analiz sonucunda 86 düğüm ve 141 bağlantıdan oluşan bir ağ elde edilmiştir. Ağ 28 kümeye ayrılmış olup, yoğunluğu 0.0386’dır. Ağın modularity değeri, Q= 0.4986, mean silhouette değeri ise 0.8328 olarak bulunmuştur. Düğümler arasındaki bağlantılar bağlantı sayısı arttıkça kalınlaşmaktadır (Şekil 1).

Şekil 1: Ülke İşbirliklikleri



Tablo 6’da ülkelerin iş birliktelikleri ve merkezilik dereceleri incelendiğinde, diğer ülkeler ile en fazla işbirliği içinde olan ülkenin ABD olduğu görülmektedir (n=97). En yüksek merkezilik derecesine sahip olan ülke ise Almanya’dır. Almanya ülkeler arasındaki bilimsel ilişkilerin sağlanması açısından ve işbirliği devamlılığı açısından köprü görevi gördüğü ve kilit rol üstlendiği söylenebilir.

Tablo 6: Ülke İş birliktelikleri ve Merkezilik Dereceleri

Ülke	Frekans	Yıl	Küme	Ülke	Merkezilik	Yıl	Küme
ABD	97	1980	3	Almanya	0.40	1995	2
Çin	57	2010	0	ABD	0.21	1980	3
Küba	45	2013	0	İngiltere	0.20	2008	4
İspanya	27	1988	0	İspanya	0.19	1988	0
Brezilya	25	2011	4	Fransa	0.16	1980	1
Almanya	22	1995	2	Çin	0.11	2010	0
Fransa	21	1980	1	Hollanda	0.09	1982	5
Belçika	17	2014	3	İtalya	0.09	2008	3
İngiltere	15	2008	4	İsrail	0.08	2015	0
Türkiye	13	2006	3	Belçika	0.07	2014	3

Ülkelerin atıf patlama (burst) değerleri Tablo 7’de verilmiştir. Tabloda kırmızı ile gösterilen kısımlar atıfların başlangıç ve bitiş süreçlerini göstermektedir. Ülkelerin yıllara göre atıf patlama değerleri incelendiğinde, en yüksek atıf patlamasına sahip ülkenin 1980-2008 yılları aralığında ABD (23.44) olduğu görülmektedir. Ayrıca “Tarımsal Kooperatifler” alanında yayımlanan güncel çalışmaların Kübalı araştırmacıların gerçekleştirdiği çalışmalara atıf kaynağı olarak sıklıkla başvurduğu görülmektedir.

Tablo 7: Ülkelerin Yıllara Göre Atıf Patlama Değerleri

Ülke	Patlama	Başlangıç	Bitiş	1976-2022
ABD	23.44	1980	2008	
Küba	9.92	2015	2019	
Yunanistan	3.59	2012	2014	
İspanya	3.46	2010	2014	
İran	3.27	2005	2011	

3.3. Dergi Ortak Atıf Ağı

Dergi ortak atıf ağı analizinde, çalışmaların ortak atıfta bulunduğu ve “Tarımsal Kooperatifler” alanında önemli bilimsel çalışmaların yayımlandığı dergilerin belirlenmesi amaçlanmaktadır. Bu amaç doğrultusunda Şekil 2’de alanda en çok atıfta bulunan dergilerin ağı yer almaktadır. Ağ, 849 düğüm (atıf kaynağı dergiler), 3789 bağlantı ve 87 kümeden meydana gelmektedir. Ağı yoğunluğu 0.0105’dir. Modularity değeri Q= 0.6613, mean silhouette değeri ise 0.8429’dur.

Şekil 2: Dergi Ortak Atıf Ağı



“American Journal of Agricultural Economics” dergisi “Tarımsal Kooperatifler” alanında pılan çalışmaların en fazla atıfta bulunduğu dergidir (n=125). Bu dergiyi “Annals of Public and Cooperative Economics” ve “Food Policy” dergisi takip etmektedir (Tablo 8).

Tablo 8: Ortak Atıf Alan Dergiler

Dergiler	Frekans	Yıl	Küme
American Journal of Agricultural Economics	125	1983	2
Annals of Public and Cooperative Economics	65	1988	0
Food Policy	62	2009	1
Agricultural Economics (AGR ECON-BLACKWELL)	59	1988	1
World Development	57	2006	1
Agribusiness	53	1988	0
Journal of Agricultural Economics	52	1995	1
The American Economic Review	51	1982	2
European Review of Agricultural Economics	42	2011	0
Journal of Rural Studies	41	2010	1

Dergilerin yıllara göre atıf patlama değerleri incelendiğinde Sustainability-Basel dergisinin ön plana çıktığı görülmektedir. Sustainability-Basel dergisi, en fazla atıf patlaması değerine sahip dergidir (8.34). Ayrıca dergi Journal of Co-operative Organization and Management dergisi ile birlikte bu alanda en güncel araştırmaların atıfta bulunduğu kaynakların yayımlandığı dergilerdir. “Tarımsal Kooperatifler” alanındaki araştırmacıların son yıllarda bu dergilerde çalışmış konulara eğilim gösterdikleri ifade edilebilir (Tablo 9).

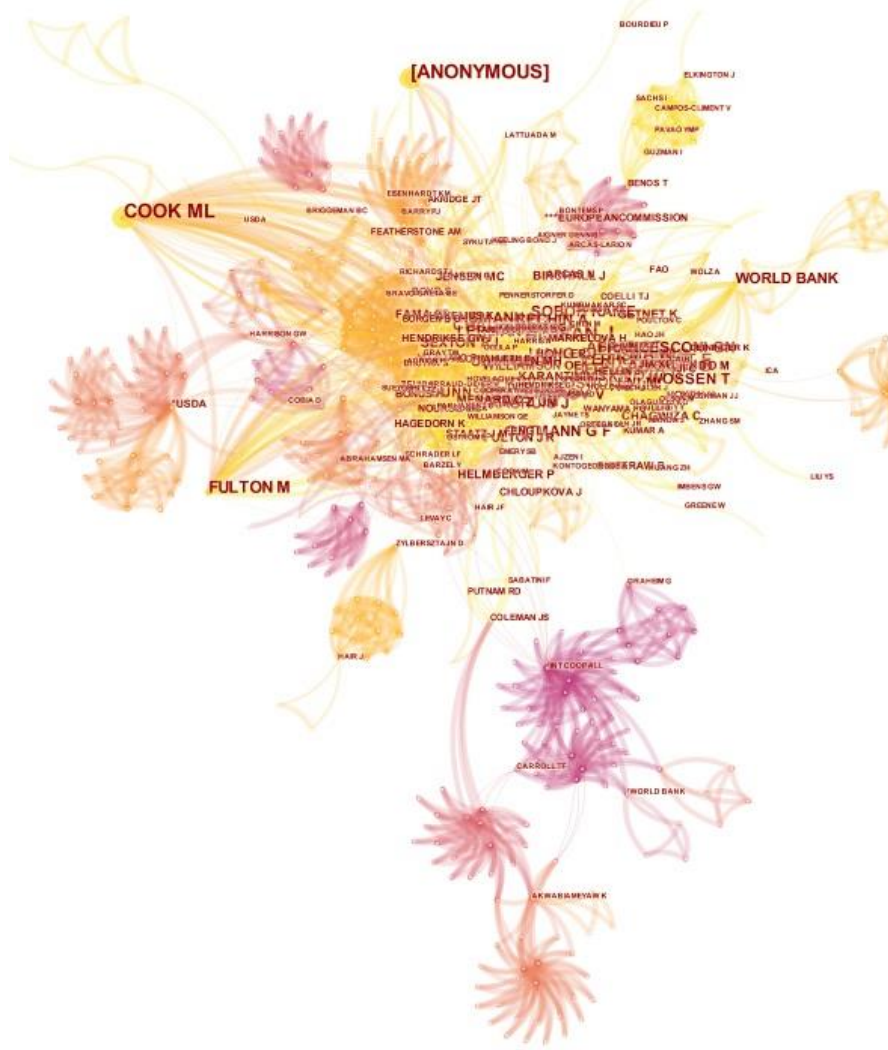
Tablo 9: Dergilerin Yıllara Göre Atıf Patlama Değerleri

Dergiler	Patlama	Başlangıç	Bitiş	1976-2022
Sustainability-Basel	8.34	2019	2021	
Journal of Political Economy	5.31	2011	2015	
Journal of Co-operative Organization and Management	5.07	2019	2021	
Making Peasants Backward	4.84	2000	2001	
Cooperative Theory	4.72	1995	2013	

3.4. Yazar Ortak Atıf Ağı

En fazla ortak yazarlığı olan araştırmacıların yer aldığı yazar ortak atıf ağı şekil 3’te gösterilmiştir. Yazar ortak atıf ağı, 904 düğüm (atıf kaynağı yazarlar), 3483 bağlantı ve 131 kümeden oluşmaktadır. Yoğunluğu 0.0085, Modularity değeri $Q=0.7873$ ve mean silhouette değeri ise 0.8897’dir (Şekil 3).

Şekil 3: Yazar Ortak Atıf Ağı



Alanda yayımlanan 586 çalışmada en fazla atıfta bulunan yazarlar L. Michael Cook ve Jos Bijman'dır. Anonymous adı altındaki ismi belirlenemeyen yazarlarda (n=44) en çok atıf alan 3. sırada yer almaktadır (Tablo 10).

Tablo 10: Ortak Atıf Alan Yazarların Atıf Sayıları

Yazarlar	Atıf Sayısı	Yıl	Küme
L. Michael Cook	52	2001	0
Jos Bijman	48	1988	0
Anonymous	44	2015	0
Tanguy Bernard	31	2012	1
Fabio R. Chaddad	31	2005	0

Yazarların yıllara göre atıf patlama değerleri incelendiğinde en fazla atıf alan yazarların Mojo, D. ve Ma, Wl. Olduğu görülmektedir. Bu yazarların atıf patlamalarının son yıllarda artış gösterdiği görülmektedir (Tablo 11).

Tablo 11: Yazarların Yıllara Göre Atıf Patlama Değerleri

Yazarlar	Patlama	Başlangıç	Bitiş	1976-2022
MOJO D	5.93	2019	2022	
MA WL	5.93	2019	2022	
BIJMAN J	5.06	2017	2020	
GRASHUIS J	4.99	2019	2022	
KOTSONIS	4.83	2000	2001	

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2014

2

Ma, W., Abdulai, A., Goetz, R. 2018. Agricultural Cooperatives and Investment in Organic Soil Amendments and Chemical Fertilizer in China

67

2018

2

3.6. Konu Kümelenmeleri ve Kelime Analizi

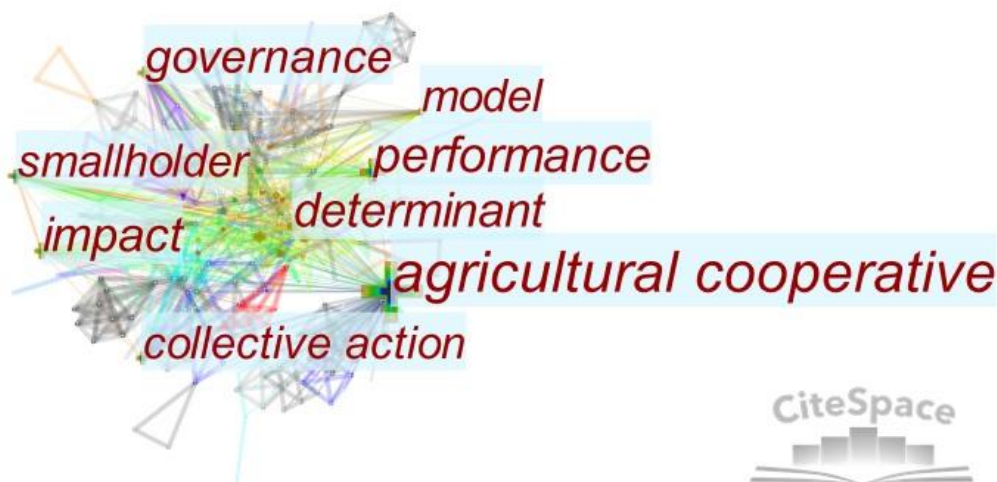
Alandaki konu eğilimlerinin tespit edilmesi amacıyla yayın ortak atıf ağından faydalanılarak trend konular tespit edilmiştir (Tablo 15). Belirli bir alandaki farklı çalışmaların bir kaynağa birçok kez atıfta bulunması o kaynakların benzer konularda çalışıldığını bir göstergesidir (Ukşul, 2016:65). Atıf kaynaklarına göre oluşan konu kümelenmeleri Tablo 15'te gösterilmiştir. Buna göre "teknik etkinlik" ile ilgili yapılan çalışmaların ön plana çıktığı görülmektedir. Mean silhouette değeri 0.813 olarak bulunmuş olup bu kümenin homojen yapıda olduğu görülmektedir. Ayrıca bu kümede yer alan çalışmaların atıf yaptıkları yayınların ortalama yılı 2000'dir.

Tablo 15: Atıf Kaynaklarına Göre Oluşan Konu Kümelenmeleri

Küme	Boyut	Mean Silhouette	Etiket (Top Terms)	Etiket (LLR)p-değeri	Ortalama Atıf Yılı
0	27	0.813	agricultural cooperative	technical efficiency (191.73, 1.0E-4)	2000
1	21	0.813	agricultural cooperative	routing problem (117.57, 1.0E-4)	2004
2	18	0.904	agricultural cooperative	technical efficiency (167.28, 1.0E-4)	1989
3	13	0.800	agricultural cooperative	jiangxi province (92.97, 1.0E-4)	1987

Ortak kelime analizi, belli bir alanda yapılan çalışmaların hangi kavramlar üzerinde yoğunlaştığını gösteren önemli bir göstergedir (Ukşul, 2016:67). Ortak kelime ağı Şekil 5'te gösterilmiştir. Buna göre, ağ 419 düğüm (kelime), 1366 bağlantı ve 78 kümeden oluşmaktadır. Ağın yoğunluğu 0.0156'dır. Modularity değeri Q= 0.5827, mean silhouette değeri ise 0.8646 olarak tespit edilmiştir (Şekil 5).

Şekil 5: Ortak Kelime Ağı



Yapılan analiz sonucuna göre yayınlarda kullanılan ortak kelimeler ve merkeziliklerin dereceleri Tablo 16'da sunulmuştur. Buna göre alanda tarımsal kooperatiflerden sonra en çok, performans çalışmalarının ön planda olduğu görülmektedir (Tablo 16).

Tablo 16: Yayınlarda Kullanılan Ortak Kelimeler ve Merkezilik Dereceleri

Kelime	Frekans	Merkezilik
agricultural cooperative	111	0.44
performance	38	0.09
determinant	26	0.07
impact	24	0.12
membership	19	0.02

4. SONUÇ

Kooperatifçilik hem ülkemizde hem de dünyada giderek önem kazanan bir konu haline gelmeye başlamıştır. Tarımsal kooperatifler ile ilgili yapılan çalışmalar da son zamanlarda artmakta ve önem kazanmaktadır. Bu alanda yapılan çalışmaların trendlerini ortaya koymak hem literatüre hem de bu alanda çalışan araştırmacılara yol gösterici olmaktadır.

Bu çalışmada, Web of Science Core Collection veri tabanında “Agricultural cooperatives” konu başlıklarında tarama yapılarak, 1976-2022 yılları arasında yayımlanan 586 çalışma incelenmiş ve alandaki eğilim ve trendler ortaya konulmuştur. Yapılan analizler sonucuna göre;

- Tarımsal kooperatifler ile ilgili yapılan çalışmaların özellikle 2006 yılından sonra ciddi artış gösterdiği tespit edilmiştir.
- Çalışmaların %67.92’si makale türünde ve %77.30’u İngilizce dilindedir.
- Ülke iş birlikliklerinde ve atıf patlaması konusunda Amerika Birleşik Devletleri (ABD)’nin öne çıktığı belirlenmiştir.
- Tarımsal kooperatifler ile ilgili yapılan çalışmalarda “American Journal of Agricultural Economics” dergisinin en fazla atıf alan dergi olduğu ve alanda ön plana çıktığı görülmüştür.
- Son zamanlarda tarımsal kooperatifçilik ile ilgili teknik etkinlik konularına ağırlık verildiği ve performans çalışmalarının yaygınlaştığı belirlenmiştir.

Bu çalışmanın kooperatifçilik alanında yol gösterici olması ve bundan sonraki çalışmalara yön vermesi beklenmektedir. Ayrıca bu çalışma yalnızca Web of Science Core Collection veri tabanında konu başlıkları taraması yapılarak yapılmıştır. Bundan sonraki çalışmalarda farklı veri tabanları kullanılarak ve tarama kriteri genişletilerek çalışmalar yapılabilir.

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Etik İklim Algısının İş Tatminine Etkisi: Liderle Özdeşleşmenin Aracı Rolü

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Özet: Bu araştırmada etik iklim algısına odaklanılmış ve etik iklim ile liderle özdeşleşme ve iş tatmini arasındaki ilişkiler incelenmiştir. Araştırmada teorik yapı ve yapılan çalışmalar dikkate alınarak etik iklim algısının liderle özdeşleşmeyi ve iş tatminini artırabileceği düşünülmüştür. Bu doğrultuda etik iklimin hem doğrudan hem de liderle özdeşleşme üzerinden iş tatminini etkileyebileceği yönünde hipotezler geliştirilmiştir. Hipotez testleri için veriler Türkiye’de bir ildeki 111 banka çalışanından anket tekniği kullanılarak toplanmıştır. Bu veriler için SPSS, Amos ve PROCESS Macro programları kullanılmıştır. Bu programlarla frekans analizi, doğrulayıcı faktör analizi, korelasyon analizi ve regresyon analizi yapılmıştır. Sonuçlar çalışanların etik iklim algısının iş tatminlerini pozitif yönde etkilediğini göstermiştir. Ayrıca sonuçlar etik iklim algısının iş tatminine etkisinde liderle özdeşleşmenin aracı olduğunu ortaya çıkarmıştır. Böylece mevcut çalışma etik iklim algısının iş tatminini doğrudan ve dolaylı (liderle özdeşleşme aracılığı ile) olarak nasıl etkilediğini ortaya koyarak literatüre katkıda bulunmuştur. Araştırmanın teorik ve pratik etkileri, kısıtlılıkları ve gelecekte yapılacak çalışmalara önerileri tartışılmıştır.

Anahtar Kelimeler: Etik İklim Algısı, Liderle Özdeşleşme, İş Tatmini

The Effect of the Ethical Climate Perception on Job Satisfaction: The Mediating Role of Identification with the Leader

Abstract: This research focused on the perception of ethical climate and examined the relationships between ethical climate and identification with the leader and job satisfaction. In the research, considering the theoretical structure and literature studies, it was thought that ethical climate perception could increase both identification with the leader and job satisfaction. In this direction, hypotheses have been developed that the ethical climate can affect job satisfaction both directly and indirectly (through identification with the leader). The data to be used in the hypothesis tests were collected from 111 bank employees in a province in Turkey using the survey technique. SPSS, Amos and PROCESS Macro programs were used for the analysis of these data. Frequency analysis, confirmatory factor analysis, correlation analysis and regression analysis were performed with these programs. According to the results, the ethical climate perception of the employees positively affected their job satisfaction. In addition, the results showed that identification with the leader has a mediating role in the effect of ethical climate perception on job satisfaction. Thus, the present research contributed to the literature by revealing how ethical climate perception affects job satisfaction directly and indirectly (via identification with the leader). The theoretical and practical effects, limitations and suggestions for future research are discussed.

Keywords: Ethical Climate Perception, Identification with the Leader, Job Satisfaction

1. GİRİŞ

Son yıllarda Arthur Andersen, Enron, ImClone Systems, Parmalat, Tyco, WorldCom, Etibank ve Emlakbank gibi kuruluşlardaki skandallar, etik olmayan eylemlerin oldukça yaygın hale geldiğini göstermektedir (Mulki vd., 2006; Yener vd., 2012). Bununla birlikte, yasal olsalar bile etik olmayan davranışların bir firmanın imajını ve itibarını zedeleyebileceği ve bunun sonucunda müşteri kayıpları, çalışanlarda moral bozukluğu ve çalışanların işten ayrılmaları ile sonuçlanabileceği konusunda artan bir farkındalık vardır. Yöneticiler, uzun vadeli ilişkiler ve müşteri sadakati oluşturmak için yüksek etik standartların hayati önem taşıdığına inanmaktadır (Mulki vd., 2006). Bu nedenle, örgüt içerisinde bireylerin neyin doğru davranış olduğuna ve örgütte etik durumların nasıl ele alınması gerektiğine dair paylaşılan algıları (Victor ve Cullen, 1987) olarak ifade edilen etik iklimin önemi daha da artmıştır.

Araştırmalar etik iklimin çalışanların iş memnuniyetinin kritik bir belirleyicisi olduğunu göstermektedir (Bıyık ve Sökmen, 2016; Çevirgen ve Üngüren, 2009; Tsai ve Huang, 2008; Schwepker, 2001; Ulrich vd., 2007; Wang ve Hsieh, 2012). Liderle özdeşleşme, örgütsel araştırmacıların ilgisini çeken ve iş tatminini artırdığı iddia edilen başka bir değişkendir (Hobman vd., 2011; Bunjak vd., 2019). Mevcut çalışmada etik iklim ve iş tatmini arasındaki ilişkide liderle özdeşleşmenin aracı rolünün incelendiği bir model oluşturulmuştur. Bu model çerçevesinde çalışmamızın birtakım teorik ve pratik katkıları olmuştur. Bunlardan ilki etik iklimin iş tatmininin önemli bir öncülü olduğu öngörülerek örgütsel bir faktör olan etik iklimin bireysel bir çıktı olan iş tatmini üzerindeki etkisi

incelenmiştir. İkinci olarak sosyal kimlik teorisi referans alınarak lider ile özdeşleşmenin etik iklim ve iş tatmini arasındaki ilişkiye aracılık ettiğini varsaydık. Araştırmamız, etik iklimin iş tatminini nasıl etkilediğine dair anlayışımızı artırma potansiyeline sahip olması ve iş tatmininin altında yatan mekanizmalar hakkında yeni bir bakış açısı (yani sosyal kimlik) sağlaması açısından önemlidir.

2. TEORİK ÇERÇEVE

2.1. Etik İklım ve İş Tatmini Arasındaki İlişki

Örgüt iklimi, örgütlerin rutin davranışları ve beklenen, desteklenen ve ödüllendirilen eylemleri işlevsel hale getirme yollarını ifade eder. Bireylerin pozisyonlarındaki, çalışma gruplarındaki ve çalışma yaşamlarındaki farklılıklar nedeniyle firma içinde örgütsel iklim algıları değişebilir (Schwepker, 2001). Çalışanların örgütsel iklime ilişkin algılarının bir yönünü yansıtan etik iklim (Newman vd., 2017), örgütte neyin doğru davranış olduğuna ve etik durumların nasıl ele alınması gerektiğine dair paylaşılan algı olarak ifade edilebilir (Schwepker, 2001). Etik iklim örgütlerde pek çok işleve hizmet etmektedir. Çalışanlara ahlaki bir ikilemle karşı karşıya kaldıklarında “ne yapmalıyım?” sorusuna cevaplar vererek etik sorunları çözmelerine yardımcı olurlar. Ayrıca etik iklim, çalışanların organizasyon içindeki etik sorunları belirlemelerine de yardımcı olur. Kısaca etik iklim, çalışanların örgütteki karmaşık durumları teşhis edip değerlendirmelerine yardımcı olan algısal bir mercek görevi görür (Cullen et al., 2003).

Örgütlerdeki etik iklimin bireysel (örneğin iş tatmini, işten ayrılma niyeti) ve örgütsel (örneğin örgütsel performans, örgütsel bağlılık) çıktı üzerinde etkisi olabilir. Bu çalışmada etik iklimin iş tatmini üzerinde pozitif bir etkisinin olduğu düşünülmüştür. İş tatmini Locke (1969: 316) tarafından “çalışma koşullarının duygusal olarak değerlendirilmesi sonucunda ortaya çıkan olumlu bir duygu modu” olarak tanımlanmıştır. İş tatmini üzerinde hem içsel (kişisel gelişim ve başarı fırsatları gibi) hem de dışsal (ücret, şirket politikaları, çalışma arkadaşları gibi) birtakım faktörler etki edebilir (Schwepker, 2001). Örgütlerde çalışma ortamının en önemli belirleyicisi olan örgütsel politikalar aynı zamanda etik ikliminin de belirleyicisidir. Diğer bir ifadeyle çalışanların iş tatminlerini etkileyen dışsal faktörlerden birisi de örgütsel politikalarla şekillenen etik iklimdir. Etik iklim, örgütsel ortamın olumlu veya olumsuz algılanmasında etkili olan en önemli unsurlardan birisidir (Newman vd., 2017). Ayrıca etik iklim, çalışanların davranışlarına yön veren ve örgütün etik karakterini gösteren bazı kalıpları içeren, örgüt içi ilişkileri ve çalışanların görüşlerini şekillendiren temel faktörlerden biridir (Faramarzpour vd., 2021). Konuyla ilgili önceki araştırmalar (örneğin, Schwepker, 2001; Çevirgen ve Üngüren, 2009; Bıyık ve Sökmen, 2016) etik iklimin iş tatmini üzerinde pozitif bir etkisinin olduğunu öne sürmüştür.

Yukarıdaki açıklamalar ve önceki çalışma bulgularına dayanarak aşağıdaki hipotez oluşturulmuştur:

Hipotez 1: Etik iklim algısı iş tatminini pozitif yönde etkiler.

2.2. Liderle Özdeşleşmenin Aracı Rolü

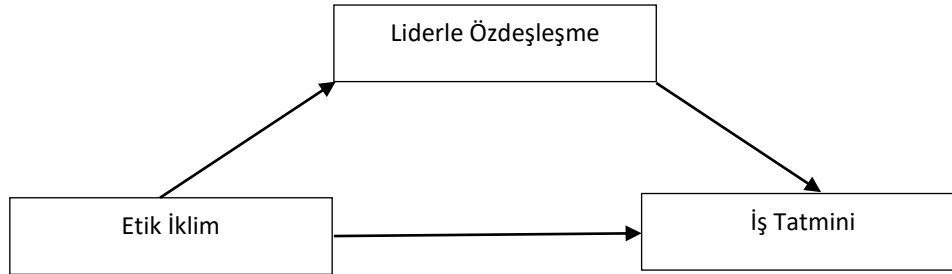
Mevcut çalışmada etik iklimin liderle özdeşleşme aracılığı ile iş tatmini üzerindeki etkisi incelenmiştir. Liderle özdeşleşme Hobman ve arkadaşları (2011) tarafından “bireyin kendisini liderin niteliklerine göre tanımlaması, liderin bireysel kazanımlarına odaklanması ve liderle yüksek düzeyde ilişki kurmasını içeren bir benlik sınıflandırma süreci” olarak tanımlanmıştır. Liderle özdeşleşme kavramı sosyal kimlik teorisinden (Tajfel, 1978) ortaya çıkmıştır. Sosyal kimlik teorisine göre, insanlar kendilerini ve diğer insanları örgütsel üyelik, dini ilişki, cinsiyet ve yaş grubu gibi çeşitli sosyal kategorilerde sınıflandırma eğilimindedir. Örgütlerde çalışanların farklı seviyelerde ve türlerde kimlikleri olabilir. Bu çalışmada, bireylerin kendilerini belirli bir kişi ile olan ilişkileri açısından tanımladıkları belirli bir sosyal kimlik biçimi olan liderle özdeşleşmeye odaklanılmıştır.

Liderle özdeşleşme, çalışanların kendilerini tanımlarken liderin tanımlayıcı özelliklerini kullanmaları durumunda ortaya çıkan bir tür sosyal kimlik biçimidir (Zhu vd., 2012). Etik iklim, örgütsel politika ve uygulamaların bir sonucu olarak şekillenir. Bu nedenle örgütsel politika ve uygulamaların belirleyicisi olan üst yönetimin, bir firmanın etik ikliminin oluşmasında ve sürdürülmesinde kritik bir rol oynadığı söylenebilir (Schwepker, 2001). Araştırmacılar (Schminke vd., 2007; Newman vd., 2017) örgütlerdeki etik iklimin diğer bir önemli belirleyicisinin liderler olduğunu belirtmişlerdir. Çalışanlar lideri örgütün bir temsilcisi olarak gördükleri için (Eisenberger vd., 2010) etik iklimle ilgili olumlu algılarını lidere bağlarlar. Böylece etik iklim algısı olumlu olan çalışanlar bunun bilincinde olarak (liderin etik iklimin belirlenmesindeki rolünün) liderle özdeşleşme eğiliminde olurlar. Bu nedenlerden ötürü etik iklimin çalışanların duygularına ve bilinçlerine etki ederek (Ambrose vd., 2018) onların yöneticileri ile özdeşleşmelerinde belirleyici olabileceği söylenebilir. Diğer taraftan araştırmacılar (örneğin, Bunjak vd., 2019) liderle özdeşleşme seviyesi yüksek olan çalışanların iş tatminlerinin arttığını tespit etmişlerdir. İş tatmini kişinin işini veya iş tecrübesini değerlendirmesi sonucunda ortaya çıkan işle ilgili bir tutumdur (Locke,

1969). Bu tutum çalışanların işlerinde belirleyici bir etkiye sahip olan liderleri ile özdeşleşmelerine göre güçlenebilir (veya zayıflayabilir). Önceki araştırmalar (örneğin, Bunjak vd., 2019; Loi vd., 2014) liderleri ile özdeşleşme seviyesi yüksek olan çalışanların işteki tatminlerinin yüksek olduğunu göstermiştir. Bu açıklamalar doğrultusunda aşağıdaki hipotez oluşturulmuştur:

Hipotez 2: Etik iklim algısının iş tatminine etkisinde liderle özdeşleşme aracı rol üstlenir.

Şekil 1: Araştırma Modeli



3. YÖNTEM

3.1. Araştırmanın Amacı ve Örneklemi

Bu çalışmada etik iklim kavramı ele alınmış ve etik iklimin liderle özdeşleşme üzerinden iş tatminini etkileyip etkilemediği belirlenmeye çalışılmıştır. Dolayısıyla da etik iklimin hem doğrudan hem de dolaylı olarak işteki tatmini etkileyip etkilemediği tespit edilmeye çalışılmıştır. Bu kapsamda Türkiye’deki bir ilimizde bankacılık sektörü çalışanları araştırma evreni olarak belirlenmiş ve bu evrenden kolayda örnekleme yöntemi ve anket tekniği ile veriler elde edilmeye çalışılmıştır. Online ve yüz yüze anketler iletilmiş ve geri dönüşü sağlanan anket verilerinden 111’inin değerlendirme için uygun olduğu gözlenmiştir. Bu katılımcı verilerine ilişkin demografik bilgiler Tablo 1’de verilmiştir.

Tablo 1: Katılımcıların Demografik Bilgileri

DEĞİŞKEN	KATEGORİ	FREKANS	(%)
Cinsiyet	Erkek	65	58,6
	Kadın	46	41,4
Medeni Durum	Evli	76	68,5
	Bekâr	35	31,5
Eğitim Durumu	Lise veya altı	6	5,4
	Ön Lisans/Lisans	88	79,3
	Lisansüstü	17	15,3
Birim	Operasyon	50	45,0
	Bireysel Pazarlama	30	27,0
	Ticari Pazarlama	25	22,5
	Diğer	6	5,4

3.2. Veri Toplama Araçları

Çalışmada veriler için daha öncesinde geliştirilen ve kullanılan ölçek maddeleri tercih edilmiştir. Etik iklim algısı için Schwepker Jr (2001) tarafından geliştirilen 7 madde ve tek boyutlu ölçek kullanılmıştır. Liderle özdeşleşme algısı için Mael ve Ashforth (1992) tarafından geliştirilen 6 maddelik örgütle özdeşleşme ölçeği referans alınmış ve bu maddeler liderle özdeşleşmeyi belirleyecek doğrultuda düzenlenmiştir. Söz konusu bu düzenleme farklı çalışmalarda da (örn; Kerse ve Tartan Selçuk, 2021) kullanılmıştır. İş tatmini düzeyinin belirlenmesinde ise Way ve arkadaşlarının (2010) geliştirdiği 4 maddelik ölçek tercih edilmiştir. Ölçeklerdeki tüm maddeler 5’li Likert tipi (1-kesinlikle katılmıyorum/ 5-kesinlikle katılıyorum) hazırlanmıştır.

4. BULGULAR

4.1. Güvenilirlik ve Geçerlilik Analizleri

Çalışmada kullanılan ölçekler için faktör analizi ve güvenilirlik analizi yapılmıştır. Faktör analizi için doğrulayıcı faktör analizi tercih edilmiş ve örneklem büyüklüğü dikkate alınarak madde faktör yükü referans değeri 0,50 kabul edilmiştir. Her bir ölçeğe yapılan analizlerde madde faktör yükü kriterleri sağlanmış ve Tablo 2’de yer alan model uyum kriteri değerleri elde edilmiştir. Bu değerler referans alınan değerleri sağlamış, dolayısıyla da faktör analizi özelinde geçerliliğin bulunduğu belirlenmiştir.

Faktör analizleri sonrasında ölçeklere güvenilirlik analizi yapılmıştır. Güvenilirlik için Cronbach Alpha katsayısına bakılmış ve etik iklim için 0,953; liderle özdeşleşme için 0,916 ve iş tatmini için 0,949 olduğu görülmüştür. Bu değerlerin 0,70’den yüksek olması nedeniyle ölçeklerin güvenilir olduğu belirlenmiştir.

Tablo 2: Ölçeklerin Model Uyum İndeksi Değerleri

Modeller	CMIN/DF	RMR	CFI	IFI	TLI	RMSEA
	$0 < \chi^2/sd \leq 5$	$\leq,10$	$\geq,90$	$\geq,90$	$\geq,90$	$\leq,08$
Etik İklım	1,684	,019	,992	,992	,983	,079
Liderle Özdeşleşme	1,039	,029	,999	,999	,999	,019
İş Tatmini	1,524	,007	,999	,999	,993	,069

4.2. Hipotez Testleri

Çalışmada hipotez testleri öncesinde değişkenlere ilişkin normallik testi bulgularına bakılmıştır (Tablo 3). Test bulgularında çarpıklık ve basıklık değerleri -2 ile +2 değerleri arasında olduğu için (George ve Mallery, 2016) normallik varsayımı sağlanmıştır. Bu nedenle de değişkenler arasındaki ilişkiler Pearson Korelasyon analizi ile belirlenmiştir. Analiz sonucunda elde edilen bulgular Tablo 3’de sunulmuştur.

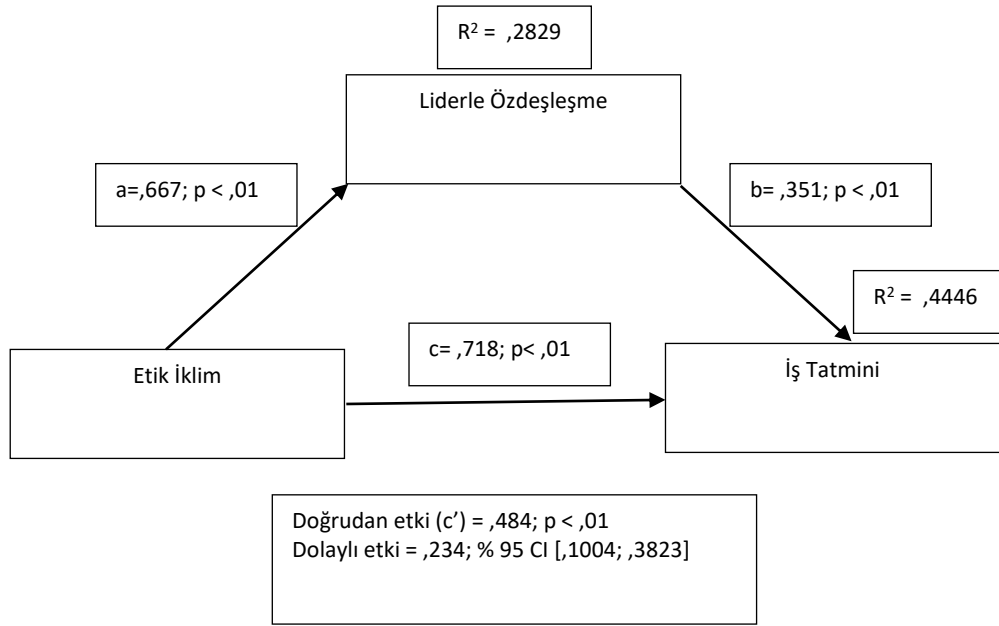
Tablo 3: Korelasyon ve Normallik Testi Bulguları

Değişkenler	Ort.	Std. Sapma	1	2	3	Çarpıklık	Basıklık
1.Etik İklım	4,175	,731	1			-1,116	1,577
2.Liderle Özdeşleşme	3,466	,917	,532**	1		,047	-,743
3.İş Tatmini	3,887	,887	,592**	,575**	1	-,613	-,139

**= 0,01 düzeyinde

Tablodaki bulgular çalışanların etik iklim algısı ile liderle özdeşleşme ($r= 0,532$; $p<0,05$) ve iş tatmini arasında ($r= 0,592$; $p<0,05$) ve liderle özdeşleşme ile iş tatmini arasında ($r= 0,575$; $p<0,05$) arasında pozitif yönde ilişkiler olduğunu göstermiştir. Bu ilişkiler tespit edikten sonra SPSS Process Macro programıyla hipotez testleri yapılmıştır. Bu doğrultuda elde edilen bulgular Şekil 2’de gösterilmiştir.

Şekil 2: Hipotez Testi Bulguları



Şekil 2'deki bulgulara göre etik iklim algısı, iş tatminini hem doğrudan ($b = 0,484$; $p < 0,01$) hem de liderle özdeşleşme üzerinden dolaylı olarak ($b = 0,234$; % 95, CI [0,100; 0,382]) pozitif yönde etkilemektedir. Dolayısıyla da H1 ve H2 hipotezi kabul edilmektedir.

5. DEĞERLENDİRME VE SONUÇ

Son yıllarında iş hayatında Enron (ABD), Vivendi (Fransa), Parmalat (İtalya), Yukos (Rusya), Emlakbank (Türkiye) gibi işletmelerde ortaya çıkan etik skandallar (Kerse, 2021) etik bir örgüt ikliminin ne düzeyde önemli olduğunu göstermiştir. Zira bu skandallar sadece sebebiyet veren kişileri etkilememiş, tüm işletmeleri ve bu işletmelerdeki çalışanları da ekonomik, sosyal, kültürel ve psikolojik olarak derinden etkilemiştir. Bu çalışmada da gerek işletmeleri gerekse üyesi olan çalışanları etkileyen etik iklim kavramı ele alınmış ve etik iklimin işteki tatmini doğrudan ve dolaylı olarak nasıl etkilediği belirlenmeye çalışılmıştır.

Araştırmada elde edilen bulgularla bazı teorik ve pratik katkılar yapılmıştır. Bunlardan birincisi, bulgular banka çalışanlarının etik iklim algısının iş tatminlerini artırdığını göstermiştir. Bu sonuç önceki araştırma bulgularını (örneğin, Çevirgen ve Üngüren, 2009; Tsai ve Huang, 2008; Schwepker, 2001; Wang ve Hsieh, 2012) desteklemiştir. İkinci olarak, liderle özdeşleşmenin etik iklim ve iş tatmini arasındaki ilişkiye aracılık ettiği tespit edilmiştir. Dolayısıyla araştırma bulguları etik iklimin iş tatminini nasıl artırdığını ortaya koyması bakımından iş tatmini literatürüne önemli bir katkıda bulunmuştur.

Araştırma bulgularının işletme yöneticileri açısından da birtakım katkıları olmuştur. Sonuçlar olumlu etik iklim algısının çalışanların işten tatmin olmaları üzerinde pozitif bir etkisi olduğunu göstermiştir. İş tatmini çalışanın işten ayrılma niyetini (Azeez vd., 2016), performansını (Inuwa, 2016) ve örgüte bağlılığını (Eleswed ve Mohammed, 2013) etkileyen önemli bir unsurdur. Bu nedenle, örgüt içerisindeki etik iklimin en önemli belirleyicilerinden olan yöneticilerin (Schwepker, 2001) örgütsel norm ve politikaları belirlerken etik ilkelere dikkat etmeleri gerekmektedir. Çalışma bulguları örgütteki iklimi etik olarak uygun gören çalışanların işlerinden daha memnun olduklarını göstermiştir. Örgüt yöneticileri, herkes tarafından uygun görülen bir etik iklim yaratmak için çalışanları da etik kararlara dahil edebilirler (Wang ve Hsieh, 2012). Ayrıca, işletme yöneticilerinin çalışanların nasıl davranmaları gerektiği konusunda yön verici olan örgütsel politika ve normları belirlerken çalışanların uymaları gereken etik kuralları da net olarak tanımlamaları gerekir. Araştırma bulguları liderle özdeşleşmenin etik iklim ve iş tatmini arasındaki ilişkiye aracılık ettiğini doğrulamıştır. Çalışanlar liderlerini örgütteki etik iklimin sorumlusu olarak gördükleri için (Schwepker, 2001) etik iklim algıları onların liderle olan özdeşleşmelerini etkiler (Bunjak vd., 2019). Bu nedenle çalışanlar tarafından uygun görülen bir etik iklimin yaratılması çalışanların liderleri ile özdeşleşmelerini artırarak iş tatminlerini güçlendirecektir.

Araştırmının literatüre yukarıda belirtilen katkılarının yanında bazı kısıtları vardır. İlki, araştırmanın kesitsel yapılmasından ötürü incelenen değişkenler arasında nedensellik ilişkisinin yönünü belirlemeye izin vermemesidir. Bu nedenle gelecekte yapılacak çalışmalarda boylamsal elde edilen veriler ile değişkenler arası neden-sonuç ilişkisi daha geçerli olabilir. İkincisi, araştırma verilerinin tek bir kaynaktan ve anlık olarak elde edilmesinden ötürü ortak yöntem varyansı hatasına sebep olmasıdır (Podsakoff vd., 2003). Gelecekte yapılacak çalışmalarda farklı kaynaklardan veri toplanarak ve bu hatayı azaltacak önlemler alınarak çalışma yinelenabilir.

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Türkiye’de Belediyelerin Operasyonel Dengelerini Zedeleyici Uygulamalarının Kamu Alımları Ekseninde İncelenmesi

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Özet: Mahalli düzeyde öz gelirler ile merkezi idareden aktarılan payların toplanması sonucunda elde edilen operasyonel gelirlerden, cari nitelikteki harcamaların toplanması ile ulaşılan operasyonel harcamaların çıkarılması şeklinde hesaplanan operasyonel denge, yatırımlarının gerektirdiği borçlanma ihtiyacını azaltması açısından mahalli idareler için önemlidir. İdarelerin elde ettikleri tasarruf ile borçlanma ihtiyaçlarını azaltmaları, borçlanmanın maliyetini oluşturan ve bütçede sabit veya katı bir harcama olarak görülen faiz yükünü üstlenmemeleri açısından katkı sağlayacaktır. Bu doğrultuda idareleri yönetenlerin mali anlamda hareket alanlarının kısıtlanmayacağı ve aynı zamanda idarelerin mali disiplin açısından güçlenecekleri düşünülmektedir. Ancak yıllar ilerledikçe görev alanları genişleyen ve artan harcama baskısı altında kalan mahalli idareler, yatırımları için gereken borçlanma ihtiyacını azaltıcı ölçüde operasyonel fazlaya ulaşamamaktadır. Yeterli düzeyde operasyonel fazla elde edilememesinin başlıca iki nedeni vardır. İdarelerin gelir yaratma olanaklarının yetersiz oluşu ile yöneticilerin kaynak kullanımında etkinlik, verimlilik ve tutumluluk ilkelerine özen göstermemeleri söz konusu iki neden olarak ifade edilebilir. Bu çalışma kapsamında sözü edilen nedenlerden ikincisine kamu alımları bağlamında odaklanılmaktadır. Bu doğrultuda Türkiye’de belediyelerde kamu alımlarında yaşanan usulsüzlüklerin operasyonel dengeleri üzerinde yaratacağı olumsuzlukların incelenmesi çalışmanın amacı olarak belirlenmiştir. Bu amaç kapsamında ilk olarak Muhasebat Genel Müdürlüğü tarafından açıklanan büyükşehir, il, ilçe ve belde belediyelerinin operasyonel dengeleri hesaplanmış, ardından da operasyonel fazla elde edilmesini veya daha da artırılmasını engelleyici uygulamalar incelenmiştir. Yapılan inceleme ile kamu alımlarında yapılan usulsüzlüklerin özellikle söz konusu alımların izlendiği mal ve hizmet alım giderleri hesabı üzerinden operasyonel fazla yaratılmasını engellediği sonucuna ulaşılmıştır.

Anahtar Kelimeler: Mahalli İdare, Belediye, Operasyonel Denge, Kamu Alımları

An Examination of Turkish Municipalities' Operational Balances in the Context of Public Procurement

Abstract: The operational balance, which is calculated as the subtraction of the operational revenues obtained as a result of the collection of own revenues at the local level and the shares transferred from the central government from operational expenditures by adding current expenditures, is essential for local governments in terms of reducing the borrowing required by their investments. Reducing the borrowing needs of the governments with the savings will contribute to the fact that they will not bear the interest burden, which constitutes the cost of borrowing and is seen as a fixed or solid expenditure in the budget. Therefore, it is thought that the fiscal space of those who manage the governments will not be restricted, and at the same time, the governments will be strengthened in terms of fiscal discipline. However, as the years progressed, local governments, whose responsibilities have expanded and are under increasing spending pressure, cannot reach an operational surplus that reduces the borrowing requirement for their investments. There are two main reasons for not achieving sufficient operational surplus. Insufficient revenue generation opportunities of the governments and the fact that the managers do not pay attention to the principles of efficiency, productivity and frugality in the use of resources can be expressed as two reasons. This study focuses on the second of the reasons mentioned in the context of public procurement. Thus, the study aims to examine the negative effects of public procurement irregularities on Turkish municipalities' operational balances. For this purpose, the operational balances of metropolitan, provincial, district and town municipalities, whose fiscal data are announced by the General Directorate of Public Accounts, were calculated. Then the practices preventing the operational surplus were examined. As a result of the examination, it was concluded that the irregularities in the public procurements prevented the creation of an operational surplus, especially through the purchases of goods and services account.

Key Words: Local Government, Municipality, Operational Balance, Public Procurement

1. GİRİŞ

Hızlı kentleşmeye ve nüfus artışına bağlı olarak mahalli idarelerin görevleri gittikçe artmaktadır. Özellikle yoğun göç alan ve nüfus yoğunluğu fazla olan kentlere veya bölgelere hizmet sunma yükümlülüğünü taşıyan idarelerde söz konusu artış daha fazla hissedilmektedir. Bu idarelerden, sorumlu oldukları sınırlar içinde ulaşım, yol yapımı ve bakımı veya kanalizasyon gibi yatırım niteliğini taşıyan hizmetleri sunmaları beklenmektedir. Yatırımların gelecek nesillere sağladığı faydalar da dikkate alınarak söz konusu hizmetler için gereken finansmanın tamamının yıllık bütçe gelirleri ile karşılanması rasyonel değildir. Bu nedenle yatırımlar için gereken

finansman borçlanarak elde edilmektedir. Böylece yatırımların maliyetine gelecek nesillerin katılımı da sağlanmaktadır (Swianiewicz, 2004: 5-7).

Mahalli idarelerin üstlendikleri yatırım hizmetlerini borçlanarak finanse etmelerinin rasyonel yönü olduğu kadar mali disiplin ve sürdürülebilirlik sorunlarının oluşması açısından olumsuz yönleri de bulunmaktadır. Gerçekten de birçok faktöre bağlı olarak artan borç stoku nedeniyle mahalli idareler mali krize sürüklenerek üstlendikleri temel hizmetleri dahi sunamamışlardır. Amerika Birleşik Devletleri'nin (ABD) Detroit ve New York eyaletleri ile Britanya'nın Liverpool kentinde yaşanan mali sorunlar sözü edilen krize örnek olarak gösterilebilir (Nacar, 2005: 203). Mahalli düzeyde yaşanan mali sorunlar sözü edilen örneklerde olduğu gibi derin bir krize dönüşme de yerel halka kalitesiz ve maliyetli hizmet sunumuna yol açabilir. Bu nedenle mahalli idarelerde yatırımlar için gereken borçlanma ihtiyacını azaltıcı önlemlerin alınması önemlidir. Bu doğrultuda idarelerin her mali yılın sonunda operasyonel fazla tutarlarını artırarak özellikle yatırımları için gereken borçlanma tutarlarını azaltabilecekleri düşünülmektedir.

Mahalli düzeyde operasyonel denge (açık veya fazla), bir idarenin yıllık bütçe gelirleri toplamından operasyonel nitelikteki harcamalarının çıkarılması ile elde edilmektedir (Morrell ve Kopanyi, 2014: 217). Mahalli idarelerin yıllık bütçe gelirlerini, öz gelirleri ile merkezi idareden aktarılan paylardan elde ettikleri gelirler oluşturmaktadır. Operasyonel harcamalarını ise söz konusu idarelerin yatırım harcamaları dışında kalan cari ve transfer harcamalarının toplamı oluşturmaktadır. Dolayısıyla sözü edilen gelirleri artırıcı ve harcamaları azaltıcı önlemler alınarak idarelerin yıllık yatırım harcamalarını ve hatta borç ödemelerini karşılayacak tutarda operasyonel fazlaya ulaşılabilir (Eyraud vd., 2020: 20). Nitekim çalışma kapsamında Türkiye'de başlıca mahalli idare türü olarak kabul edilen ve mali sorunları gittikçe derinleşen belediyelerin operasyonel fazla tutarlarını artırmaya yönelik alınabilecek önlemlerin kamu alımları üzerinden incelenmesi amaçlanmaktadır. Kamu alımları (mal ve hizmet alımları ile yapım işleri) için ödenen tutarların önemli kısmı idare bütçelerinin mal ve hizmet alım giderleri hesabında izlenmektedir. Bu kapsamda yapılan harcamaların toplam bütçe harcamaları arasında en fazla paya sahip olmaları, operasyonel fazla elde edilmesine sağlayacakları katkı açısından önemini ortaya koymaktadır. Gerçekten de Türkiye'de belediyelerin gelir artırımına ilişkin kısıtları da dikkate alınarak harcamalarının azaltılması ile ulaşmaları olası operasyonel fazla tutarları artırılabilir. Bu doğrultuda çalışmanın sorunsalı, kamu alımlarında yaşanan usulsüzlüklerden kaynaklanan harcama artışlarının bütçeye yansımaları ile operasyonel denge arasında kurulacak ilişki üzerinde temellendirilmiştir.

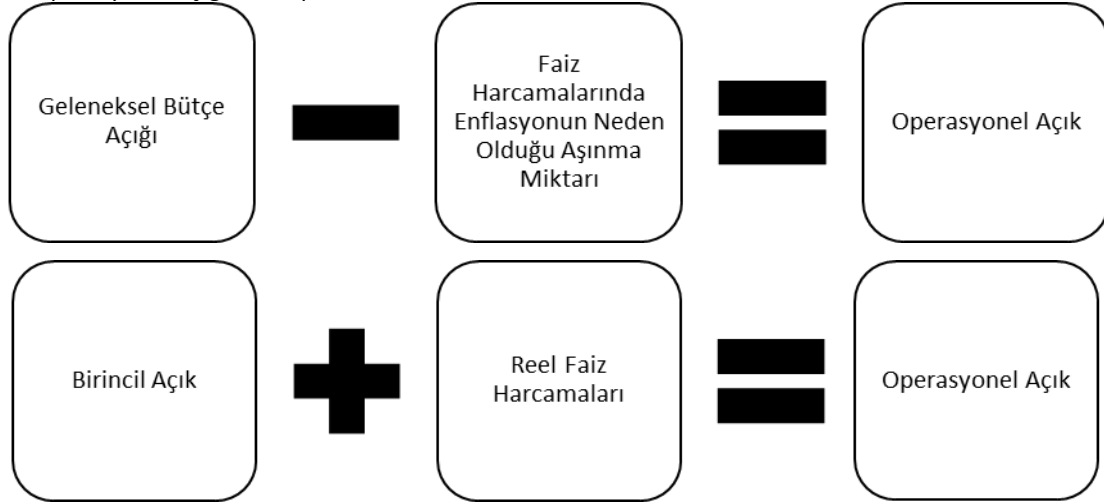
Çalışmanın belirlenen kapsamı ile uyumlu şekilde izleyen başlıkların ilkinde mahalli idare düzeyinde operasyonel denge kavramının kullanımı ve önemi açıklanmıştır. Ardından sözü edilen kavramın bileşenleri açıklanarak kamu alımları ile ilişkisi kurulmuştur. İzleyen başlıkta operasyonel dengenin hesaplanma yöntemi açıklanmış, Türkiye'de belediyelerin operasyonel denge tutarları tablolar aracılığıyla gösterilmiş ve kamu alımlarına ilişkin süreçlerde yaşanan sorunların söz konusu tutarlar üzerinde doğurduğu etkiler incelenmiştir. Çalışma genel bir değerlendirmeyi ve önerileri içeren sonuç kısmı ile tamamlanmıştır.

2. OPERASYONEL DENG KAVRAMI VE MAHALLİ DÜZEYDE KULLANIMI

Merkezi idare veya mahalli idare düzeyinde kullanımına bağlı olarak operasyonel denge kavramına ilişkin tanım farklılaşmaktadır. Söz konusu kavram, merkezi idare düzeyinde, bütçe açığının özel tanımlarından biri olarak kullanılmaktadır. Merkezi idare düzeyinde operasyonel (işlemsel) açık şeklinde ifade edilen kavram, özellikle yüksek enflasyonun yaşandığı ve borçluluk düzeyinin fazla olduğu ülkelerde doğru politikaların belirlenmesi açısından yetersiz kalan geleneksel (klasik) bütçe açığına alternatif olarak geliştirilmiştir (Tokatlıoğlu ve Selen, 2017: 165; Blejer ve Cheasty, 1991: 1644).

Operasyonel açık, kamu harcamaları ile kamu gelirleri arasındaki farkı ifade eden geleneksel bütçe açığından, faiz ödemelerinin enflasyona bağlı olarak aşınan kısmının çıkarılması ile elde edilmektedir. Ayrıca operasyonel açık, kamu gelirlerinden faiz harcamaları dışında kalan kamu harcamalarının çıkarılması ile ulaşılan birincil açığa, faiz ödemelerinin yalnızca reel kısmı eklenerek de elde edilmektedir (Tanzi vd., 1987: 727-728). Bu yönüyle enflasyonist etkilerin (Eisner ve Pieper, 1984: 15) ve faiz harcamalarının bütçeye getirdiği reel yükün (Şen vd., 2007: 13) hesaplama açısından dikkate alınması, sözü edilen açık türünün geleneksel ve birincil bütçe açıklarından farklılaşmasına yol açmaktadır. Operasyonel açığın hesaplanmasında kullanılan iki yöntem Şekil 1'de yer verilmiştir.

Şekil 1. Operasyonel Açığın Hesaplanma Yöntemleri



Kaynak: Şen vd., (2007: 13-14).

Operasyonel denge kavramı, merkezi idare düzeyinde kullanımının aksine bir mahalli idarenin mali durumunu ve mali sürdürülebilirliğini yansıtmak için kullanılan bir ölçüttür (Chamber of Commerce and Industry of Western Australia, 2007: 18). Bu kavramın kullanımı ile mahalli idarelerin sağlıklı bir finansman yapısına sahip olup olmadıkları tespit edilmeye çalışılmaktadır. Bu yapının sağlanıp sağlanmadığı da yatırımlar için gereken borçlanma tutarının boyutunun yanında idarelerin borç ödeme kapasiteleri üzerinden ölçülmektedir. Dolayısıyla ulaştıkları operasyonel fazla tutarlarının, yıllık yatırım harcamaları ile borç ödemelerini karşılamaları, idarelerin güçlü bir mali yapıya sahip olduklarını düşündürmektedir (Eyraud vd., 2020: 20).

Mahalli idarelerin operasyonel fazlaya ulaşmaları kadar söz konusu fazlanın istikrarlı bir şekilde elde edilmesi de önemlidir. Çünkü operasyonel fazla yaratılması, bir idarenin sınırları içinde yaşayan yerel halkın yanında gelecek nesilleri de ilgilendirmektedir. Bu fazlanın yaratılması ile idarenin borçlanma ihtiyacının ve maliyetinin azalacağı belirtilebilir. Böylece oluşan istikrarlı ortamdan daha kaliteli ve düşük maliyetli hizmete ulaşarak yararlanan yerel halkın refahının artacağı ifade edilebilir (Kurtuluş, 2006: 15).

3. OPERASYONEL DENGİNİN BİLEŞENLERİ VE KAMU ALIMLARI İLE İLİŞKİSİNİN KURULMASI

Operasyonel denge, mahalli idarelere ayrılan öz gelirler ile söz konusu idarelere aktarılan mali transferlerin toplanması ile elde edilen bütçe gelirlerinden (operasyonel gelirlerden), toplam cari harcamaları tanımlayan operasyonel harcamaların çıkarılması şeklinde hesaplanmaktadır (Kurtuluş, 2006: 16). Dolayısıyla idarelerin operasyonel dengelerini etkileyen iki temel bileşenin olduğu ifade edilebilir. İdarelerin bütçe gelirlerinin tamamı ile harcamalarının bir kısmı (toplam cari harcamalar) söz konusu iki bileşendir.

Mahalli idarelerin gelirlerinin türleri ve bütçe gelirleri içerisindeki dağılımları ülkeden ülkeye farklılık göstermektedir. Gelirlerin çeşitliliği ve dağılımı açısından ülkeler arası farklılıklar olsa da genel kabul gören bir uygulamanın varlığından bahsedilebilir. Bu doğrultuda emlak vergisi, motorlu taşıtlar vergisi, ilan ve reklam vergisi veya eğlence vergisi gibi gelir türlerinin mahalli idarelerin öz vergi gelirlerini; çeşitli kiralama faaliyetlerinin yanında işletme kurmaları sonucunda elde ettikleri teşebbüs ve mülkiyet gelirleri, harcamalara katılma payları, harçlar, kullanıcı ücretleri, idari para ve vergi cezaları ile varlık satışından elde ettikleri sermaye gelirleri de idarelerin diğer öz gelirlerini oluşturmaktadır. Mahalli idareler sözü edilen gelirlerin dışında, gelir paylaşımı düzenlemesi ile bağış ve yardım şeklinde de gelir elde edebilmektedirler.

Mahalli idarelerin operasyonel denge tutarlarını etkileyen bileşenlerden diğeri olan operasyonel harcamalar, cari harcamaların toplanması ile elde edilmektedir. Sosyal güvenlik prim ödemeleri dâhil olmak üzere personel harcamaları, faiz harcamaları ve vadesi bir yılı aşmayan mal ve hizmet alım giderleri cari harcamaları oluşturmaktadır. Ayrıca cari nitelikli karşılıklı ödemeler olarak tanımlanan transfer harcamaları (cari transferler) da cari harcamalar kapsamında değerlendirilmektedir (Strateji ve Bütçe Başkanlığı, 2019: 2). Dolayısıyla cari harcamalar ile cari transferlerin toplanması ile ulaşılan toplam cari giderler, mahalli idarelerin operasyonel harcamalarını oluşturmaktadır.

Mahalli idarelerin yatırımları için gereken borçlanmayı azaltarak istikrarlı bir mali yapı kurmaları, elde edilmesi olası operasyonel fazla miktarının artırılması ile olanaklıdır (Kurtuluş, 2006: 15). Öncelikle operasyonel fazla

yaratılması ve söz konusu fazlaya ilişkin tutarın artırılması için gelirlerin genişletilmesine ve harcamaların kısılmasına ihtiyaç vardır. Ancak harcamaların kısılması sırasında hizmet kalitesini ve yerel halkın memnuniyet düzeyini azaltıcı tercihlerde bulunulmamasına özen gösterilmesi gerekir. Bu noktada harcamaların kısılması ile vurgulanmak istenen, kamu kaynaklarının kullanılmasına ilişkin esaslara ve ilkelere uyulmamasından doğan savurganlıklardır. Bu tür savurganlıklar sonucunda bir kamusal mal veya hizmet için olması gereken tutardan daha fazlası harcanmaktadır. Mahalli idarelerin gelir yaratma olanaklarının sınırlı olduğu dikkate alınarak sözü edilen türde harcamaların yapılması, operasyonel fazla yaratılmasını veya yaratılan tutarın artırılmasını engellemektedir. Bu bağlamda operasyonel fazla ile kamu alımları ilişkisi kurulabilir. Çünkü kamu alımlarına ilişkin harcamalar, ekonomik sınıflandırma kapsamında idarelerin bütçelerinin mal ve hizmet alım giderleri hesabında izlenmektedir. Daha önce de ifade edildiği gibi sözü edilen tutarlar operasyonel harcamaların bir kısmını oluşturmaktadır. Dolayısıyla kamu alımlarına ilişkin süreçlerde hukuki düzenlemeler ile belirlenen ilkelere uyulmamasından doğacak savurganlıkların, idarelerin harcamalarında artışa yol açarak oluşması olası operasyonel fazla tutarlarını azaltacağı ifade edilebilir.

Ekonomik sınıflandırma kapsamında mal ve hizmet alım giderleri hesabının detayları incelendiğinde, harcamaların üretime yönelik (hammadde, ara malı, enerji bedelleri), tüketime yönelik (kırtasiye ve büro malzemesi, su ve temizlik maddesi gibi) veya hizmet alımları şeklinde yapıldığı görülebilir (Hazine ve Maliye Bakanlığı, 2022). Nitekim Kamu İhale Kurumu (KİK) tarafından yayımlanan raporda, kamu alımlarının “*idarelerin yaptıkları mal veya hizmet alımları ile yapım işlerini*” kapsadığı ifade edilmiştir (KİK, 2022: IV). Özellikle 1980’li yıllarda başlayan iktisadi ve mali dönüşümün bir uzantısı olarak kamu idarelerinin bazı malları ve hizmetleri üretmek yerine piyasadan satın almayı tercih ettiği bilinmektedir. Örneğin, devlet müdahalesinin sınırlanmayıp normal karşılandığı dönemde kamu idareleri güvenlik hizmetini kamu personellerini kullanarak sağlarken, dönüşen iktisadi anlayış ile birlikte piyasada kurulan bir şirketten güvenlik hizmetini satın alarak sunmaya başlamıştır. Mahalli idarelerde benzer eğilim, temizlik, asfaltlama, park ve bahçe gibi hizmet alanlarında da uygulanmaktadır (Meşe, 2011: 209). Bu tür malların ve hizmetlerin yüklenicisi ise çeşitli ihale yöntemleri ile belirlenmektedir. Türkiye’de mal veya hizmet alımı ile yapım işleri için çıkılan ihaleleri düzenleyen 4734 sayılı Kamu İhale Kanunu’nun 5. maddesinde ihale süreçlerinde uyulması zorunlu olan temel ilkeler sıralanmıştır. Bu ilkeler, saydamlık, rekabet, eşit muamele, güvenilirlik, gizlilik, kamuoyu denetimi, ihtiyaçların uygun şartlarda ve zamanında karşılanması ile kamu kaynaklarının etkin kullanımı şeklinde ifade edilebilir (4734 Sayılı Kamu İhale Kanunu, Madde-5). Bu ilkelere uyulursa kamu kaynaklarının savurganca kullanılmayacağı bir ön kabul olarak ileri sürülebilir. Ancak yöneticilerin çıkarlarını gözeterek sözü edilen ilkelere uymamalarından dolayı kamu kaynaklarının kullanımında israf oluşmaktadır. Kaynakların israf edilmesi de bütçe harcamalarına yansarak idarelerin olması gerekenden fazla harcama yapmasına yol açmaktadır. Bu doğrultuda çalışma kapsamında incelenmesi amaçlanan kamu alımlarına ilişkin süreçlerde ortaya çıkıp bütçe harcamalarına yansıyan savurgan ve hatta usulsüz harcamalar ile mahalli idarelerin operasyonel dengeleri arasında olduğu varsayılan ilişkinin netleştirildiği belirtilebilir. İzleyen başlıklarda sözü edilen ilişkinin varlığı veriler ile desteklenmeye çalışılacaktır.

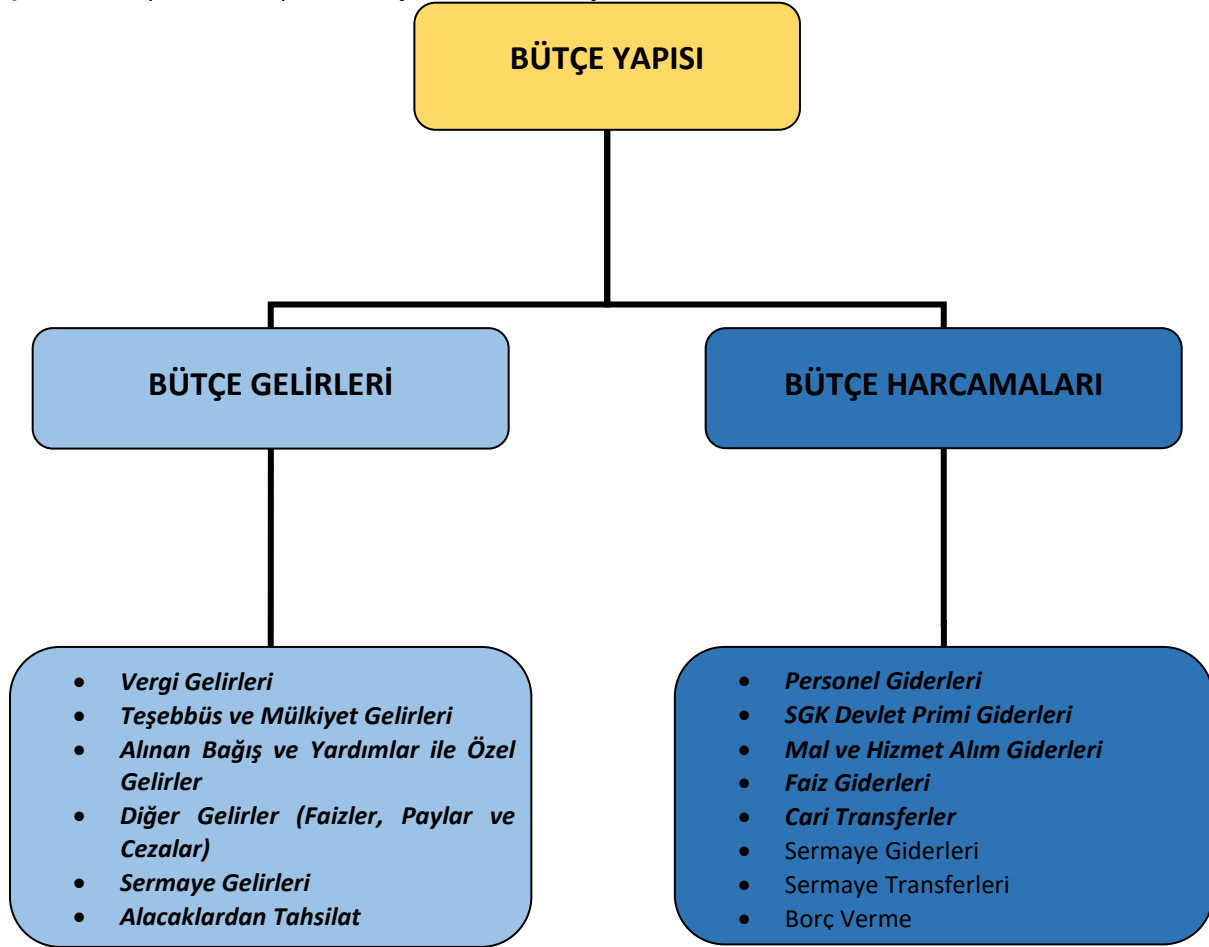
4. TÜRKİYE’DE BELEDİYELERİN OPERASYONEL DENGİ TUTARLARINI ETKİLEYEN KAMU ALIMLARINA İLİŞKİN USULSÜZLÜKLERİNİN İNCELENMESİ

Başlık kapsamında ilk olarak Türkiye’de belediyelerin operasyonel denge tutarları hesaplanmış ve söz konusu tutarların gelişimi oluşturulan tablolar ile incelenmiştir. Ardından Türkiye’de belediyelerin kamu alımlarına ilişkin süreçlerinde yaşanan usulsüzlükler çeşitli örnekler üzerinden açıklanıp sözü edilen usulsüzlüklerden doğan fazla harcamaların belediyelerin operasyonel fazla tutarları üzerinde oluşturabileceği etkilere yönelik çıkarımlarda bulunulmuştur

4.1. Türkiye’de Belediyelerin Operasyonel Denge Tutarlarının Hesaplanması ve Tutarların Gelişimi

Operasyonel dengiyi şekillendiren bileşenlerden yola çıkarak söz konusu dengeye ilişkin tutarların hesaplanması için belediyelerin bütçe gelirlerinin ve harcamalarının tanıtılması gerekir. Ekonomik sınıflandırma dikkate alınarak bütçenin gelir ve harcama türleri Tablo 1’de özetlenmiş ve aynı tabloda söz konusu türlerin toplam tutarlar içerisindeki dağılımı 2021 yılı itibarıyla gösterilmiştir.

Şekil 2. Türkiye’de Belediyelerin Bütçe Gelirleri ile Bütçe Harcamalarının Sınıflandırılması



Kaynak: Analitik Bütçe Sınıflandırmasına İlişkin Rehber

Şekil 2’de sıralanan bütçenin gelir kısmında yer alan vergi gelirleri arasında belediyelerin mülkiyet üzerinden aldıkları vergiler (emlak vergisi, çevre temizlik vergisi gibi), dâhilde alınan mal ve hizmet vergileri (haberleşme vergisi, eğlence vergisi, ilan ve reklam vergisi gibi) ve çeşitli harçlar (bina inşaat harcı, tellallık harcı, iş yeri açma izni harcı gibi) gelir türleri yer almaktadır. İkinci sırada yer alan teşebbüs ve mülkiyet gelirleri kapsamında mal ve hizmet satış gelirleri ile taşınır ve taşınmaz mallardan elde edilen kira gelirleri izlenmektedir. Alınan bağış ve yardımlar ile özel gelirler hesabında ise belediyelere yurt içi veya yurt dışından bağış ve yardım şeklinde sağlanan gelirler izlenmektedir. Diğer gelirler adını taşıyan hesapta, belediyelerin genel bütçe vergi gelirlerinden aldıkları paylar, harcamalara katılma payları, faiz gelirleri ve para ile vergi cezalarına ilişkin tutarlar takip edilmektedir. Gayrimenkul veya menkul malların satış gelirlerinden elde edilen tutarlar sermaye gelirleri hesabında izlenmektedir. Son olarak alacaklar tahsilat hesabında da belediyelerin daha önce verdiği borçlara karşılık yapılan ödemeler takip edilmektedir (Şahin İpek, 2018). Bu gelirlerden genel bütçe vergi gelirlerinden aktarılan paylar, mali transferler kapsamında ele alınan gelir paylaşımı düzenlemesini; vergi, teşebbüs ve mülkiyet, faizler, cezalar, sermaye gelirleri ile alacaklar tahsilat toplamı da belediyelerin öz gelirlerini oluşturmaktadır.

Bütçenin harcama kısmına bakıldığında, ilk iki sırada personel için yapılan ödemeler ile sosyal güvenlik prim giderlerine ilişkin hesapların yer aldığı görülmektedir. Ardından hammadde, kırtasiye, büro malzemesi, temizlik malzemesi, enerji alımları, hizmet alımları, görev yollukları ve taşıt bakım ve onarım giderleri gibi tutarların izlendiği görülmektedir. Faiz giderleri hesabında da belediyelerin aldıkları yurt içi ve yurt dışı borçlar için ödedikleri tutarlar izlenmektedir. Cari transferler hesabında hane halkına eğitim, sağlık veya barınma gibi karşılıksız şekilde yapılan ödemelere ilişkin tutarlar takip edilmektedir. Sermaye giderleri de belediyelerin yatırım harcamalarının izlendiği hesaptır. Yatırım veya sermaye nitelikli malların ve hizmetlerin finansmanı için yapılan karşılıksız ödemeler de sermaye transferleri hesabında izlenmektedir. Likidite yönetimi veya kazanç sağlama amaçları dışında kamusal amaçlar ile yapılan ödemeler de borç verme hesabında izlenmektedir (Strateji ve Bütçe Başkanlığı, 2019).

Sıralanan bütçe gelirlerinin tamamı, bütçe harcamalarının ise cari harcamaların toplamını oluşturan ilk beş hesaba ilişkin tutarlar (personel giderleri, SGK prim giderleri, mal ve hizmet alım giderleri, faiz giderleri ile cari transferler), belediyelerin operasyonel dengelerinin hesaplanması için oluşturulan denklemde kullanılmaktadır. Yapılan hesaplama sonucunda elde edilen gelirlerin, operasyonel harcamaları en azından sermaye giderleri hesabında izlenen yatırım harcamaları kadar aşması beklenmektedir¹. Böylece yatırımlar için gereken borçlanma ihtiyacının azaltılacağı düşünülmektedir. Bu doğrultuda operasyonel dengenin hesaplanması için oluşturulan denklem aşağıdaki şekilde yazılabilir:

$$OD=(\text{ÖG}-OH)+GBVP$$

Denklemde OD operasyonel dengeyi, ÖG belediyelerin öz gelirlerini, OH operasyonel harcamaları ve GBVP de genel bütçe vergi gelirlerinden belediyelere aktarılan payları temsil etmektedir. Aslında operasyonel dengeyi hesaplamak için oluşturulan denklem, bütçe gelirlerinden doğrudan operasyonel harcamaların çıkarılması şeklinde de yazılabilir. Ancak Kurtuluş (2006: 16), belediyelerin öz gelirleri ile genel bütçe vergi gelirlerinden aldıkları payların, operasyonel fazla elde edilmesine katkısını daha net görmek için yukarıda yazılan denklemi kullanmıştır. Bu denklem ile operasyonel fazlanın kalitesine ilişkin daha kolay ve kesin şekilde yorum yapılabileceği belirtilebilir. Bu açıklamanın ardından söz konusu denklem kullanılarak Türkiye’de büyükşehir, il, ilçe ve belde belediyelerinin operasyonel denge tutarları ayrı ayrı hesaplanmıştır. Belediyelere ilişkin verilere Mahalli İdareler Genel Faaliyet Raporları ile Hazine ve Maliye Bakanlığı Muhasebat Genel Müdürlüğü’nden ulaşılmıştır. Bu doğrultuda ilk olarak büyükşehir belediyelerine ilişkin yapılan hesaplama yapılmış, elde edilen tutarlar Tablo 1’de gösterilmiştir.

Tablo 1: Büyükşehir Belediyelerinin Operasyonel Denge Tutarlarının Gelişimi ve Yatırım Harcamaları ile Karşılaştırılması (2006-2021)

Yıllar	Öz Gelirler	Operasyonel Harcamalar	GBVP	Operasyonel Denge	Yatırım Harcamaları
2006	3.358.259.000	3.620.933.000	4.817.522.000	4.554.848.000	4.320.503.000
2007	4.025.624.000	4.145.125.000	5.384.422.000	5.264.921.000	5.777.210.000
2008	3.567.916.000	5.125.738.000	6.292.216.000	4.734.394.000	6.777.754.000
2009	4.838.110.000	5.986.113.000	6.473.072.000	5.325.069.000	5.913.474.000
2010	4.650.915.000	6.495.499.000	8.636.472.000	6.791.888.000	5.959.547.000
2011	5.224.550.000	7.328.068.000	10.256.767.000	8.153.249.000	5.760.789.000
2012	5.304.191.000	8.538.474.000	11.874.411.000	8.640.128.000	6.793.106.000
2013	6.629.655.000	9.679.850.000	13.952.531.000	10.902.336.000	10.275.171.000
2014	9.764.184.000	14.021.458.000	19.911.610.000	15.654.336.000	14.320.486.000
2015	8.004.780.000	17.825.237.000	24.894.872.000	15.074.415.000	14.974.222.000
2016	9.272.900.000	21.684.109.000	28.382.500.000	15.971.291.000	20.801.596.000
2017	12.624.482.000	25.469.227.000	33.309.105.000	20.464.360.000	28.781.835.000
2018	14.069.647.000	30.746.015.000	40.206.298.000	23.529.930.000	31.836.895.000
2019	13.493.668.000	35.943.811.000	42.497.886.000	20.047.743.000	20.171.817.000
2020	11.163.451.000	38.542.887.000	53.012.619.000	25.633.183.000	20.681.528.000
2021	17.359.063.000	52.003.886.000	76.379.990.000	41.735.167.000	29.949.081.000

Kaynak: Mahalli İdareler Genel Faaliyet Raporu ile Hazine ve Maliye Bakanlığı tarafından yayımlanan veriler kullanılarak yazar tarafından oluşturulmuştur.

Tablo 1’deki verilerden yola çıkarak Türkiye’de büyükşehir belediyelerinin ele alınan on altı yıl boyunca operasyonel fazla verdikleri görülmektedir. Söz konusu sonuç belediyeler açısından olumlu olsa da belediyelerin öz gelirleri yerine genel bütçe vergi gelirlerinden aktarılan payların etkisi ile yaratılması, ulaşılan operasyonel fazlanın yeterince kaliteli olmadığını göstermektedir. Bu doğrultuda büyükşehir belediyelerinin, söz konusu paylardan kesinti yapma yetkisi bulunan merkezi idarenin kararlarına ve merkezi bütçeyi olumsuz etkileyen krizlere karşı duyarlılıklarının arttığı belirtilebilir (Kurtuluş, 2006: 23). Sözü edilen durum önemli olmakla birlikte

¹ Aslında operasyonel fazla tutarları ile yatırım harcamaları ve yıllık borç ödemelerinin toplamının karşılanması beklenmektedir. Ancak 1985 yılında alınan karar doğrultusunda borç anapara ödemeleri bütçe hesapları dışında ayrı bir hesapta izlenmesi kararlaştırılmıştır (Eğilmez, 2020: 95). Bu nedenle karşılaştırma yalnızca operasyonel denge tutarları ile yatırım harcamaları arasında yapılmıştır.

Tablo 1’den elde edilmesi beklenen esas bulgu, büyükşehir belediyelerinde operasyonel denge tutarlarının yatırım harcamalarını karşılama açısından yeterli olup olmadığıdır. Yapılan hesaplama sonucunda elde edilen bulgular, on altı yılın yedisinde operasyonel fazla tutarlarının yatırım harcamalarını karşılayamadığını göstermektedir. Dolayısıyla büyükşehir belediyelerinde çoğunlukla operasyonel fazla tutarlarının yatırım harcamalarını aştığı belirtilebilir. Büyükşehir belediyelerinin dışında kalan il, ilçe ve belde belediyelerine ilişkin veriler de Tablo 2’de ve Tablo 3’te özetlenmiştir.

Tablo 2: İl Belediyelerinin Operasyonel Denge Tutarlarının Gelişimi ve Yatırım Harcamaları ile Karşılaştırılması (2006-2021)

Yıllar	Öz Gelirler	Operasyonel Harcamalar	GBVP	Operasyonel Denge	Yatırım Harcamaları
2006	1.241.406.000	1.775.605.000	818.441.000	284.242.000	668.367.000
2007	1.712.101.000	2.006.782.000	946.070.000	651.389.000	824.770.000
2008	1.789.443.000	2.397.087.000	1.127.790.000	520.146.000	969.498.000
2009	1.565.637.000	2.583.161.000	1.333.076.000	315.552.000	663.871.000
2010	2.106.546.000	2.993.074.000	1.781.752.000	895.224.000	837.480.000
2011	2.312.508.000	3.438.162.000	2.164.014.000	1.038.360.000	1.427.095.000
2012	2.721.807.000	3.835.117.000	2.438.077.000	1.324.767.000	1.741.854.000
2013	3.156.517.000	4.609.819.000	3.183.303.000	1.730.001.000	2.438.038.000
2014	1.895.931.000	3.171.104.000	2.386.223.000	1.111.050.000	1.160.820.000
2015	2.277.433.000	3.776.325.000	2.923.916.000	1.425.024.000	1.345.621.000
2016	2.602.541.000	4.488.384.000	3.244.190.000	1.358.347.000	1.828.962.000
2017	3.040.143.000	5.140.236.000	3.902.463.000	1.802.370.000	2.881.250.000
2018	3.245.568.000	6.265.040.000	4.618.859.000	1.599.387.000	3.486.490.000
2019	3.263.177.000	6.944.082.000	5.103.498.000	1.422.593.000	1.687.500.000
2020	3.891.089.000	8.322.221.000	6.268.543.000	1.837.411.000	2.102.454.000
2021	5.082.381.000	9.897.594.000	8.674.121.000	3.858.908.000	4.186.214.000

Kaynak: Mahalli İdareler Genel Faaliyet Raporu ile Hazine ve Maliye Bakanlığı tarafından yayımlanan veriler kullanılarak yazar tarafından oluşturulmuştur.

Tablo 3: İlçe ve Belde Belediyelerinin Operasyonel Denge Tutarlarının Gelişimi ve Yatırım Harcamaları ile Karşılaştırılması (2006-2021)

Yıllar	Öz Gelirler	Operasyonel Harcamalar	GBVP	Operasyonel Denge	Yatırım Harcamaları
2006	6.404.353.000	7.721.357.000	3.732.883.000	2.415.879.000	3.053.877.000
2007	7.453.848.000	8.903.684.000	4.126.057.000	2.676.221.000	3.719.763.000
2008	7.869.913.000	10.767.707.000	5.088.734.000	2.190.940.000	4.429.805.000
2009	6.859.080.000	11.141.579.000	5.552.292.000	1.269.793.000	2.916.766.000
2010	9.953.330.000	13.011.032.000	6.915.041.000	3.857.339.000	3.693.576.000
2011	12.115.748.000	15.251.214.000	8.318.207.000	5.182.741.000	5.371.442.000
2012	13.379.087.000	17.674.126.000	9.127.563.000	4.832.524.000	6.848.832.000
2013	15.757.459.000	20.734.101.000	10.434.270.000	5.457.628.000	9.615.384.000
2014	15.662.178.000	21.873.611.000	11.815.118.000	5.603.685.000	6.806.122.000
2015	18.156.187.000	25.715.338.000	14.460.219.000	6.901.068.000	8.434.681.000
2016	20.972.240.000	29.505.677.000	14.951.445.000	6.418.008.000	9.787.642.000
2017	24.479.369.000	34.428.548.000	17.896.241.000	7.947.062.000	12.565.904.000
2018	26.080.858.000	40.736.680.000	20.842.248.000	6.186.426.000	15.951.231.000
2019	26.455.223.000	44.894.416.000	22.330.415.000	3.891.222.000	9.973.041.000
2020	32.743.898.000	50.122.885.000	26.935.834.000	9.556.847.000	11.467.771.000
2021	43.991.775.000	61.293.280.000	36.893.235.000	19.591.730.000	19.800.634.000

Kaynak: Mahalli İdareler Genel Faaliyet Raporu ile Hazine ve Maliye Bakanlığı tarafından yayımlanan veriler kullanılarak yazar tarafından oluşturulmuştur.

Tablo 2’den ve Tablo 3’ten yola çıkarak büyükşehir belediyelerindeki görece iyimser kabul edilebilecek bulguların il, ilçe ve belde belediyeleri için geçerli olmadığı ifade edilebilir. Çünkü on altı yıl boyunca il belediyelerinin operasyonel fazla tutarları yalnızca iki yılda (2010 ve 2015), ilçe ve belde belediyelerinin de yalnızca bir yılda (2010) yıllık yatırım harcamalarını karşılamaktadır. Dolayısıyla sözü edilen belediyelerde, gerek operasyonel fazla yaratma biçimi gerekse yatırım harcamalarını karşılama açısından sorun olduğu belirtilebilir.

Tablolarda yer alan verilerden yola çıkarak her üç belediye türünde de elde edilen operasyonel fazla tutarlarının daha çok genel bütçe vergi gelirlerinden aktarılan paylardan kaynaklandığı tespit edilmiştir. Diğer bir ifade ile öz gelirler operasyonel harcamaları karşılama açısından oldukça yetersiz kalmıştır. Söz konusu bulgunun Türkiye’de belediyelerin düşük mali özerklik düzeyine sahip olduğunu göstermektedir. Bu doğrultuda belediyelerin öz gelirlerinin artırılmasına yönelik düzenlemeler ile operasyonel fazla tutarlarının artırılmasının olanaklı olduğu belirtilebilir. Ancak aynı olanak genel bütçeden aktarılan paylar için geçerli değildir. Çünkü Türkiye’de idareler arası mali ilişkiler bağlamında benimsenen güçlü merkezîyetçi yapının sınırlarına ulaşıldığı düşünülmektedir. Dolayısıyla operasyonel fazla tutarlarını artırmak için genel bütçe vergi gelirlerinden belediyelere aktarılan payların artırılması oldukça düşük bir olasılık olarak görülmektedir. Bu bağlamda sözü edilen tutarları artırmanın bir diğer yolu, operasyonel harcamaları oluşturan bileşenlerden tasarruf etmeye çalışmaktır. Bu tasarrufun da operasyonel harcamalar içerisinde en fazla paya sahip olan mal ve hizmet alım giderlerinden sağlanması daha kolay olduğu kadar rasyoneldir. Bu hesapta izlenen tutarlardan tasarruf sağlanması da kamu alımlarına ilişkin süreçlerde yaşanan usulsüzlükler nedeniyle oluşan israfın önlenmesi ile olanaklı olabilir. Nitekim izleyen başlıkta sözü edilen usulsüzlüklere ilişkin örnekler verilecektir.

4.2. Türkiye’de Belediyelerin Kamu Alımlarında Yaşanan Usulsüzlükler ve Operasyonel Fazla Tutarlarına İlişkin Çıkarımlar

Türkiye’de kamu alımlarına ilişkin işlemleri düzenleyen 4734 sayılı Kamu İhale Kanunu’nun 2. maddesinde, söz konusu kanun hükümlerine uyması gereken kamu idareleri sıralanmıştır. Bu idareler arasında belediyeler de vardır. Belediyelerin yöneticilerinden kamu alımlarına ilişkin işlemlerinde kanunun 5. maddesinde sıralanan temel ilkelere uymaları beklenmektedir. Ancak yöneticilerin daha önce sözü edilen ilkelere uymamalarından dolayı usulsüzlüklere ve dolayısıyla kamu kaynaklarının israfına yol açtıkları düşüncesi ileri sürülmektedir. Nitekim Kamu İhale Kurumu tarafından yayımlanan istatistikler ve ihaleleri konu alan bilimsel çalışmalar ile sözü edilen usulsüzlüklerin varlığı doğrulanabilir. Bu doğrultuda ilk olarak Kamu İhale Kurumu’nun hizmet birimleri arasında yer alan Kamu İhale Kurulu’na yapılan itirazın şikâyet başvuruları sonucunda Kurul tarafından alınan uyuşmazlık kararı istatistikleri sözü edilen düşünceye bir kanıt olarak sunulabilir. Kurul tarafından 2021 yılında 2415 uyuşmazlık kararı alınmıştır. Bu kararların 630’u (%26,09) belediyelerin ihale işlemlerine ilişkindir (Kamu İhale Kurumu, 2022: 30). Dolayısıyla 2021 yılında alınan her dört uyuşmazlık kararından birinin belediyeler tarafından yapılan ihaleler ile ilişkili olduğu belirtilebilir. Sözü edilen karar sayısının ulaştığı boyut dikkate alınarak belediyelerin ihale süreçlerinde özellikle rekabet ilkesinin ihlal edici usulsüzlüklerin fazla olduğu belirtilebilir (Öcal Çiftçi ve Yılmaz, 2019: 124). Çünkü itirazın şikâyet başvurularının başlıca gerekçesi, isteklilerin ihaleleri düzenleyen belediyelere yaptıkları şikâyetlerden beklentilerinin tersi yönünde sonuç almalarıdır (Çetinkaya, 2014a: 85). Nitekim Kurul tarafından alınan uyuşmazlık kararları, isteklilerin başvurularında haklı olduğunu göstermektedir.

Kamu İhale Kurumu’nun yayımladığı istatistiklerin ardından kamu alım süreçlerinde belediyelerin yaptıkları usulsüzlüklerin incelendiği bilimsel çalışmalarda elde edilen bulgular incelenebilir. Bu doğrultuda ilk olarak Çetinkaya’nın (2014b) çalışmasından başlanabilir. Çetinkaya (2014b: 306-309), belediyelerin ihale süreçlerinde yaşanan usulsüzlükleri altı ayrı başlıkta incelemiştir. Rekabet ilkesine uyulmaması, belediye şirketlerinin kayırılması, ihale usullerinin özüne uygun şekilde hareket edilmemesi, kiralama işlemlerinde kayırmaların yapılması, yaklaşık maliyetlerin rasyonel şekilde belirlenmemesi ve ihale süreçlerine ve edimin ifasına fesat karıştırılması sözü edilen başlıklardır. Bu başlıklardan gelir getirici bir işlem olan kiralama faaliyetleri dışında kalanlar bütçe harcamalarının israfına ilişkin örnekler sunmaktadır. Bu kapsamda aslında rekabet ilkesine uyulmaması ile doğrudan ilişkisi de bulunan belediye şirketlerinin kayırılması ile başlanabilir. Belediye şirketlerinin, belediyelerin düzenledikleri ihalelere katılmalarına engel bulunmamaktadır. Özellikle belediyeler tarafından düzenlenen temizlik, park ve bahçe, güvenlik gibi işlere ilişkin ihaleleri çoğunlukla kurdukları şirketler almaktadır. Aslında ihalelerin belediye şirketlerine verilmesi, kamu kaynağının kullanımı açısından tutumlu davranıldığını düşündürülebilir. Ancak İlhan (2013), Eroğlu (2020) ve Meşe (2011) tarafından yapılan çalışmalar aksini ispatlayıcı bulgular içermektedir. İlhan (2013: 18-22), belediyelerin düzenledikleri ihalelerin bir belediye şirketi yerine özel bir şirkete verildiğinde maliyette bir değişim olup olmadığını sorgulamıştır. Yaptığı hesaplama ile 2008 ve 2009 yıllarında özel şirketlerin belediye şirketlerine kıyasla, ihale konusu hizmetleri daha düşük

maliyet ile gerçekleştirdiklerini saptamıştır. Nitekim sözü edilen iki yılda belediye şirketlerinin toplam zararlarının karlarını aştığını tespit etmiştir. Eroğlu (2020: 1044-1045) da Bursa Büyükşehir Belediyesi ile şirketleri arasındaki kamu alımlarının rekabet ve eşit muamele ilkelerine uyulmadan gerçekleştirildiği sonucuna ulaşmıştır. Elde ettiği bulguları da açık ihale ve pazarlık usullerinde yalnızca belediye şirketlerinin teklif vererek ihaleleri kazanmalarına, daha çok olağanüstü koşullarda kullanılması gereken bir usul olan pazarlık usulünün yaygınlaşmasına ve yaklaşık maliyetlerin daha önceden şirketler tarafından bilinmesine dayandırmıştır. Öte yandan Meşe (2011: 210-211) de doğrudan temin ve pazarlık uygulamaları kullanılarak düzenlenen ihalelere firmaların katılımını engelleyici koşullar konularak, açık ihale usulü ile yapılan ihalelerde de yaklaşık maliyetler yüksek tutulup yalnızca ekonomik ve mali şartları karşılayan şirketlerin katılmasını olanaklı kılarak ihaleleri belediye şirketlerinin kazanması sağlandığını ifade etmiştir. Ayrıca açık ihale usulünün düzenlenmesi gereken işlerin bölünüp doğrudan temin veya pazarlık uygulamalarının tercih edilmesi kapsamında da sözü edilen ilkelere uyulmadığı belirtilmiştir (Çetinkaya, 2014b: 306). Bu çalışmalara ek olarak Işık ve Engin (2022) tarafından 2020 yılı esas alınarak Sayıştay'ın belediyeleri ve bağlı idarelerini denetlemeleri sonucunda ortaya çıkan kamu alımlarına ilişkin sorunlarına yer verdiği raporlar incelenmiştir. Bu doğrultuda sözü edilen sorunların çoğunlukla ihaleye hazırlık aşamasında ortaya çıktığını saptamışlardır. Belediyelerin açık ihale yönteminden uzaklaşmaları ve doğrudan temin uygulamasına yönelmeleri ile yaklaşık maliyetin doğru belirlenmemesi sözü edilen sorunlar arasında sıralamışlardır. Bu sorunların özellikle kamu kaynağının israf edilmesini tetiklediği bilinmektedir. Öte yandan doğrudan temin uygulamasının kullanıldığı durumlarda piyasa araştırmasını yeterli ölçüde yapılmamasını da kamu kaynağının israfına neden olabilecek sorunlardan biri olarak ifade etmişlerdir (Işık ve Engin, 2022: 175-177).

Türkiye'de belediyelerin kamu alımlarında yaşanan usulsüzlükleri ispatlayıcı bulguların özetlenmesinin ardından oluşması olası israfın belediyelerin bütçelerine yansımalarına ilişkin çıkarımlarda bulunulabilir. Kamu alımları kapsamında harcanan tutarların mal ve hizmet alım giderleri hesabında izlendiği daha önce ifade edilmiştir. Bu doğrultuda ilk olarak her bir belediye türünde 2021 yılında mal ve hizmet alımları için yapılan harcama tutarları tespit edilmiştir. Bu kapsamda 2021 yılında büyükşehir belediyelerinde yaklaşık 30,5 milyar TL, il belediyelerinde yaklaşık 7 milyar TL ve ilçe ile belde belediyelerinde de yaklaşık 45,8 milyar TL harcama yapılmıştır. Bu tutarlar, büyükşehir belediyelerinde toplam bütçe giderlerinin yaklaşık %33'ünü, il belediyelerinde yaklaşık %50'sini, ilçe ve belde belediyelerinde de yaklaşık %55'ini oluşturmaktadır. Sözü edilen hesapta izlenen giderlerin tamamı mal ve hizmet alımına yönelmemektedir. Bu hesapta yolluklar, görev giderleri ile temsil ve tanıtma giderleri de izlenmektedir. Dolayısıyla yalnızca mal ve hizmet alımına yönelik giderler (üretim ve tüketim için mal ve malzeme alımları, hizmet alımları ve menkul mal, gayrimaddi hak alım, bakım ve onarım giderleri) toplandığında, büyükşehir belediyelerinde yaklaşık 28,3 milyar TL, il belediyelerinde yaklaşık 6,4 milyar TL ve ilçe ile belde belediyelerinde de yaklaşık 40,7 milyar TL tutarına ulaşılmaktadır (Hazine ve Maliye Bakanlığı, 2022). Ayrıca söz konusu tutarlar, büyükşehir belediyelerinin operasyonel harcamalarının yaklaşık %54,4'ünü, il belediyelerinin operasyonel harcamalarının yaklaşık %65,3'ünü, ilçe ve belde belediyelerinde de yaklaşık %65,5'ini oluşturmaktadır. Bu yönüyle belediyelerin ihale düzenleyerek aldıkları mal ve hizmetlere ilişkin giderlerin operasyonel harcamaların başlıca belirleyicisi olduğu belirtilebilir. Dolayısıyla belediyelerde kamu alımlarında yaşanan usulsüzlüklerin yarattığı harcama artışının operasyonel harcamaları artıracağı belirtilebilir. Gelir yaratma olanaklarına ilişkin kısıtlar da dikkate alındığında, harcamalarda yaşanan söz konusu artış, belediyelerin daha çok operasyonel fazla yaratmalarını engellemektedir. Böylece belediyeler, yatırımları için gereken borçlanma ihtiyacını azaltma açısından başarılı olamamaktadır. Bu soruna bağlı olarak da belediyelerin borçlarını ve yükümlülüklerini içeren borç stoku artıp finansman sorunlarının derinleştiği belirtilebilir.

5. SONUÇ

Türkiye'de belediyelerin kamu alımları ile operasyonel fazla tutarları arasındaki ilişkinin incelendiği çalışma kapsamında, kamu alımlarına ilişkin süreçlerde yaşanan usulsüzlüklerin sözü edilen idarelerin daha çok operasyonel fazla yaratma olanaklarını kısıtladığı sonucuna ulaşılmıştır. Belediyelerin operasyonel fazla elde etmeleri, yatırımları için gereken borçlanma ihtiyacını azaltmaları açısından önemlidir. Dolayısıyla operasyonel fazla tutarlarını artırmaya yönelik üretilen çözüm önerisi ölçüsünde fayda sağlanacağı ifade edilebilir. Nitekim her üç belediye türünde de operasyonel fazla elde edildiği, belirlenen denklem doğrultusunda yapılan hesaplamalar ile ispatlanmıştır. Ancak fazlaların elde edilmesinde özellikle genel bütçe vergi gelirlerinin belirleyici olduğu görülmektedir. Dolayısıyla söz konusu gelirlerin artırılarak elde edilecek fazlaların da artırılacağı düşünülebilir. Ancak belediyelerin bütçe gelirleri içerisinde kapladığı alan ve düşük mali özerklik düzeyleri dikkate alınarak sözü edilen gelirlerin artırılmasına ilişkin sınıra ulaşıldığı ifade edilebilir. Öte yandan

Türkiye’de idareler arası mali ilişkiler bağlamında benimsenen merkezîyetçi yapı doğrultusunda da belediyelerin öz gelir yaratma olanakları oldukça sınırlandırılmıştır. Bu nedenle belediyelerin daha çok operasyonel fazla tutarları elde etmeleri için operasyonel harcamalarını azaltıcı önlemlerin alınması gerekmektedir. Bu harcamaların başlıca bileşenini de mal ve hizmet alımına yönelik giderler oluşturduğu için önlemlerin alınması sözü edilen giderlerin azaltılmasına yönelik uygulamalar ile başlanabilir. Bu harcamalar belediyelerin gerçekleştirdikleri kamu alımlarının bütçelerindeki karşılıklarını göstermektedir. Bu doğrultuda belediyelerin yöneticilerinin kamu alımlarını düzenleyen 4734 sayılı Kamu İhale Kanunu’nun 5. maddesinde sıralanan saydamlık, rekabet, eşit muamele, güvenilirlik, gizlilik, kamuoyu denetimi, ihtiyaçların uygun şartlarda ve zamanında karşılanması ile kamu kaynaklarının etkin kullanımı ilkelerine sıkı sıkıya uymaları gerekmektedir. Böylece karşılaşılan usulsüzlüklerden kaynaklanan israfın azaltılacağı ve dolayısıyla harcamalardan önemli ölçüde tasarruf edileceği düşünülmektedir.

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Avrupa Birliği Ülkelerinde Doğalgaz Tüketimi, Enflasyon ve Çıktı Büyüklüğü İlişkisi: NARDL Yaklaşımı

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Özet: Son dönemlerde birçok ülke, ekonomik büyümesinde, toplumsal açıdan kalkınmasında ve bireylerin refahında önemli rol oynayan enerji kaynaklarının tedarik edilmesi konusunda sorunlar yaşamaktadır. İktisadi kalkınmanın yaşanması durumunda ülkelerdeki enerji bağımlılık düzeyi artarken, enerji piyasasında ham petrolden sonra önemli bir yere sahip olan doğalgazın artan ithalat bağımlılığı, ülkelerin sürdürülebilir kalkınma hedeflerine ulaşması ve çıktı verimliliğinin sağlaması konularında engeller oluşturmaktadır. Avrupa Birliği ülkeleri, dünya genelinde enerji tüketiminin en fazla olduğu coğrafyalardan biri olmasının yanı sıra fosil enerji kaynakları açısından oldukça fakir bir bölgede yer almaktadır. Bu çerçevede, yakın dönemde yaşanan politik/hukuki kısıtlamalar ve doğalgazın tedariki konusunda oluşan sorunlar nedeniyle Avrupa Birliği ülkelerinin ithal enerji kaynaklarına olan bağımlılıkları artarken, bununla birlikte hızlı fiyat artışlarının etkisi çıktı büyüklüğünü olumsuz yönde etkilenmektedir. Çalışma kapsamında, Avrupa Birliği ülkelerinde 1990-2020 dönemleri arasında doğal gaz tüketimi, enflasyon ve çıktı büyüklüğü arasındaki asimetrik ilişkinin belirlenmesi amacıyla doğrusal olmayan ARDL (NARDL) yaklaşımı kullanılmaktadır. Sonuçlar, kısa ve uzun dönemli süreçte doğalgaz tüketimi ve enflasyonun çıktı büyüklüğü ile arasında anlamlı bir ilişkiyi göstermekte ve ekonomik kalkınma ve enerji politikaları uygulamaları açısından incelenmesinde önem arz etmektedir.

Anahtar Kelimeler: Doğalgaz Tüketimi, Enflasyon, Büyüme, NARDL Yaklaşımı

Abstract: Recently, many countries have been experiencing problems in the supply of energy resources, which play an important role in their economic growth, social development and welfare of individuals. While the level of energy dependence in countries increases in the event of economic development, the increasing import dependence of natural gas, which has an important place in the energy market after crude oil, creates obstacles for countries to achieve sustainable development goals and ensure output efficiency. In addition to being one of the geographies with the highest energy consumption in the world, the countries of the European Union are located in a region that is quite poor in terms of fossil energy resources. In this context, due to recent political/legal restrictions and problems in the supply of natural gas the dependency of the European Union countries on imported energy sources is increasing, and along with this, the effect of rapid price increases negatively affects the output size. Within the scope of the article, European Union countries, between the period 1990-2020 natural gas consumption for the purpose of determination of the relationship between inflation and the output size asymmetric nonlinear ARDL (NARDL) approach is used. The results show a significant relationship between natural gas consumption and inflation in the short- and long-term process and it is important to examine in terms of economic development and energy policy applications.

Key Words: Natural Gas Consumption, Inflation, Growth, NARDL Approach

1. GİRİŞ

Toplumsal ve iktisadi alanda gelişim için önemli olan enerji; bireyin günlük yaşantısını sürdürebilmesi için gerekli olan tüm süreçler için bir girdi olarak bilinirken, sanayi başta olmak üzere, ulaştırma, iletişim, konut gibi pek çok alt sektörde de kullanılmaktadır. Teknolojinin ilerlemesi ve sanayileşmenin sürekli artış göstermesi nedeniyle endüstriyel alanda enerji kullanımı geniş bir kullanım ölçeğine sahip olmakta ve ekonomilerin enerjiye ve alt türevlerine olan taleplerinde/bağımlılıklarında artış yaşamasına neden olmaktadır. Artan talebe karşılık rezervlerin giderek azalması, enerji ve alt türevlerinin, kaynakların dengesiz dağılımı ve aynı zamanda iktisadi-toplumsal kalkınmanın gerçekleşmesi için üretim sürecindeki en temel girdiler arasında yer alması nedeniyle ülkeler enerji konusunda farklı arayışlarda bulunmaktadır.

Petrol ve doğalgaz gibi fosil enerji kaynakları açısından oldukça fakir/kısıtlı bir coğrafyada bulunan Avrupa Birliği (AB) ülkeleri, dünya genelinde enerji tüketiminin en fazla gerçekleştirildiği ülkeler arasında yer almakta ve küresel anlamda en gelişmiş enerji pazarlarından birine ev sahipliği yapmaktadır. Ek olarak, Avrupa Birliği ülkelerinde, Norveç, Hollanda ve İngiltere'nin dışında özellikle doğalgaz rezervleri açısından önemli düzeyde enerji kaynaklarına sahip ülke bulunmaması nedeniyle Avrupa Birliği ülkelerinin enerji kaynakları ithalatına olan

bağımlılığı sürekli artmaktadır. Avrupa Birliği ülkelerinde, tüm enerji türleri içerisinde toplam enerji tüketiminin yaklaşık %24'ünü oluşturan doğalgaz, petrolden sonra en fazla tüketilen enerji kaynağı olarak yer almaktadır (British Petroleum, 2022: 9). Bu nedenle içerisinde çeşitli kısıtlılıklar barındıran Avrupa Birliği ülkelerinin, enerji ve kaynaklarını verimli kullanması gerekmektedir. Toplumların gelişmesinde ve günlük yaşamının sürdürülebilirliği konusunda önem arz eden enerji tüketimini karşılayamayan ülkeler, yüksek düzeyde enerji ithal etmekte ve iktisadi darboğaza sürüklenerek politik-sosyolojik açıdan bağımlılık yaşamaktadır. Enerji kaynaklarının yüksek fiyatlardan arz edildiği ülkelerde, petrol, doğalgaz ve elektrik gibi büyük öneme sahip girdiler üzerine getirilen yükümlülüklerin (vergi, hayat pahalılığı gibi), üretici maliyetleri üzerine etkilerinin detaylı bir biçimde ele alınması gerekmektedir. Ayrıca, enerji maliyetlerinin arttığı bir ortamda, rekabet gücünün kaybedilmesi ulusal sermayenin ve ulusal mal-hizmet bütününe yok sayılmasını beraberinde getirerek ulusal gelirin düşmesine de neden olmaktadır. Bu çerçevede, enerjinin sanayileşme ve kentleşme ile birlikte tüm ekonomik aktivitelerde kullanımının artması, enerji kullanımı ile ekonomik büyüme arasındaki ilişkiyi iktisadi analiz kapsamında değerlendirilmesi ve başta doğalgaz olmak enerji kaynaklarının yüksek fiyatlardan arz edildiği Avrupa Birliği ülkelerinde, iktisadi kalkınma ve enerji talebi arasındaki ilişkinin dönemsel açıdan incelenmesi önem arz etmektedir.

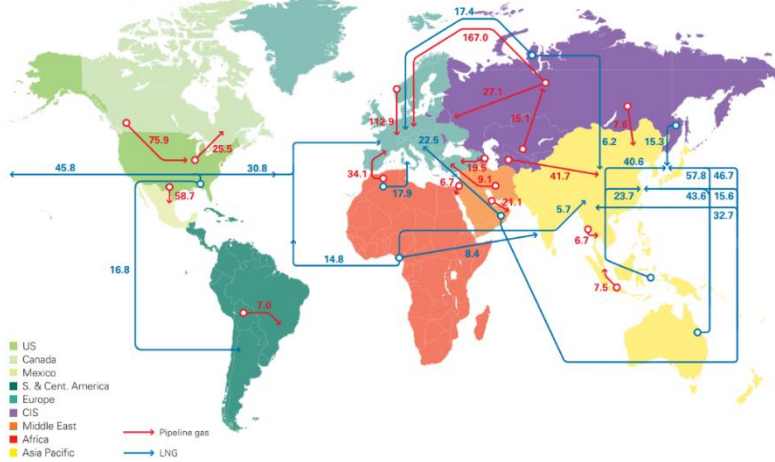
Çalışma kapsamında, Avrupa Birliği ülkelerinde 1990-2020 dönemleri arasında doğal gaz tüketimi, enflasyon ve çıktı büyüklüğü arasındaki asimetrik ilişkinin belirlenmesi amaçlanmaktadır. Çalışmanın ilk bölümünde enflasyon teorilerine değinilerek, doğalgaz, iktisadi kalkınma ve çıktı büyüklüğü hakkında teorik bilgiler verilmekte, ikinci bölümünde kullanılan ekonometrik yöntem hakkında metodolojik bilgiler yer almakta ve sonrasında uygulamaya yönelik bulgulara ait sonuçlar verilerek politik sonuçlara değinilmektedir.

2. KAVRAMSAL ÇERÇEVE

Ekonominin ithal enerji darboğazına düşmesi ekonomik büyümeyi olumsuz yönde etkilemektedir. Enerji kaynakları; doğal gaz, nükleer enerji, petrol, kömür vb. yenilenemeyen ve rüzgâr enerjisi, güneş enerjisi, jeotermal enerji vb. yenilenebilir enerji kaynakları olmak üzere ikiye ayrılmaktadır. Ek olarak, kömür, petrol, doğalgaz vb. gibi yenilenemeyen enerji kaynakları birincil enerji kaynağı olarak adlandırılırken, bunların kullanımıyla elde edilen enerji kaynakları ise (elektrik, petrol ürünleri) ikincil enerji kaynakları olarak adlandırılmaktadır. Bu kapsamda, ikincil enerji kaynaklarını karbondioksit emisyonlarını azaltarak çevre açısından dışsal maliyet üretmemekte ve ülkeye özgü özellik/çeşitlilik göstermesi nedeniyle, ülke içerisinde işsizliği azaltarak, ithal enerji bağımlılığını artırmaktadır. Avrupa Birliği ülkelerinde bulunan yenilenemeyen enerji kaynaklarının yetersizliğinden dolayı dışa bağımlı bir durumda bulunmakta ve bu eksikliği yenilenebilir enerji politikalarıyla gidermeye çalışmaktadır. Artan yönde eğiliminin olduğu gözlemlenen enerji talebini Avrupa Birliği ülkelerinin bir bütün olarak ekonomik gelişmişliğine yansıtacağı düşünülmektedir. Avrupa Birliği'nin (AB) enerji politikalarının gelişiminde etkili olan enerji arz güvenliği, Avrupa Birliği ülkelerinin doğalgaz ithalatında Rusya'ya önemli ölçüde bağımlı olması, Rusya ile Ukrayna arasındaki enerji krizlerinin AB ülkelerini olumsuz etkilemesi ve Rusya'dan Avrupa Birliği ülkelere ulaşan doğalgaz akışının dönemsel olarak kesintiye uğraması nedeniyle Avrupa Birliği'nin enerji alanındaki en önemli gündemi arasında yer almaktadır. Bu çerçevede, Avrupa Birliği ülkeleri, çevresel etmenlerden enerji tasarrufuna kadar enerji arz güvenliğini destekleyecek önemli atılımlarda bulunmaktadır. Enerjinin; yeterli, güvenilir, rekabet edilebilir fiyat, çevresel etki gibi faktörler çerçevesinde ekonomik büyümeyi gerçekleştirmesi ve sosyal gelişmeyi desteklemesi diğer ülkeler gibi Avrupa Birliği ülkelerinin de hedefleri arasında yer almaktadır. Enerji tüketimi ülkelerin ekonomik büyümeleri açısından son derece önem arz etmektedir. İktisat literatüründe bazı çalışmalar ekonomik büyümeden enerji tüketimine nedensellik olduğunu göstermekteyken, bazı çalışmalar da enerji tüketiminden ekonomik büyümeye doğru bir nedenselliğin varlığını göstermektedir. Amerika Birleşik Devletleri'nin enerji tüketimi ve GSMH arasındaki ilişkiyi analiz eden Kraft ve Kraft (1978), GSMH'dan enerji tüketimine doğru tek yönlü bir nedensellik belirlemektedir. Erol ve Yu (1987), enerji tüketimi ve GSYİH arasındaki ilişkiyi farklı farklı ülkeler için analiz ederken Kanada için enerji tüketiminden GSYİH'ya doğru tek yönlü bir ilişki olduğunu ifade etmektedir. Nedensellik yönünde kesin bir sonuç olmamasına rağmen enerjinin ekonominin diğer sektörleri ile yapısal bağıllığı ekonomistlerin ve politikacıların bu konuya olan ilgisini artırmaktadır. Bu bağlamda enerji harcamaları ile GSYİH arasındaki nedensellik ilişkisinin yönü politika yapıcılar için büyük önem arz etmektedir. Enerji tüketimi ile GSYİH arasındaki nedensellik ilişkisi, büyüme hipotezi, koruma hipotezi, feed-back (geri bildirim hipotezi) ve nötralite hipotezi olmak üzere dört varsayım altında incelenmektedir (Pirlogea ve Cicea, 2012; Acaravcı, 2010). Büyüme hipotezi, nedensellik yönü enerji harcamalarından/tüketiminden iktisadi kalkınmaya doğru olması durumunda, baz alınan ülkenin enerjiye bağımlı olduğunu ifade etmekte ve ayrıca, karar alıcıların uygulamış olduğu enerji politikalarının iktisadi kalkınmayı olumsuz yönde etkilemesi durumunda da ortaya çıkmaktadır (Ciarreta ve

Zarraga, 2010). Koruma hipotezi, büyüme hipotezinin tersi olarak, nedensellik yönünün iktisadi kalkınmadan enerji harcamalarına/tüketimine doğru olması durumunda, baz alınan ülkenin iktisadi kalkınmayı sürdürebilmek için enerjiye bağımlı olmadığı sonucunda görülmekte ve bu durum, karar alıcıların enerji koruma politikalarının iktisadi kalkınmayı olumsuz yönde etkilemeyeceğini göstermektedir. Ancak, bazı durumlarda, iktisadi kalkınmanın artması durumunda enerji tüketiminin de artması muhtemel olmaktadır. Feedback (Geri Bildirim) hipotezi, enerji harcamaları/tüketimi ile iktisadi kalkınma arasında çift yönlü bir nedenselliğin bulunduğunu belirtmekte ve baz alınan ülkelerde artan iktisadi kalkınmanın enerji tüketimini artırabilmesi nedeniyle enerji tüketiminin de iktisadi kalkınmayı hızlandırabileceğini ifade etmektedir. Bu durumda, enerjiye çift yönlü bağımlılık gösteren bir ülkenin ihtiyaç duyduğu enerjiyi kendisi üretebilir konuma gelmesi ve yenilenebilir enerji kaynaklarına yönelmesi büyük önem arz etmektedir (Pirlogea ve Cicea, 2012). Son olarak, Nötrallite hipotezi ise, iki değişken (enerji harcaması/tüketimi ile iktisadi kalkınma) arasında bir nedensellik ilişkisi bulunmadığını ifade etmektedir. Şekil 1’de dünya genelinde boru hatlarıyla ve sıvılaştırılmış şekilde yapılan (LNG) dünya doğalgaz ticaretinin dağılımı yer almaktadır.

Şekil 1. Dünya Doğalgaz Ticaretinin Dağılımı (British Petroleum, 2020)



Şekil 1. incelendiğinde, Avrupa Birliği ülkelerinin, doğalgaz ithalatının talebi büyük oranda (sıvılaştırılmış doğalgaz dahil olmak üzere toplamda 353 milyar metreküp) Norveç, Rusya, Azerbaycan, Cezayir ve Libya’dan karşılanmaktadır. Dünya doğalgaz ticaretinin büyük bir bölümü, yaklaşık %53,2 kısmı Avrupa kıtasında gerçekleşmektedir.

İktisadi büyüme ile enerji tüketimi arasındaki ilişkinin seviyesi ve yönü pek çok teorik ve ampirik çalışmada incelenmektedir. Yu ve Hwang (1984), 1947-1979 dönemleri arasında ABD’nin enerji tüketimi ile ekonomik büyüme arasındaki ilişkiye ek olarak enerji tüketimi ile istihdam arasındaki ilişkiyi inceledikleri çalışmada, Sims Tekniği kullanmakta ve enerji tüketimi ile ekonomik büyüme arasında bir nedenselliğin olmadığını, istihdamdan enerji tüketimine tek yönlü bir ilişkinin olduğunu belirtmektedir. Masih ve Masih (1996), 1955-1990 dönemleri arasında Hindistan, Pakistan, Endonezya, Malezya, Filipinler ve Singapur ülkelerinde enerji tüketimi ile ekonomik büyüme arasında uzun dönemli ilişkinin belirlenmesine yönelik yaptıklarında çalışmada, Hindistan, Pakistan ve Endonezya’da uzun dönemli ilişkinin varlığını belirlerken, Malezya, Singapur ve Filipinler’de uzun dönemli ilişkinin bulunmadığını ifade etmekte ve Hindistan’da enerjiden ekonomik büyümeye doğru (Büyüme hipotezi), Pakistan ve Endonezya’da ise ekonomik büyümeden enerji tüketimine doğru (Koruma Hipotezi) olduğunu vurgulamaktadır. Stern (2000), 1948-1994 dönemleri arasında veri setine koentegrasyon analizi uygulayarak, ABD’nin makro ekonomisinde enerjinin rolünü belirlemek istediği çalışmada, enerji kullanımı ile büyüme arasında uzun dönemli bir ilişki olduğunu belirtmektedir. Yang (2000), doğalgaz tüketiminden GSYİH’ya doğru tek yönlü nedensellik olduğunu belirtmektedir. Soytas ve Sarı (2003), enerji harcamaları ile GSYİH arasında eşbütünlük ve Vektör Hata Düzeltme (VEC) modeli yoluyla nedensellik ilişkisini incelediği çalışmada sonuçlar çalışma grubunda bulunan ülkeler arasında farklılık göstererek, çift yönlü ve enerji harcamalarından GSYİH’ya doğru tek yönlü ilişki olduğunu belirtmektedir. Lee ve Chang (2008), 1971-2002 dönemleri arasında 16 Asya ülkesi için enerji tüketimi ile iktisadi büyüme arasındaki nedensellik ilişkisi ve uzun dönem ilişkisi analiz etmeyi amaçladığı çalışmada, iktisadi büyüme ile enerji tüketimi arasında uzun dönemde pozitif bir ilişkinin desteklendiğini ve kısa dönemde değişkenler arasında herhangi bir nedenselliğin olmadığını vurgulamaktadır. Eggoh, Bangake ve Rault (2011), 1970-2006 dönemleri arasında, 21 Afrika ülkesi için enerji tüketimi ve ekonomik büyüme ilişkisini analiz etmeyi amaçladığı çalışmada, geliştirilmiş panel koentegrasyon testi ve nedensellik testini kullanmakta ve enerji ithalatı ve ihracatının artması

durumunda enerji tüketiminin artmasına bağlı olarak büyümenin artacağını ifade etmektedir. Kum H, vd., (2012), 1970-2008 dönemleri arasında G7 ülkelerine (Almanya, Amerika Birleşik Devletleri, Birleşik Krallık, İtalya, Fransa, Japonya ve Kanada) yönelik veri setini kullandığı çalışmada, doğalgaz tüketimi ile iktisadi büyüme arasında İtalya ve Birleşik Krallık için nedensel bir ilişki olmadığını, Fransa ve Almanya'nın çift yönlü nedensellik gösterdiğini belirtmektedir. Dumitrescu E.I. ve Hurlin, C. (2012), Avrupa ülkelerinin enerji tüketimi ve iktisadi kalkınmayı incelemek amacıyla yaptığı çalışmada, Avusturya ve Fransa için büyüme hipotezinin, İrlanda ve Hollanda için koruma hipotezinin, İtalya, İsveç, İsviçre ve Birleşik Krallık için geribildirim hipotezinin ve Almanya için tarafsızlık hipotezinin varlığını elde etmektedir. Balitskiy S, vd., (2016), 1997-2011 dönemleri arasında, Avrupa Birliği ülkelerine yönelik enerji tüketimi ile iktisadi büyümeyi dönemsel olarak incelemeyi amaçladıkları çalışmada, FMOLS yöntemini kullanmakta ve Avrupa Birliği üye ülkelerinin kısa dönemde feed-back hipotezi (ilgili değişkenler arasında çift yönlü nedenselliğin bulunduğunu ifade etmektedir. Ayrıca, Destek M.A. (2016), OECD ülkelerine yaptığı çalışmada da benzer sonuçlar elde etmektedir. Yücel M.A (2021), Avrupa birliği ülkeleri ve Türkiye'ye yönelik sürdürülebilir kalkınma kapsamında eko-inovasyon ve eko-verimlilik uygulamalarının dinamik mekânsal etkileşimini incelediği çalışmada, sınır ilişkilerin benimsenerek, kolektif bir çevresel politika uygulanması sonucunda çevresel bozulum sorunsalının azalabileceğini ve iktisadi kalkınmanın sağlanabileceğini ifade etmektedir.

Teorik olarak, enerji tüketimi ve enflasyon dinamikleri arasındaki ilişki, talep çekme teorisi, yapısalci teori, enflasyon beklentisi teorisi, talep kayması teorisi ve enflasyonun yeni politik makroekonomi teorisi ile açıklanabilmektedir. Genellikle Keynesyen ekonomide popüler hale gelen *talep çekme teorisi*, enflasyon tespitine devlet harcamaları ve tüketimden enflasyon tespitine kadar parasal olmayan etkileri vurgulamaktadır. Talep çekme teorisine göre, ekonomideki enflasyon, tam istihdam çıktısı düzeyinde arz üzerindeki aşırı toplam talebin sonucu olmaktadır. Toplam talep, Avrupa Birliği ülkeleri gibi açık ekonomide tüketim, yatırım, devlet harcamaları ve net ihracattan oluşmaktadır. Sabit bir ortalama tasarruf eğilimi göz önüne alındığında, tam istihdam düzeyinde artan para gelirleri, toplam arz üzerinden toplam talebin aşılmasına ve bunun sonucunda enflasyonist bir boşluğa yol açmaktadır. Toplam talep, kaynaklar tam olarak kullanılmadığı veya artan talebi karşılamak için üretim hızla artırılamadığı için arzı aşabilmektedir. Sonuç olarak, genellikle "çok az mal peşinde koşan çok fazla para" olarak tanımlanan bir düşünceye yanıt olarak fiyatlar yükselmeye başlamaktadır. Toplam talep, tüketim harcamalarındaki artış nedeniyle tam istihdam düzeyinde toplam arzı aşması durumunda, enflasyonist bir boşluk oluşmakta ve boşluğun büyüklüğüne göre enflasyon düzeyi de değişmektedir. Bir ekonomi tam istihdam noktasına ulaştığında, mevcut çıktı üzerindeki toplam talepte artış yaşanması durumunda fiyatta da artış yaşanmakta ve talepteki artışın devam etmesi sonucunda enflasyon oluşmaktadır. (Bayo, 2005). Bu nedenle enerji tüketimindeki sürekli büyüme, ekonominin toplam talep işlevinin tüketim bileşenine uyabilmekte ve enflasyonu sorunsalı ortaya çıkabilmektedir. Talep-çekme enflasyon teorisine göre, toplam talebin her bir bileşeninde azalmaya neden olan politika, talep üzerindeki baskıyı ve dolayısıyla enflasyonu azaltmada etkili olmaktadır (Totonchi, 2011). *Yapısalci teori*, enflasyonun, öncelikle parasal olmayan faktörlerden kaynaklanan hızlı ekonomik gelişme ve büyüme sürecinin doğal bir sonucu olduğunu öne sürmektedir. Ek olarak yapısalci teori, yatırım harcamalarındaki artışın ve onu finanse etmek için para arzının genişlemesinin, özellikle gelişmekte olan ülkelerde enflasyondan sorumlu kısmen yakın faktörler olduğunu savunmaktadır. Yapısalci enflasyon teorisi, gelişmekte olan tüm ülkelerde bulunan enflasyonun bir açıklaması olarak belirtilmektedir (Noyola,1956; Sunkel,1960; Kirkpatrick ve Nixon,1976) Teoriye göre, hızlı ekonomik büyüme ve gelişme dönemlerinde ekonomideki toplam talebin arttığını, ancak ekonomideki arzın yapısal darboğazların varlığı nedeniyle toplam talepteki artışla aynı oranda artmadığını düşünülmektedir. Özetle, yapısal darboğazların varlığının yarattığı toplam talep ve arz arasındaki boşluk, ekonomide enflasyonist baskılara yol açmaktadır. *Talep kayması teorisi*, bir sektördeki aşırı talebe yanıt olarak fiyatların ve ücretlerin yukarı doğru esnek olabileceğini ve ekonominin diğer sektörlerinde aşağı doğru katı olabileceğini savunmaktadır. Bu nedenle, toplam talep aşırı olmasa bile, ekonominin bazı sektörlerinde aşırı talebin bulunması ve diğer sektörlerde eksik talep sonucunda fiyatların düşmemesi nedeniyle genel fiyat seviyesinde bir artışa yol açmaktadır. Talep eksikliği olan sektörler, kar marjlarını korumak için ürünlerinin fiyatlarını yükseltmekte ve bu nedenle enerji tüketimindeki artış ekonominin diğer sektörlerine yayılarak, genel fiyat seviyesini etkilemektedir. *Politik Makroekonomik teori*, bir ekonomideki enflasyon sürecini açıklamak için ekonomik olmayan faktörleri (kurum, politik, kültür vb.gibi) dikkate almaktadır. Teoriye göre, enflasyon nedeni ile olayın zamanlaması arasında esas olarak önemli siyasi/kurumsal kararlarla (Merkez Banka'sının bağımsızlığı, ulusal para politikası vb.gibi) ilgili bir bağlantı olduğu ve uzun süren bütçe açığının enflasyonun nedeni olabileceği savunulmaktadır. *Rasyonel Beklenti Teorisi'ne* göre, insanlar aynı hataları tutarlı bir şekilde yapmazlar ve beklentileri, kendileri için mevcut olan geçmiş ve güncel bilgilere dayanmakta ve her ekonomik sorunun gelecekteki enflasyon konusunda rasyonel beklentisi olduğunda, gelecekteki enflasyonu yenmek için

şimdi büyük alımlar yapacaklarını belirtmektedir. Talepteki bu büyümenin mevcut arzı geçmesi ve talep çeken fiyat artışını tetiklemesiyle sonuçlanmaktadır. Enflasyon beklentisi bir kez ortaya çıktığında, ortadan kaldırılması zorlaşmakta ve enflasyon sorunsalı ortaya çıkabilmektedir. Avrupa Birliği'nin bazı ülkelerinde enerji tüketimi-fiyat değişikliği durumu, enerji kıtlığı döneminde panik alımların enerji ürünü fiyatında beklenmedik bir artış yaratabilmektedir (Totonchi, 2011).

Doğalgaz tüketime bağlı olarak fiyatlarda şoklar yaşanması durumunda ekonomi, arz, talep ve ticaret dengesi açısından etkilenmektedir. Üretim faktörleri arasında yer değiştirilebilirlik sonucunda göreceli olarak fiyatların değişmesi ve üretim araçları yeniden tedarik edilmesi sonucunda şokların etkisi minimize edilebilmektedir. Bu nedenle, üretim kapasitesi üzerinde uzun dönemli şoklar, kaynakların yeniden tedarik edilmesinin bir sonucu olarak ortaya çıkan ve doğalgaz fiyatlarına ilişkin belirsizliklerin hakim olduğu kısa dönemli şoklara karşın daha az belirgin olmaktadır. Ancak, sektörler arasındaki ikame edilebilirlik aynı zamanda maliyetler de (eğitim giderleri, ulaşım giderleri vb.gibi geri dönüşü olmayan yatırımlar) ortaya çıkmaktadır. Yatırım üzerindeki doğrudan etki, zamanla değişme eğiliminde olan doğalgaz fiyatı değişikliklerinin istikrarına ilişkin beklentilerine bağlı olmaktadır. Doğalgaz fiyatlarındaki şoklar fiyatlar genel seviyesini yükselterek, daha düşük reel gelire dönüşmekte ve bu nedenle doğalgaz talebi azalmaktadır. Doğalgaz fiyatlarının genel fiyatlar üzerindeki doğrudan etkilerinin yanı sıra sıkı nominal ücretler ve fiyat-ücret dengelemesinin enflasyonu artırması nedeniyle dolaylı etkileri de bulunmaktadır. Ülke ekonomiler, doğalgaz fiyatlarındaki şokların neden olduğu uluslararası ortamda meydana gelen değişikliklerden de etkilenmektedir. Doğalgaz ithalat fiyatlarındaki değişim sonucunda, ticaret dengesi bozulmakta ve toplumsal-ekonomik anlamda refah kaybı hızlanmaktadır. *“Doğalgaz fiyatlarında artış yaşanması durumunda, büyük ölçüde iktisadi kalkınma artmaktadır” düşüncesi*, sektörel ikame edilebilirlik ile ilişkili uyum maliyetlerine ve yatırım harcamalarına ilişkin belirsizliklerin etkilerine bağlanabilmektedir. Doğalgaz fiyatlarındaki artışlar, kaynakların enerji yoğun sektörlerden enerji verimli sektörler doğru kaydırılmasına olanak sağlamaktadır. Bu durum, ilgili ayarlama maliyetleri nedeniyle yalnızca kademeli olarak ilerlediğinden, çıktıda kısa vadeli bir düşüş meydana gelmekte ve bu nedenle iktisadi yavaşlamayı yoğunlaştırmaktadır. Öte taraftan, doğalgaz fiyatlarında düşüş yaşanması durumunda, toplam çıktı verimliliğinin genişlemesi, düzeltilmiş maliyetler (Yaşam maliyetindeki bir değişikliğe karşılık gelen ücretlerde yapılan bir ayarlama) tarafından azaltılmaktadır. Bu nedenle, işgücü piyasasındaki düzeltilmiş maliyetleri önemli bir rol oynamaktadır. Teknolojinin ilerlemesi ile birlikte uygun maliyetli alternatif enerji kaynaklarının gelişmesi ve sektörel değişim yaşanması sonucunda, gelişmiş ülkelerde doğalgaz ithalatında düşüş yaşanmaktadır. Politik yapıcılar, bir doğalgaz fiyatı şoku ile karşı karşıya kaldıklarında, para politikası stratejilerine bağlı olarak, ya genişleyici önlemlerle reel etkilere karşı koymaya ya da kısıtlayıcı önlemlerle enflasyonist etkilerle mücadele etmeye çalışabilmektedir. Bu nedenle para politikası, doğalgaz fiyatlarındaki değişikliklerin kısa vadede sahip olduğu etkileri önemli ölçüde belirleyebilmektedir. Doğalgaz fiyatlarında artış yaşanması durumunda, hane halkı tarafından tüketilen akaryakıt veya kalorifer yakıtı gibi rafine edilmiş ürünlerinin fiyatlarına yansımaları durumunda ortaya çıkan ve tüketici fiyat endeksi üzerindeki etkisi hane halkının doğalgaz ve türevlerine yapmış olduğu harcamaların toplam harcama içerisindeki payına bağlı olan *doğrudan etki* ve üretim sürecinde doğalgaz veya türevlerinin girdi olarak kullanıldığı mal ve hizmetlerin fiyat değişimlerine yansıtılmasıyla birlikte ortaya çıkan *dolaylı etki* olmak üzere iki tür etki görülmektedir (Álvarez, vd., 2011). Doğalgaz fiyatında şokların yaşanması sonucunda, gelecekteki doğalgaz fiyatı beklentilerini etkilenen bilmekte ve özellikle doğalgaz fiyatına bağlı olan yatırım projelerinin hesaplamalarında da değişim yaşanabilmektedir. (Baumeister ve Kilian, 2016). Ekonomik uygulayıcılar ve politika yapıcılar arasında, petrol fiyatı şoklarının hem gelişmiş hem de yükselen/gelişmekte olan ekonomilerde enflasyon üzerinde en azından kısmi geçiş etkisi olduğuna genel olarak inanılmaktadır (Mirzaei ve Al-Khouri, 2016). Stuber (2001), Kanada'daki enerji tüketiminin genel ekonomik faaliyet ve enflasyon üzerindeki sürekli değişen etkisini araştırdığı çalışmada, tüketici düzeyinde benzin, akaryakıt ve doğal gaz fiyatlarındaki büyük artışların, Kanada'daki TÜFE enflasyonunun neden olduğunu vurgulamaktadır. Moradkhani vd., (2010), Malezya'da ham petrol, doğal gaz ve kömür, petrol üretimi gibi farklı enerji türlerinin fiyatlarındaki değişimin diğer malların fiyatlarındaki değişim ilişkisini incelemeyi amaçladığı çalışmada, enerji türlerinin fiyatlarında değişim yaşanması durumunda, diğer mal-hizmet fiyatlarının da artış gösterebileceğini belirtmektedir. Öksüzler O. ve İpek E. (2011), yaptıkları VAR analizi sonucunda, petrol fiyatlarından ekonomik büyümeye doğru tek taraflı bir nedensellik ilişkisi yanı sıra petrol fiyatları ile enflasyon arasında herhangi bir nedensellik ilişkisi olmadığını ifade etmekte ve etki-tepki fonksiyonları sonucunda petrol fiyatlarındaki bir birimlik şokun hem ekonomik büyümeyi hem de enflasyon oranını pozitif etkilediğini ifade etmektedir. Behname (2013), 1980-2009 dönemleri arasında, Danimarka, Norveç, İsveç, Birleşik Krallık ve Finlandiya'nın enerji fiyatları ve enflasyon arasındaki ilişkiyi araştırdığı çalışmada, orta vade enerji tüketiminin enflasyonu artırdığını ve bu durumda, uzun dönemde işsizliğin artabileceğini vurgulamaktadır. Raza vd. (2013), 1971-2012 dönemine yönelik olarak gerçekleştirdiği Johansen Eşbütünleşme sonucunda, GSYİH,

İthalat, para arzı (M2), kamu harcamaları, enerji krizi ve çıktı açıklarının enflasyon üzerindeki etkisi pozitif yönde olduğunu belirtmektedir. Iyke ve Odhaimbo (2014), Gana için enerji tüketimi-büyüme bağlantıları araştırdığı ve 1971-2012 dönemi için ARDL yaklaşımı kullandığı çalışmada, enerji tüketiminin enflasyonu tetiklediğini vurgulamaktadır. Iyke (2014), Nijerya için 1971-2012 dönemi için dinamik bir nedensel ilişki kullandığı çalışmada, kısa dönemde enflasyonun enerji tüketimine neden olacağını ifade etmektedir. Rehman (2014), Granger nedensellik ilişkilerini kullanarak küresel finansal krizi takip eden yıllarda beş Asya ülkesi için enerji tüketimi para politikası ile enflasyon arasındaki ilişkiyi incelediği çalışmada, iki Asya ülkesi için petrol tüketimi ile enflasyon arasında güçlü bir etkileşim olduğuna dair kanıtlar elde etmektedir. Josheski vd., (2014), enerji tüketiminin Arnavutluk, Bosna Hersek, Sırbistan ve Makedonya dahil olmak üzere Avrupa'nın 4 Orta, Doğu ve Güney ülkesinin ekonomik kalkınma ve fiyatları üzerindeki etkisini eşbütünleşme ve hata düzeltme modelleme teknikleri kullanarak incelediği çalışmada, orta vadede bölge için enerji tüketimi-enflasyon ilişkilerinde ters bir eğilim olduğunu göstermektedir. Zhang (2015), dünya genelinde enerji maliyetini artırmanın temel nedenlerinden birinin enerji güvenliği olduğunu belirtmektedir. Eregha ve Mesagan (2017), enerji tüketimi ile enflasyon arasında ters bir ilişki olduğunu ifade etmektedir. Eftekhari M. S. ve Kiaee (2016), 2008-2012 dönemine yönelik gerçekleştirdiği çalışmada, para arzı, GSMİH, petrol fiyatları, gelir seviyesindeki artışların enflasyon oranını artırdığını belirtmektedir. Parker (2017), küresel enflasyonun diğer birçok faktörün yanı sıra enerji fiyatları tarafından nasıl tetiklendiğini amaçladığı çalışmada, enerji fiyatlarının artış yaşanması durumunda, küresel anlamda gıda fiyatlarında da artış yaşanacağını vurgulamaktadır. İbrahiem (2018), 1980-2011 yılları arasında enerji tüketiminin Mısır ekonomisi için nüfus, kentleşme ve büyüme üzerindeki etkisini araştırdığı çalışmada, VAR ayrıştırma tekniklerini uygulayarak, ulaşımda enerji tüketiminin uzun dönemde kentleşme üzerinde ciddi etkileri olacağını ve bu nedenle ekonomi için büyüme seçenekleri olarak enerji tasarrufu politikaları uygulanması gerektiğini önermektedir.

Özetle, doğalgaz ve türevlerinin tüketimi, enflasyon ve iktisadi kalkınma ilişkisini analiz etmek amacıyla çeşitli ülkeler için, farklı modeller oluşturularak, farklı yöntemler kullanılarak ve farklı veri aralıkları seçilerek yapılmış birçok çalışma bulunmaktadır. Çalışmanın bundan sonraki kısmında, Avrupa Birliği ülkeleri için doğalgaz, enflasyon ve çıktı büyüklüğünün asimetrik ilişkisini belirlemek amacıyla kullanılacak olan ekonometrik yöntemin metodolojine değinilmektedir.

3. EKONOMETRİK YÖNTEM

Asimetrik modellemenin birlikte yaşattığı uzun dönemli ilişkiler bağlamında artan popüleritesi, rejim-değişim modellerinin çoğalmasına yol açmaktadır. Genelde uzun dönemli ilişkilerde asimetri veya asimetrik ilişki ortaya çıkabilmektedir. Prensip olarak, uzun vadeli ilişkide asimetrik olanları ve hata düzeltme mekanizmasını tutarlı bir şekilde bir araya getirebilen tek bir model elde etmek mümkün olmaktadır. Çalışma kapsamında, Avrupa Birliği Ülkelerinde doğalgaz tüketimi, enflasyon ve çıktı büyüklüğünün asimetrik ilişkisini belirlemek amacıyla kullanılan Doğrusal Olmayan Otoregresif Dağıtılmış Gecikme (NARDL) modeli, dikkate alınan zaman serisinin $I(1)$ olmasını gerektiren hata düzeltme modellerinin aksine, $I(1)$ ve $I(0)$ serilerinin birlikte modellenmesine, değişkenler arasında oluşması muhtemel eşbütünleşme ilişkisinin modellenmesine, doğrusal ve doğrusal olmayan eşbütünleşme ilişkilerinin gösterilmesine ve bağımsız değişkenlerin bağımlı değişkenler üzerinde dönemsel (kısa-uzun) etkilerinin belirlenmesine olanak sağlamaktadır. (Shin vd., 2014). Ayrıca NARDL modellerinde, diğer eşbütünleşme modellerinin (Vektör Hata Düzeltme gibi) aksine, denkleme daha fazla değişken eklenmesi durumunda parametre sayısı artmamaktadır. Değişkenlerin ikinci farkında durağan hale gelmesi ya da bir başka deyişle $I(2)$ olmaması yeterli olmaktadır. NARDL yönteminin bir diğer avantajı ise, NARDL yönteminin temelini oluşturan ARDL yönteminin küçük örneklem özelliklerinin geleneksel ekonometrik modellere kıyasla çok daha güçlü olması olarak bilinmektedir (Romilly, Song ve Liu., 2001; Turner, 2006). NARDL yaklaşımının ampirik tahmin süreci, modele bulunan değişkenlerinin birim kök testinin yapılarak ikinci dereceden entegre $I(2)$ olmadığına gösterilmesi, modelde yer alan değişkenler arasında uzun dönemli ilişkinin varlığının eşbütünleşme testi ile sınanması (Bu aşamada Pesaran vd., (2001) tarafından geliştirilen sınır testi yaklaşımı kullanılmaktadır), dönemsel (kısa-uzun) asimetrik etkilerin varlığının Wald testi ile sınanarak model spesifikasyonunun belirlenmesi ve belirlenen modelin tahmin edilerek pozitif-negatif bileşenlerdeki bir birimlik şokların kümülatif dinamik etkilerini gösteren dinamik çarpanların türetilmesi olmak üzere dört adımda özetlenmektedir. Doğrusal ARDL modeli;

$$\Delta y_t = \alpha + \rho_y y_{t-1} + \rho_x x_{t-1} + \sum_{i=1}^r \theta_i \Delta y_{t-i} + \sum_{i=0}^s \pi_i \Delta y_{t-i} + \varepsilon_t$$

şeklinde ifade edilmektedir. Modelde, y_t , t anındaki çıktı büyüklüğünü, x_t , açıklayıcı değişkenler vektörünü, Δ , değişimi ve ε_t beyaz gürültülü hata terimini göstermektedir. Doğrusal ARDL modeli, geleneksel eşbütünleşme modellerine karşı çeşitli avantajlara sahip olmasına rağmen, sistem değişkenleri arasındaki ilişkilerin doğrusal olmaması ve/veya asimetrik bir ilişki olması durumunda basit ve yetersiz kalmaktadır. Bu çerçevede, dönemsel olarak (kısa-uzun) Avrupa Birliği Ülkelerinde doğalgaz tüketimi, enflasyonun çıktı büyüklüğü üzerindeki asimetrik etkisinin hesaplanmak istenmesi durumunda Doğrusal olmayan ARDL (NARDL) daha kapsamlı sonuçlar vermektedir. Doğrusal olmayan ARDL modeli, dışsal değişken $\Delta x_t'$ yi artış ve azalmaları belirleyebilmek için pozitif Δx_t^+ ve negatif Δx_t^- kısmi toplamlarına ayırmakta ve

$$x_t^+ = \sum_{j=1}^t \Delta x_j^+ = \sum_{j=1}^t \max(\Delta x_j, 0), x_t^- = \sum_{j=1}^t \Delta x_j^- = \sum_{j=1}^t \min(\Delta x_j, 0)$$

şeklinde belirtilmektedir. Eşitlik 1.'de dönemsel (kısa-uzun) olarak asimetrik etkilerin yazılması durumunda model,

$$\Delta y_t = \alpha + \rho_y y_{t-1} + \rho_x^+ x_{t-1}^+ + \rho_x^- x_{t-1}^- + \sum_{i=1}^r \theta_i \Delta y_{t-i} + \sum_{i=0}^s (\pi_i^+ \Delta x_{t-i}^+ + \pi_i^- \Delta x_{t-i}^-) + \varepsilon_t$$

şekline dönüşmektedir. Eşitlik 3.'te yer alan (+) ve (-) üst simgeleri, denklemlerdeki pozitif/negatif kısmi toplamları göstermektedir. Uzun dönem asimetrik ilişki, denklemde yer alan ρ^+ ve ρ^- ifadeleriyle belirlenmekteyken, kısa dönem asimetrik ilişki denklemde yer alan π^+ ve π^- ifadeleriyle belirlenmektedir. Uzun dönemli asimetrik ilişki, $H_0 = \rho^+ = \rho^-$ temel hipoteziyle Wald testi kullanılarak test edilmekteyken, kısa dönemli asimetrik ilişki, $i = 0, 1, \dots, s$. olmak üzere, $H_0 = \pi_i^+ = \pi_i^-$ temel hipotezinde Wald testi ile test edilmektedir. Eşitlik 3.'te yer alan doğrusal olmayan ARDL (NARDL) modeli, uzun/kısa dönemde asimetri mevcut olduğunda veya yalnızca açıklayıcı değişkenlerin bir alt kümesi, bağımlı değişken üzerinde asimetrik bir etki uyguladığında verimli olmaktadır. Bu nedenle, uzun ve kısa dönemde uygun simetri kısıtlamaları koyulması ve değişkenler üzerinde en uygun NARDL modelini tahmin edilmesi için, NARDL modelini tahmin etmeden önce, bağımlı değişkeni asimetrik bir şekilde etkileyen açıklayıcı değişkenleri doğru bir şekilde belirlenmesi önem arz etmektedir (Jeribi vd., 2021).

4. BULGULAR

Avrupa Birliği ülkeleri, dünya genelinde enerji tüketiminin en fazla olduğu coğrafyalardan biri olmasının yanı sıra fosil enerji kaynakları açısından oldukça fakir bir bölgede yer almaktadır. Bu çerçevede, yakın dönemde yaşanan politik/hukuki kısıtlamalar ve doğalgazın tedariki konusunda oluşan sorunlar nedeniyle Avrupa Birliği ülkelerinin ithal enerji kaynaklarına olan bağımlılıkları artarken, bununla birlikte hızlı fiyat artışlarının etkisi çıktı büyüklüğünü olumsuz yönde etkilenmektedir. Çalışma kapsamında, Avrupa Birliği ülkelerinde 1990-2020 dönemleri arasında doğal gaz tüketimi, enflasyon ve çıktı büyüklüğü arasındaki asimetrik ilişkinin belirlenmesi amacıyla oluşturulan modelin veri seti, dünya bankası ve çalışma grubunda bulunan ilgili ülkelerin açık istatistik portallarından elde edilmektedir. Tablo 1.'de çalışma kapsamında kullanılan değişkenlerin tanımlamaları ve özet istatistikleri yer almaktadır.

Tablo 4. Değişkenlere İlişkin Tanımlayıcı İstatistikler

GDP	Ülkelerin Gayri Safi Yurt içi Hasıla cinsinden Büyüme Yüzdesi				
GAS	Ülkelerin Doğalgaz Tüketimi (m ³ cinsinden)				
ENF	Ülkelerin Enflasyon Oranı				
	Gözlem	Ortalama	Standart Sapma	Minimum Değer	Maksimum Değer
GDP	31	1.52261	2.104907	-5.955793	3.899841
GAS	31	199446.7	15211.35	166688.3	222785.2
ENF	31	2.690673	1.679494	-0.061644	6.217375

Tablo 1. incelendiğinde, değişkenlere ilişkin gözlem sayısının 31 olduğu, değişkenlerin ortalamasının 1.52 ile 199446.7 arasında, değişkenlerin standart sapmasının 1.679494 ile 15211.35 arasında, değişkenlerin minimum değerlerinin -5.955793 ile 166688.3 arasında ve maksimum değerlerinin 3.899841 ile 222785.2 arasında değişim gösterdiği görülmektedir. Tablo 2.'de çalışma kapsamında kullanılan değişkenler öncelikli olarak durağanlık derecelerinin belirlenebilmesi amacıyla yapılan Genişletilmiş Dickey-Fuller (ADF) ve Phillips-Perron (PP) birim kök test sonuçları yer almaktadır.

Tablo 5. Durağanlık Testi Sonuçları

Değişkenler	ADF Test İstatistikleri		Phillips-Perron Test İstatistikleri		Sonuç
	Düzye Değerleri	Birinci Fark Değerleri	Düzye Değerleri	Birinci Fark Değerleri	
GDP	-3.218758**	-2.633348**	-3.020658**	-2.633348**	I(0)
	$t_{\%1} = -3.670170$	$t_{\%1} = -2.644302$	$t_{\%1} = -3.670170$	$t_{\%1} = -2.644302$	
	$t_{\%5} = -2.963972$	$t_{\%5} = -1.952473$	$t_{\%5} = -2.963972$	$t_{\%5} = -1.952473$	
	$t_{\%10} = -2.621007$	$t_{\%10} = -1.610211$	$t_{\%10} = -2.621007$	$t_{\%10} = -1.610211$	
ENF	-2.177919	-2.016315**	-1.990448	-3.272174***	I(1)
	$t_{\%1} = -3.670170$	$t_{\%1} = -2.644302$	$t_{\%1} = -3.670170$	$t_{\%1} = -4.296729$	
	$t_{\%5} = -2.963972$	$t_{\%5} = -1.952473$	$t_{\%5} = -2.963972$	$t_{\%5} = -3.568379$	
	$t_{\%10} = -2.621007$	$t_{\%10} = -1.610211$	$t_{\%10} = -2.621007$	$t_{\%10} = -3.218382$	
GAS	-2.302392	-7.497196*	-2.218402	-7.480305*	I(1)
	$t_{\%1} = -3.670170$	$t_{\%1} = -3.679322$	$t_{\%1} = -3.670170$	$t_{\%1} = -3.679322$	
	$t_{\%5} = -2.963972$	$t_{\%5} = -2.967767$	$t_{\%5} = -2.963972$	$t_{\%5} = -2.967767$	
	$t_{\%10} = -2.621007$	$t_{\%10} = -2.622989$	$t_{\%10} = -2.621007$	$t_{\%10} = -2.622989$	

Tablo 2. incelendiğinde GDP değişkeninin düzeyde (**I(0)**) durağan olduğu görülmektedirken, ENF ve GAS değişkenleri düzeyde birim kök içermeleri nedeniyle birinci farkları alındıktan sonra (**I(1)**) durağanlaştığı görülmektedir. Çalışma kapsamında kullanılan NARDL yaklaşımı, değişkenler arasındaki durağanlık derecelerini dikkate almadan farklı bütünleşme derecelerine sahip değişkenler arasında (**I(2)** haricinde) eşbütünleşme ilişkisinin varlığının incelenmesine olanak vermektedir. Bu çerçevede, ilgili değişkenler arasında NARDL yaklaşımı uygulanabilmektedir. Tablo 3.'te çalışma kapsamında oluşturulan modelin NARDL kısa ve uzun dönem sonuçları yer almaktadır.

Tablo 6. Kısa ve Uzun Dönem NARDL Sonuçları

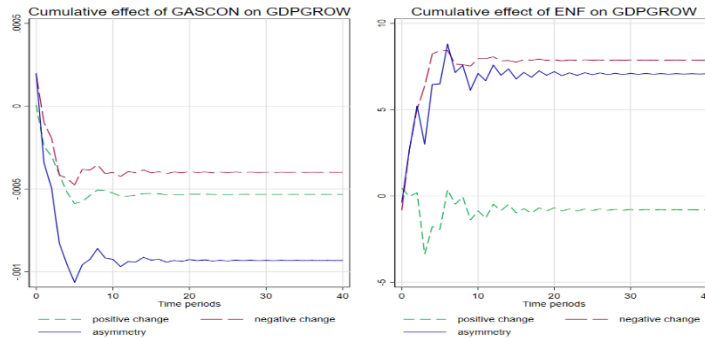
Bağımlı Değişken GDP_t	Kısa Dönem		Uzun Dönem
Değişkenler	Katsayı		
Sabit Terim	2.138564** (2.166590)		
GDP_{t-1}	-0.335685* (-1.434481)	-0.2141315* (-1.152641)	
ENF^+	-1.062486*** (-1.696933)	-1.062486*** (-1.696933)	-0.795462* (-1.773469)
ENF^-	2.466706* (3.370719)	2.466706* (3.370719)	1.846773* (4.123410)
GAS^+	0.000286* (4.313473)	0.000286* (4.313473)	0.000214* (4.175741)
GAS^-	-0.000214** (-3.050590)	-0.000214* (-3.050590)	-0.00016* (-3.485777)
ECM_{-1}	-0.405685* (-3.707775)		
F sınır Testi			
F_{stat}	9.044244		
Kritik Değerler			F_{stat}
%10	4.06	ENF	
%5	4.57	$Wald_{LR}$	9.105460*
%1	5.72	$Wald_{SR}$	4.565
R^2	0.532	GAS	
		$Wald_{LR}$	5.025**
		$Wald_{SR}$	4.565
Breusch-Pagan Testi	7.201*	Ramsey-Reset Testi (F)	3.069**
Jarque-Bera Testi	19.72*	Portmanteau testi	9.19**

*, ** ve *** işaretleri sırasıyla %1, %5 ve %10 düzeyinde anlamlılığı göstermektedir. Ek olarak parantez içinde yer alan ifadeler de değişkenlere ilişkin t istatistik değerlerini ifade etmektedir. En uygun NARDL modelini tespit edebilmek için bağımlı ve bağımsız değişkenler için maksimum 8 gecikme belirlenmiş ve genelde özele yaklaşımı benimsenerek anlamsız gecikmeler modelden çıkartılmıştır.

Avrupa Birliği ülkelerindeki doğalgaz tüketimi ve enflasyonun çıktı büyüklüğüne olan etkisini belirlemek amacıyla oluşturulan modelin genel anlamlılığını ifade eden R^2 yaklaşık olarak %53 olarak belirlenmektedir. Modele ait diagnostik testler incelendiğinde modelde, otokorelasyon olmaması, heteroskedastisite (değişen varyans) olmaması ve normallik varsayımlarının sağlanması ve model kurma hatasının olmaması, sırasıyla Portmanteau testi, Breusch-Pagan Testi, Jarque-Bera Testi ve Ramsey-Reset testinin istatistiksel olarak anlamlı bulunması nedeniyle sağlanmakta ve oluşturulan modelin sınır ve asimetrik testlerinin gerçekleştirilebilmesi için uygun olduğu sonucuna ulaşılmaktadır. NARDL modelinden elde edilen F sınır Testi değerinin (9.044244) istatistiksel olarak anlamlı olması ve alt-üst kritik değerlerden büyük olması nedeniyle değişkenler arasında asimetrik eşbütünleşme ilişkisinin varlığı tespit edilmektedir. Enflasyon ve çıktı büyüklüğü arasındaki kısa dönem katsayıları incelendiğinde, enflasyonun istatistiksel olarak anlamlı ve negatif çıkması nedeniyle enflasyon ile iktisadi kalkınma arasında ters yönlü bir ilişki bulunmaktadır. Ayrıca enflasyon ile iktisadi kalkınma arasındaki uzun dönem ilişki, uzun dönemde de istatistiksel olarak anlamlı ve negatif çıkması nedeniyle, ters yönlülüğünü korumaktadır. Öte taraftan, doğalgaz tüketimi ile iktisadi kalkınma arasındaki hem uzun dönemde hem de kısa dönem sonuçları istatistiksel olarak anlamlı çıkmakta ve pozitif yönlü bir ilişki belirlenmektedir. $Wald_{LR}$ ve $Wald_{SR}$ sırasıyla değişkenlerle ilgili uzun dönem ve kısa dönem ilişkin simetriyi gösteren Wald istatistiğini göstermektedir. Bu çerçevede, enflasyon ile iktisadi kalkınma ve doğalgaz tüketimi ile iktisadi kalkınma arasında kısa dönemde simetrik bir ilişki (açıklayıcı değişkenlerin gecikmelerinden gelen pozitif katsayılarla negatif katsayıların birbirine eşit olması durumu) bulunmaktayken, uzun dönemde asimetrik bir ilişki olduğu tespit edilmektedir. Bu durum, doğalgaz tüketim ve enflasyonun iktisadi kalkınma üzerinde uzun dönemde asimetrik bir ilişki göstermesi nedeniyle, açıklayıcı değişkenlerin (doğalgaz tüketimi ve enflasyon) gecikmelerinden gelen pozitif katsayılarla negatif katsayıların birbirine eşit olmadığını göstermektedir. Özetle, uzun dönemde açıklayıcı değişkenlerdeki artış veya azalışların, iktisadi kalkınma üzerinde farklı büyüklükte etkiye sahip olduğu anlaşılmaktadır. Kısa dönem hata düzeltme mekanizmasını gösteren gecikmeli hata teriminin (ECM_{-1}) katsayısının 0 ile -1 arasında ve istatistiksel olarak anlamlı olduğu görülmektedir. Bu nedenle oluşturulan modelde hata düzeltme mekanizmasının çalıştığı tespit edilmekte ve kısa dönemde meydana gelen dengesizlikler ortalama olarak 2,5 yıl içinde düzelerek uzun dönem dengesine ulaşmaktadır.

Bağımsız değişkenlerin (ENF ve GAS) bağımlı değişken (GDPGROW) üzerine kümülatif etkileri grafik olarak Şekil 2.'de gösterilmektedir. Grafiklerde yer alan mavi çizgi (düz çizgi) asimetrik etkileri göstermekte ve durağan(stabil) hale geldiğinde bağımsız değişkenin bağımlı değişken üzerindeki asimetrik etki sona ermektedir. Ayrıca, bu grafikler bağımsız değişkenden bağımlı değişkene doğru geçişkenliği de göstermektedir.

Şekil 2. Bağımsız değişkenlerin bağımlı değişken üzerindeki kümülatif etki grafikleri



İlgili şekil incelendiğinde, doğalgaz tüketim yaklaşık on yedi (17) dönem sonra asimetrik etkisi sona ererek durağanlaşmaktayken, enflasyon değişkeni yaklaşık her iki bağımsız değişkenin de yaklaşık yirmi beş (25) dönem sonra asimetrik etkisi sona ererek durağanlaşmaktadır. Bu çerçevede, ilk on yedi (17) dönemde doğalgaz tüketimindeki artışlar, azalmalara göre doğalgaz tüketimi çıktı büyüklüğünü daha fazla artırmaktadır. Öte taraftan, enflasyon düzeyindeki, ilk yirmi beş (25) dönemdeki azalmalar, artışlara göre, çıktı büyüklüğünü kalkınmayı daha fazla azaltmaktadır. İlgili grafiklerden elde edilen sonuçlar ile NARDL sonuçları tutarlılık göstermektedir. Avrupa Birliği ülkelerinin doğalgaz tüketimi ile enflasyonun çıktı büyüklüğü ile asimetrik ilişkinin belirlenmesinde elde edilen hata düzeltme mekanizması ile birlikte kısa ve uzun dönem nedensellikler belirlenebilmektedir. Bu çerçevede yapılan kısa dönem nedensellik testi olan ve farklı durağanlık seviyelerinde nedensellik testi yapılmasına olanak sağlayan Toda-Yamamoto nedensellik testi sonuçları Tablo 4.'te yer almaktadır.

Tablo 7. Toda-Yamamoto nedensellik testi sonuçları

Bağımlı Değişken	Bağımsız Değişken		
	GDP	GAS	ENF
GDP		6.998	59.001
GAS	29.119*		33.749
ENF	52.92*	16.786*	

*, işareti %1 düzeyinde anlamlılığı göstermektedir.

Tablo 4. incelediğinde, çıktı büyüklüğünden doğalgaz tüketimine doğru nedensellik bulunmazken, tersi yönde (doğalgaz tüketiminden çıktı büyüklüğüne doğru) nedensellik ilişkisi bulunmaktadır. Öte taraftan, enflasyondan çıktı büyüklüğüne ve doğalgaz tüketimine doğru tek yönlü nedensellik bulunmaktadır.

5. SONUÇ

Ekonomik kalkınmanın başlangıç dönemlerinde yüksek insan gücünün bulunduğu faaliyetler ön plandayken, endüstrileşme sürecinin başlamasıyla birlikte makineleşme artış göstermekte ve enerji kaynakları ön plana çıkmaktadır. Enerji kaynaklarının kullanımındaki artış nedeniyle toplam çıktı üretimi artmakta ve endüstrileşme süreci hızlanarak devam etmektedir. Nüfus genişlemesi sebebiyle artan sermaye genişliği ve kaynakların kullanımı konusunda sağlanması düşünülen eşitlik yaklaşımı nedeniyle enerji, ülkelerin geniş kapsamlı üretim yapılabilmesinde kilit bir rol oynayarak, sosyal-iktisadi kalkınmanın en temel etmenlerinden birisini oluşturmaktadır. Bu nedenle kalkınmışlığı sağlamış ve sağlamakta olan ekonomiler enerji tüketimine/üretimine önem vermektedir. Avrupa Birliği'nin enerji kaynakları açısından erişim ve ham madde sorunu bulunan bir bölgede bulunması ve düzensiz göç sorunsalı sebebiyle heterojen bir nüfus artışının yaşanması nedeniyle ekonomilerin enerji talebinin artması beklenmektedir.

Avrupa Birliği ülkelerinde son dönemlerde yaşanan doğalgaz tedarik sorunsalı ve küresel çapta görülen enflasyon sonucunda iktisadi kalkınma ile ilgili sorunsallıklar arasındaki dönemsel (kısa-uzun) açıdan asimetrik ilişkinin belirlenmesi önem arz etmektedir. Çalışma kapsamında, Avrupa Birliği ülkeleri için enflasyon, ve doğalgaz tüketiminin çıktı büyüklüğü üzerindeki etkisinin, bağımsız değişken(ler)deki şokların pozitif ve negatif şoklar olarak ayrılmasına ve bu şokların bağımlı değişken üzerinde etkilerinin incelenmesine olanak veren asimetrik sınır testi yaklaşımı (NARDL) ile 1990-2020 dönemler arası ele alınarak incelenmektedir. Dönemsel (kısa-uzun) açıdan farklılık göstermeksizin, doğalgaz tüketiminde meydana gelen artışların iktisadi kalkınma üzerindeki etkisi, doğalgaz tüketiminde meydana gelen azalışın etkisinden daha büyük oranda gerçekleşmektedir. Bu durum, Avrupa Birliği ülkelerinde doğalgaz tüketimini, çıktı büyüklüğü ile pozitif yönlü bir ilişki göstermesinin yanı sıra uzun dönemdeki katsayıların kısa dönemdeki katsayılardan küçük olması nedeniyle doğalgaz tedarik sorunsalının Avrupa ekonomilerin kalkınmasına etkisinin olabileceğini de göstermektedir. Ayrıca ithal edilen doğalgazın büyük bir çoğunluğunun sanayi üretiminde büyük bir girdi olarak kullanılması nedeniyle Avrupa Birliği ülkelerinin enflasyona bağlı olarak iktisadi daralmanın da yaşaması öngörülmektedir. Bu durum, sonuçlara göre enflasyon ile iktisadi kalkınma ilişkinin negatif olması ve uzun dönemde, enflasyon katsayılarının doğalgaz tüketimi katsayılarından daha büyük olmasıyla birlikte görülmektedir. Öte taraftan, Toda-Yamamoto nedensellik testi sonuçları incelendiğinde, Avrupa Birliği ülkelerinde büyüme hipotezinin (enerji tüketiminden iktisadi kalkınmaya doğru nedensel ilişkinin bulunma durumu) bulunduğu görülmektedir. Bu durum, Avrupa ülkelerinde enerjiye bağımlılığının üst düzeyde olduğunu ifade etmekte ve ayrıca, karar alıcıların uygulamış olduğu enerji politikalarının iktisadi kalkınmayı olumsuz yönde etkilediği anlamına gelmektedir. Enflasyon ile doğalgaz tüketimi arasındaki nedensellik ilişkisi incelendiğinde, enflasyondan doğalgaz tüketimine doğru tek yönlü bir nedensellik ilişkisi elde edilmektedir. Bu durum, Avrupa birliği ülkelerinde enerji temin fiyatlarında artış yaşanması sonucunda üretici maliyetleri artacağını ve bu nedenle ülkenin uluslararası rekabet gücünü zayıflayarak çıktı büyüklüğünün azalacağını ifade etmektedir. Diğer taraftan, çıktı büyüklüğü ile enflasyon arasındaki tek yönlü nedensellik ilişkisi (enflasyondan çıktı büyüklüğüne doğru), Avrupa Birliği ülkelerinde fiyatlar düzeyindeki artış yaşanması sonucunda çıktı büyüklüğü azalması ve ticaret dengesinin bozulmasını ifade etmektedir.

Özetle, elde edilen kısa dönem ilişkilerin uzun dönem ilişkilerle farklılık gösterdiği görülmektedir. Avrupa Birliği ülkelerinin doğalgaz tüketiminde verimli kullanılabilirliğin azalması sonucu maliyetlerin yükselmesi nedeniyle enflasyon sorunsalı ortaya çıkabilmektedir. Bu nedenle politika yapıcılarının, enflasyon hedeflemesi rejiminde enflasyon, çıktı büyüklüğü ve iktisadi kalkınma ilişkileri göz önünde bulundurarak doğalgazın tedarik edilmesinde yaşanan sorunsallıklara yönelik istikrar politikalarında yenilenebilir enerji kaynaklarının kullanılabilirliğini dikkate alması gerekmektedir.

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Sürdürülebilir Kalkınma ve Eko-İnovasyon: Dinamik Mekânsal Etkileşim

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Özet: Ekonomi ve insan faaliyetlerin artışının yanı sıra nüfus artışı, teknolojik değişim, kaynak donanımları, kurumsal yapılar, ulaştırma modelleri vb. gibi birçok faktör tarafından yenilenemeyen kaynakların tüketilmesi, küresel ısınmaya katkıda bulunan gazların salınımını artırmaktadır. Bu durum, çevre kirliliği ve iklim değişikliği sonucunda yaşanan eko-sistemik bozuklukların, sosyo-ekonomik ve kültürel yapı üstündeki olumsuz etkisinin artmasına neden olmaktadır. Oluşan çevresel sorunların minimize edilmesine olumlu katkısı bulunan eko-inovasyon kavramı, ekolojik etkileri ve kaynak yoğunluğunu azaltmakta ve doğal kaynakların kullanımı açısından ekonomik aktivitelerin verimliliğini ifade etmede önemli bir rol oynamaktadır. Sınır ilişkisi bulunan ülkelerin ortak çevresel politika göstermesi veya gösterdikleri çevresel politik yaklaşımlarla birbirlerini etkilemesi nedeniyle mekânsal ilişkilerin gözetilerek eko-inovasyonun belirlenmesi sürdürülebilirlik açısından önem arz etmektedir. Bu çalışmada, ülkelerin eko-inovasyon kapasitelerinin belirlenmesinin yanı sıra makroekonomik değişkenlerle birlikte dönemsel (kısa-uzun) mekânsal etkileşiminin de ortaya çıkarılması amaçlanmaktadır. Çalışma kapsamında, 2010-2018 dönemleri arası baz alınarak sürdürülebilir kalkınma çerçevesinde Türkiye ve seçilmiş Avrupa ülkelerinde eko-inovasyon kapasitelerinin dinamik mekânsal ilişkilerinin uzun ve kısa vadeli doğrudan-dolaylı etkilerini ortaya çıkarılması amaçlanmaktadır. Türkiye ve Avrupa Bölgesindeki ülkelerin mekânsal ilişkileri gözetilerek eko-inovasyon kapasitelerinin belirlenmesi amacıyla tek model kurgulanmaktadır. Çalışma kapsamında uygulanan analiz sonucunda, ülkelerin eko-inovasyon ve göstergeleri arasında uzun ve kısa dönem dolaylı-doğrudan olarak anlamlı bir mekânsal ilişki elde edilmektedir. Bu kapsamda, çalışma grubunda bulunan ülkelerin mekânsal ilişkilerini gözeterek çevre dostu teknolojilerin kullanılabilirlik seviyelerini artırması, çevresel inovasyon uygulamalarını artırması ve eko-inovasyon politikalarının kalkınma politikalarıyla birlikte ele alınması gerekmektedir.

Anahtar Kelimeler: Sürdürülebilir Kalkınma, Çevresel Sürdürülebilirlik, Eko-İnovasyon, Dinamik Mekansal Panel Veri

Abstract: In addition to the increase in economic and human activities, consumption of non-renewable resources by factors such as population growth, technological change, resource equipment, institutional structures, transportation models increase the emission of gases that contribute to global warming. Eco-systemic degradation as a result of environmental pollution and climate change causes an increase in the negative impact on the socio-economic and cultural structure. The concept of eco-innovation, which contributes positively to the minimization of environmental problems, it reduce ecological impacts and resource intensity and it plays an important role in expressing the efficiency of economic activities in terms of the use of natural resources. It is important for sustainability to determine eco-innovation by considering spatial relations, since countries with border relations show a common environmental policy or influence each other with their environmental policy approaches. In this study aims, in addition to determining the eco-innovation capacities of countries, revealing the periodic (short-long) spatial interaction with macroeconomic variables. This paper aims to reveal the long and short term direct-indirect effects of dynamic spatial relations of eco-innovation capacity in Turkey and European regions within the framework of sustainable development, between 2010-2018 periods. One models, considering the spatial relations of Turkey and European Region countries are designed to determine eco-innovation capacity. As a result of the analysis applied within the scope of the study, a meaningful spatial relationship is obtained that long- and short-term indirect-direct relationship between countries' eco-innovation and indicators. In this context, the countries in the working group should increase the usability levels of environmentally friendly technologies by considering their spatial relations, increase their environmental innovation practices, and eco-innovation policies should be considered together with their development policies.

Key Words: Sustainable Development, Environmental Sustainability, Eco-Innovation, Dynamic Spatial Panel Data

1. GİRİŞ

Küreselleşme ile birlikte yapay çevre alanları artarken, doğal çevre alanları azalmasının yanı sıra endüstriyellemenin küreselleşmesiyle birlikte çevresel sorunlar da aratarak devam etmektedir. Kapitalizmin yirminci yüzyılın ikinci yarısından sonra tüm dünyaya hızla yayılması sonucu ekonomik/ticari ilişkiler ülke sınırlarını aşarak, sanayi üretiminin yaygınlaşması, teknolojilerin yeni kirleticiler ortaya çıkarması, ulaşım imkanlarının gelişmesi, kentleşmenin artması, kaynak kullanımının hızlanması, nüfus artışı, yoksulluk vb. gibi çevresel sorunlara neden olan gelişmeler, belirli bölgelerde sınırlı kalan çevresel bozulmayı küresel boyutlara taşımaktadır. Çevresel sorunların oluşumu-boyutu, kirleticilerin boyutu ve sürekliliğine, doğanın kirleticileri özümleme kapasitesine ve kirleticilere karşı gösterilen farkındalığa bağlı olarak artabilmektedir. Küreselleşme

ile birlikte teknolojik ve endüstriyel gelişmeler sonucunda kolay ulaşılabilir pazar yapılarının ortaya çıkması rekabet sürecinde artış yaratırken; doğal kaynaklar ve çevresel değerlerde azalma yaratmaktadır. İnsani-sınai faaliyetlerinin çevre üzerindeki negatif etkisinin geleceğe dönük kaygılara sebep olması nedeniyle Brundtland (1987) raporunda, çevresel kaygıları dikkate alan, ekolojik denge ile ekonomik büyümeyi bir bütün olarak gören, kıt kaynakları etkin bir şekilde kullanımını sağlayan ve bugünkü ihtiyaçlar karşılanırken gelecekte ortaya çıkacak ihtiyaçların da karşılanabilmesini ifade eden sürdürülebilir kalkınma kavramı ortaya konmaktadır. Sürdürülebilir kalkınma, üretim süreçlerinin yanı sıra tüketim modelleri ve tüketicilerin farkındalığını artırmaya yönelik politika uygulamalarını da kapsamakta ve insan-ekonomi-çevre olmak üzere birbirini destekleyen üç boyuttan oluşmaktadır.

Sanayileşme ile birlikte sektörel üretkenlik artışı sağlanmaya çalışılırken, üretim girdisinde kullanılan hammaddelerin yüksek düzeyde kullanılması sonucunda kıt kaynak tüketimi hızla artmaktadır. Hızla artan nüfus, ekonomilerin rekabet üstünlüğü yarışı ve karlı büyüme kapsamında maliyetlerinin düşürülmesi çevresel sorunların artmasına neden olarak çevresel tahribatta artış yaşanmasına olanak sağlamaktadır. Maliyetlerini minimize ederken varlıklarını ve karını maksimize eden ekonomiler, kısa vadede fayda kazanımı sağlamak için zaman perspektifine dayalı olarak uzun vadede etkisini gösteren çevresel süreçlerle çelişki yaşamaktadır. Bu kapsamda, ekonomilerin çevre üzerindeki olumsuz etkilerinin en aza indirilmesini hedefleyen ve enerji dahil olmak üzere doğal kaynakların daha verimli şekilde kullanılmasını amaçlayan eko-inovasyon kavramı ön plana çıkmaktadır. Sürdürülebilir kalkınma olgusu çerçevesinde hem teknoloji hem de tüketim modellerinde eko-inovasyon kilit ve stratejik bir rol oynamaktadır. Ekonomik büyümeye odaklanma eğilimiyle ortaya çıkan olumsuz yan etkilerin (kaynak azalması/tükenmesi, çevre kirliliği ve sosyal adaletsizlik) giderilmesinde eko-inovasyonun gelişiminin nicel olarak ortaya çıkarılması ve sürdürülebilir kalkınma planlarının içine eko-inovasyon stratejilerin dahil edilmesi gerekmektedir. Ekonomilerin eko-inovasyon kapasitesiyle makroekonomik değişkenler arasındaki ilişkilerin varlığı bölgelere/ülkelere, kirlenici türlerine ve komşuluk ilişkilerine göre farklılık göstermektedir. Bununla birlikte, kullanılan farklı modelleme tekniklerine ve çevresel göstergelere göre de sonuçlarda çeşitlilik gözlemlenmektedir. Çalışma çerçevesinde, sürdürülebilir kalkınma olgusu çerçevesinde Türkiye ve seçili Avrupa ekonomilerinin eko-inovasyon kapasiteleri belirlenerek ilgili makroekonomik değişkenler ile arasındaki uzun ve kısa dönem dinamik mekânsal ilişkilerin ortaya çıkarılması amaçlanmaktadır. Çalışma kapsamında, birinci bölümde sürdürülebilir kalkınma göstergeleriyle eko-inovasyonun ilişkisine değinildikten sonra ikinci bölümde ele alınan ekonometrik modelin teorik yapısı hakkında bilgi verilmekte ve son bölümde sürdürülebilir kalkınma kapsamında eko-inovasyon uygulanabilirliği üzerindeki dinamik mekânsal etkiler belirlenerek politika önerilerine değinilmektedir.

2. LİTERATÜR TARAMASI

Sanayileşme ile birlikte artan enerji ihtiyacını karşılamak üzere kullanılan yenilenemeyen enerji kaynakları, modern kentleşme, nüfus artışı vb. gibi etkenler küresel ısınma, iklim değişiklikleri, hava-su-toprak kirliliği, atık ve çevresel tahribat gibi sorunlara ve biyolojik çeşitlilikte azalmaya neden olmaktadır. Bu çerçevede, yoksulluk-eşitsizlik sorunlarıyla birlikte çevresel tahribatı da dikkate alan sürdürülebilir kalkınma kavramı refah/yaşam düzeyinde azalma olmaksızın büyümedeki kısıt olarak ifade edilmektedir (Pezzey et al., 1989). Ülke ekonomilerindeki sürdürülebilir kalkınma politikası, kurumsal alt yapı, sermaye ve politika uyum eksikliği, çevre sorunları hakkında bilgi/tecrübe eksikliği, politika geliştirmede ve zaman-mekan-yöntem belirlemede yaşanan zorluklar, endüstriyel üretimin yüksek seviyelere çıkması, kamuoyunun katılımının sınırlı olması, politik uygulamalara karşı güvensizlik, kaynak ve uyum yetersizliği vb. gibi sorunlardan ötürü, az gelişmiş ve gelişmekte olan ekonomilerde, fiziki-beşeri altyapı yetersizliğiyle birlikte, sürekli iktisadi büyüme sağlama isteği nedenlerinden ötürü sektöre yavaşlamaktadır. Sürdürülebilir kalkınma kapsamında, çevresel bozulmayı dikkate alarak, ekolojik denge ile ekonomik büyümeyi birbirinden ayırmadan doğal kaynakların etkin kullanımını sağlayarak bugünkü ihtiyaçlar karşılanırken, gelecekte ortaya çıkacak ihtiyaçların da karşılanabilmesini imkân sağlamaktadır. Sürdürülebilir kalkınma, yoksulluğun sonlandırılması, açlığın sonlandırılarak gıda güvenliğini sağlanması, sağlıklı-refah içinde bir yaşam ortamının oluşturulması, nitelikli eğitimin-öğretimin artırılması, toplumsal cinsiyet eşitliğinin sağlanması, temiz su ve sanitasyonun sağlanması, temiz enerji erişilebilirliğinin sağlanması, tam-üretken istihdam ile verimliliği yüksek faaliyetleri destekleyerek sürdürülebilir ekonomik kalkınmanın sağlanması, sürdürülebilir sanayileşmenin desteklenmesi, tüm alanlarda inovatif faaliyetlerin teşvik edilmesi, ülkeler arasındaki eşitsizliklerin azaltılması, güvenli-sürdürülebilir şehirlerin oluşturulması, üretim-tüketim modellerinin sürdürülebilir hale getirilmesi, iklim değişikliği ve etkileri için alınacak önlemlerin hızlandırılması, su kaynaklarının (tatlı su, nehir, deniz, okyanus vb. gibi) korunması, eko-sistemlerin sürdürülebilirliğini sağlayarak biyolojik çeşitliliğin korunması, adalete erişimi sağlanması, kamu-özel kurumların

denetleme mekanizmalarının geliştirilmesi, barışçıl-kapsayıcı toplumların tesis edilmesi ve sürdürülebilir kalkınma için küresel bir ortaklık sağlanması gibi hedeflerden/temellerden oluşmaktadır.

Çevresel/ekolojik değerler olmadan canlıların yaşamsal döngüsünü sürdürememesi nedeniyle sürdürülebilir kalkınma politikalarının en önemli boyutu, çevresel sürdürülebilirlik olarak belirtilmektedir. Kapsamlı ekonomi, gelecekteki üretim faktörlerinin ekonomik potansiyeli, çevre koşullarının durumuna bağlı olması nedeniyle, sağlıklı ve sürdürülebilir bir çevrenin varlığıyla birlikte mümkün olmaktadır (OECD, 2008:3). Doğal kaynakların verimli bir şekilde kullanılması, üretim-tüketim sürecinde çevreye bırakılan atıkların azaltılması ve tüketilen doğal kaynakların geri dönüşümünün sağlanabilmesi şeklinde ifade edilen çevresel sürdürülebilirlik, biyolojik çeşitliliğin korunması, atmosferik yapıda dengenin sağlanması ve diğer ekosistem işlevlerinin korunmasını kapsamaktadır. Sürdürülebilirlik kavramının yapı taşı olan çevresel sürdürülebilirlik süreci, Endüstri 4.0 ile birlikte, ürünün kaynak halinden atık sürecine kadar olan ürünün tasarımı-gelişimi kontrol edilebilmekte, üretim-tüketim süreçlerini belirlenebilmekte, organizasyonel yönetim sistemleri oluşturulabilmekte ve akıllı çıktı-ürün sistemlerine entegre edilerek başarıya ulaşabilmektedir. Bu nedenle, gereksiz kaynak stoku ve tüketiciler tarafından pek fazla talep edilmeyen ürünlerin üretimi engellenebilmektedir.

Sanayi başta olmak üzere diğer faaliyet kollarındaki gelişmeler neticesinde rekabet gücü elde etmek amacıyla çevreye verilen zarar artarak devam etmekte ve meydana gelen tahribat çevrenin kendi kendini yenileme imkanını sekteye uğratmaktadır. Bu kapsamda, çevresel etkileri minimal seviye indiren, sürdürülebilir çözümlere odaklanan ve küresel çevresel problemlerin çözümünde etkili bir yaklaşım olarak kabul edilen eko-inovasyon kavramı ön plana çıkmaktadır. İlgili alternatiflere göre çevresel gelişmelere öncülük eden yeni veya önemli ölçüde geliştirilmiş ürün-hizmet, süreç, pazarlama yöntemleri, organizasyonel yapılar ve kurumsal düzenlemelerin oluşturulması-uygulanması olarak tanımlanan eko-inovasyon; sürdürülebilir gelişme hedefine ulaşma amacı güden her türlü kayda değer yenilikçiliği kapsamaktadır. Diğer bir ifadeyle, çevre üzerindeki olumsuz etkilerin en aza indirilmesi hedeflenmekte ve enerji dahil olmak üzere doğal kaynakların daha verimli ve sorumlu bir şekilde kullanılması amaçlanmaktadır. Çevresel etkileşim boyutunu göz önüne alarak yaşam döngüsünü içinde barındıran eko-inovasyon kavramı, yenilikçi amacı ve pazar odaklı yaklaşımı içinde barındıran inovasyon tanımından farklılaşmaktadır. Sürdürülebilirlik olgusu çerçevesinde hem teknoloji hem de tüketim modellerinde eko-inovasyon kilit bir rol oynamaktadır (Jang-Hwan Jo et al., 2015). İnsani ve sinai faaliyetlerin süreç içerisinde giderek artması doğanın kendini yenileyebilmesine engel teşkil etmektedir. Çevresel tahribatın azaltılması ve işletme/ülke düzeyinde sürdürülebilir faydanın sağlanması için çözüm olarak sunulan eko-inovasyon uygulamaları, işletme/ülke düzeyinde yeni/geliştirilen ürün, süreç, pazarlama stratejilerinin uygulanmasıyla birlikte çevresel etkilerin azaltılmasını ifade etmektedir (Fussler and James, 1996). Çevresel bozulmaların önlenmesi/azaltılması için yeni veya geliştirilmiş süreçlerden, tekniklerden, uygulamalardan ve sistemlerden oluşan eko-inovasyon, maliyetlerin azalmasına ve kalitenin sağlanmasına neden olarak, çevresel faydayı, tüketici-üretici için değer yaratacak şekilde sentezlemektedir. Ulusal ve yerel düzeyde çevresel sürdürülebilirliğin sağlanmasına yardımcı olan ve çevresel yükün azalmasına katkıda bulunan yeni fikirleri, davranışları, ürünleri, süreçleri kapsayan eko-inovasyon kavramı, endüstriyel faaliyetlerin çevresel beklentilere uyumlu hale getirilmesiyle birlikte başarıya ulaşabilmektedir. Çevresel düzenlemelerin getirdiği çevresel yatırımlar, ekonomiler tarafından maliyetli görülmekteyken, eko-inovasyon uygulamaları ve inovatif çözümlerle birlikte kaynak-enerji verimliliği sağlanarak çevresel yatırımların neden olduğu maliyetler azaltılabilmektedir (Porter and Linde 1995). Bu nedenle, eko-inovatif uygulamalar ekonomik tasarrufların yanı sıra kaynakların tasarruf edilmesini sağlayarak çevresel faydaları beraberinde getirebilmektedir (OECD, 2012). Eko-inovasyon uygulamalarının çevresel performans ve rekabet edilebilirlik üzerinde olumlu bir etkisi bulunmaktayken; çevresel baskıların azaltılmasını doğrudan-dolaylı olarak etkilemektedir (Dong et al., 2014). Ekonomik performans, sürdürülebilir rekabet kapasitesi vb. gibi faktörlerin kombinasyonel göstergesi olarak belirtilen eko-inovasyon, mevcut çevre standartları, su kalite düzeyi, hava kirletici emisyonları, katı atık üretimi, gürültü düzeyi vb. gibi niceliksel olarak standardize edilmiş göstergelerle birlikte işletme düzeyinde ve sistematik-dinamik bakış açısıyla birlikte sinai faaliyetlerin kirlilik düzeyin belirlenmesi, doğal kaynakların korunması ekolojik restorasyonun sağlanması vb. gibi verimlilik ve etkinlik göstergeleri ile birlikte ulusal düzeylerde ölçülebilmektedir (Boons ve Wagner, 2009). Ulusal düzeyde çevresel performans, işletme düzeyindeki çevresel performans göstergelerini de içermekteyken, ekonomik performans ve rekabet avantajlarını beraberinde getirebilmektedir. Ulusal düzeyde çevresel performansı attırmaya yönelik yapılan yapısal reformlar, ulus ve işletme birlikteliğinin sağlanmasına ve ulusal kalkınma hedeflerinin sağlanmasına destek olabilmektedir. Eko-inovasyon mevzuatlarının düzenlenmesi ve uygulanması, pazar odağının artırılması ve teknolojinin geliştirilmesiyle birlikte çevresel performans artmaktadır. Ahmad et al., (2020), eko-inovasyon uygulamalarının karbondioksit emisyonlarının azaltılmasında önemli bir rolü olduğunu ifade etmektedir. Inglesi-Lotz and Doğan (2018), Afrika ülkelerine yönelik dinamik en küçük kareler yönetimini kullandığı çalışmada,

yenilenebilir enerji tüketimi çevresel kaliteyi iyileştirirken yenilenemeyen enerji tüketimi çevre kalitesini bozduğunu belirtmektedir. Bhat (2018), BRICS ülkelerine yönelik uzun dönem elastikiyet, birim kök testleri, eşbütünleşme testi ve Genelleştirilmiş Momentler yöntemlerini kullandığı çalışmada, kişi başına düşen gelir ve yenilenemeyen enerji kullanımı karbon dioksit emisyonunu artırdığını yenilenebilir enerjinin ise azalttığını belirtmektedir. Mensah et al., (2018), OECD ülkelerine yönelik gecikmesi dağıtılmış otoregresif (ARDL) sınır testi yöntemini kullandığı çalışmada, eko-inovasyon uygulamaları yenilenebilir enerji tüketimini, araştırma-geliştirme faaliyetlerini artmasına neden olarak çevresel fayda sağlamaktayken, gayri safi yurtiçi hasıla (GSYİH) artış yaşanması ve yenilenemeyen enerji tüketimi artması durumunda çevre kalitesinin azaldığını ifade etmektedir. Hoque et al., (2017), küresel iklim değişikliğindeki artışın eko-inovasyon uygulamalarıyla birlikte azalacağını düşünmektedir. Lee and Min (2015), eko-inovasyonun, kamusal, yeşil teknolojiler ve araştırma-geliştirme yatırımları tarafından desteklenen uzun vadeli çevresel (yeşil) yeteneklerin geliştirilmesinin ilerleyen dönemlerde ulusal alanda rekabet sağlanmasının ana kaynağı olacağını ifade etmektedir. Horbach (2014), eko-inovasyon belirleyicilerinin analiz edildiği ampirik literatürdeki yeterli veri eksikliği nedeniyle bölgesel ve konum faktörlerinin dahil edilmesinin ihmal edildiğini vurgulamaktadır

Sanayi devriminden önce pek önemsenmeyen çevresel sorunsallıklar, sanayileşmeyle birlikte üretim/tüketim sonucu ortaya çıkan atık ürünlerden kaynaklı ekosistem üzerinde oluşan bozulum sorunsalının sürekli ve dengeli kalkınma çerçevesinde incelenmesi ve ortak sınır ilişkisine sahip ülkelerin-bölgelerin-kentlerin benzer politikalar gösterebilmesi nedeniyle mekânsal ilişkilerin gözetilmesi gerekliliğini ortaya çıkarmaktadır. Bu kapsamda, çevre ve iklim temeline dayanan sürdürülebilirlik olgusunun makroekonomik değişkenlerle etkileşiminin ortaya çıkarılmasında gerçekleştirilen modelleme-tahminleme süreçlerinde kullanılan yöntem çeşitliği farklı sonuçlar ortaya koymaktadır. Modelleme ve tahminleme aşamalarında kullanılan en uygun ve etkin ekonometrik yöntemin tanıtılması fikrine dayalı olarak gerçekleştirilen çalışma, daha önce ele alınan klasik panel yöntemler veya yatay kesit/panel mekânsal yöntemler yerine dinamik sürecin dahil olduğu dinamik mekânsal panel veri yöntemini tanıtmakta ve bu yöntemin kullanılmasıyla elde edilen sonuçlara ait politika süreçlerinin tasarlanması ve etkinliklerinin sorgulanması gerekliliğini ortaya koymaktadır. Model yapısına ilişkin hipotezlere dinamik etkiler ve mekânsal etkiler dahil edilerek çevresel sürdürülebilirlik ve makroekonomik değişkenler arasındaki yapının değerlendirilmesi gerekliliğine vurgu yapılmaktadır. Ek olarak, yapılan literatür taraması sonucunda hem mekânsal ilişkilerinin gözetilerek eko-inovasyonun değerlendirilmesiyle ilgili hem de dinamik mekânsal panel veri yaklaşımı ile ilgili neredeyse yok denecek kadar az çalışmaya rastlanıldığından, çalışma kapsamında modele ilişkin ayrıntılı teorik bilgi verilerek hem eko-inovasyon hem de diğer alanlarda yapılması muhtemel çalışmalara yön gösterilmesi amaçlanmaktadır.

3. YÖNTEM

Ekonometri literatürün alt dalı olarak gelişen mekânsal ekonometri, bölgesel-kentsel düzeyde yaşanan değişimlerin ekonometrik modellere uygulanmasıyla birlikte ortaya çıkmaktadır. Matematiksel verilerin mekânsal/coğrafi boyutuna anlam kazandırabilen mekânsal ekonometrik yöntemler, bölgesel-konumsal verilerin modellenmesine, uygun spesifikasyonun belirlenmesine, hipotezlerin test edilmesine ve tahmin edilmesine olanak sağlamaktadır (Anselin, 1988:10). Bu kapsamda, son dönemlerde, sınır ilişkilerinin önem kazanması, komşuluk ilişkilerine özgü ortak sosyo-ekonomik politikaların belirlenmesi nedeniyle kuramsal ekonometrik modellemelerine karşın mekân-zaman sürecini analize dahil eden mekânsal ekonometri yöntemi önem kazanmaktadır.

Mekânsal etkileşim ve mekânsal heterojenlikten kaynaklanabilen mekânsal etki hem coğrafi hem de sosyo-ekonomik uzaklıklar nedeniyle ortaya çıkabilmektedir (Le Gallo, 2002). Mekânsal etkileşim, uzaysal/konumsal alanda olan bir noktanın başka bir konumda olan nokta ile arasındaki etkileşim olarak tanımlanmaktadır. Baz alınan konuma bağlı olarak ortaya çıkan ve baz alınan konum ile komşu konum arasındaki ilişkiyi tanımlayan mekânsal etki, yatay kesit bağımlılığı kapsamında komşu konumdaki korelasyonu ifade eden mekânsal bağımlılığa (otokorelasyon) ve yatay kesit heterojenliği kapsamında ilgilenilen değişkenin bir konumdan diğerine sabit olmayan varyansını ifade eden mekânsal heterojenliğe sahip olabilmektedir. (Anselin et al., 2008:5) Bu kapsamda, mekânsal birimlerin homojenlikten uzaklaşmasına neden olan mekânsal heterojenlik, ilgilenilen alan üzerindeki noktalarda farklı ilişkinin gözlenmesi olarak tanımlanabilmekteyken, doğrusal regresyon modelinde, $i = 1, 2, \dots, n$ gözlemleri için $(1 \times K)$ boyutlu açıklayıcı değişken matrisi x_i , bağımlı değişken vektörü y_i , parametre vektörü β_i ve hata terimi ε_i olmak üzere mekânsal heterojenlik $y_i = f_i(x_i\beta_i, \varepsilon_i)$ şeklinde ifade edilebilmektedir. Rassal değişkenin komşu konumlarda gözlenen değerleri arasındaki korelasyonun sıfırdan farklı olması mekânsal otokorelasyon olarak tanımlanabilmekteyken, i ve j konumları arasındaki korelasyona $Cov(y_i, y_j) = E(y_i y_j) - E(y_i)E(y_j) \neq 0, \forall i \neq j$ ifadesiyle ulaşılabilmektedir

(Darmofal, 2006). Ek olarak, *i ve j* konumları arasındaki korelasyon sıfırdan farklı olması durumunda mekânsal açıdan ilişki (değer benzerliği ile konum benzerliğinin uyumlu) olduğu söylenebilmektedir. Rassal değişken için düşük/yüksek olan değerlerin kümelenme eğiliminde olduğu durumda pozitif mekânsal otokorelasyon, baz alınan konumun komşu konumlar tarafından çok farklı değerler ile çevrelenmiş olduğu durumda negatif mekânsal otokorelasyon ve değer dağılımlarının belirli bir kalıba uymadığı ve mekânsal otokorelasyondan söz edilemediği durumda rassallık durumu olmak üzere üç farklı mekânsal otokorelasyon bulunmaktadır.

Mekânsal ekonometride konumdan kaynaklı ilişki yapısı coğrafi ağırlıklandırma veya sosyo-ekonomik ağırlıklandırma teknikleriyle matris formu kullanılarak gösterilebilmektedir. Bu nedenle mekânsal etkileşimi belirleyebilmek için, kurulan ekonometrik modele mekânsal bağıntının dahil edilmesi gerekmektedir. Bu durum, gözlemler arasında mekânsal etkileşim modellenmesi nedeniyle her bir gözlemin bir dizi komşu gözlemle bağlantılı olduğu ve dışsal mekânsal kalıba uygun olan mekânsal ağırlık matrisiyle sağlanabilmektedir. Sonlu-negatif olmayan, stokastik bir süreç içeren ve $N \times N$ boyutlu simetrik-kare olan pozitif mekânsal ağırlık matrisinde ($\tilde{W}$) satır elemanı i konumu ile sütun elemanı j konumu arasındaki etkileşimin gücü, $\tilde{w}_{ij}$ elemanıyla gösterilmektedir. Gözlemler arasındaki ilişkinin gücü mekânsal ağırlık yapısı ile ifade edilmekirken, i ve j konumları komşu ise $\tilde{w}_{ij} = 1$, komşu değilse $\tilde{w}_{ij} = 0$ olarak elde edilmektedir. Satırları standardize edilmiş komşuluk matrisi mekânsal ağırlık matrisi $w_{ij} = \tilde{w}_{ij} / \sum_j \tilde{w}_{ij}$ şeklinde elde edilebilmektedirken, mekânsal ağırlık matrisinin standardize edilmesi otoregresif parametrelerin ve mekânsal bağlantı katsayısının ölçülmesinde ve yorumlanmasında avantaj sağlayabilmektedir (Getis and Aldstadt, 2004). İlgilenilen birimlerin özelliğine göre ortak sınır paydaşlığı veya belli bir mesafedeki gözlemlerin mekânsal düzenlemesine dayanan coğrafi ağırlıklandırma, sınırdaşlığa ve uzaklığa bağlı olarak belirlenmektedir (Yücel, 2021). Sınırdaşlığa bağlı ağırlıklandırmalarda mekânsal birimler arası ilişki, sınırların ayırt edilebilir harita üzerinden konuma dayalı olarak belirlenmesiyle oluşturulmaktadır. Ortak sınıra sahip alanlar ve birbirini çevreleyen alanlar için bitişik alanların ortak kenar paylaşması üzerine kurulan kale komşuluğu, bitişik alanların ortak bir köşe paylaşması üzerine kurulan fil komşuluğu ve bitişik alanların ortak bir kenar ve köşe paylaşması üzerine kurulan vezir komşuluğu olmak üzere üç komşuluk tanımı bulunmaktadır. Ek olarak, mekânsal ilişkilerinin uzak olması durumunda açıklayıcılığını yitirmesi nedeniyle mekânsal ağırlık matrisinin ortak köşe ve kenarın paylaşılması anlamına gelen vezir komşuluğu düzenine göre oluşturulması daha kapsayıcı sonuçlar vermektedir (Terzioğlu vd., 2020).

Kesitsel yapıdaki çalışmaların aksine daha geniş modelleme olanağı sunan mekânsal panel yapılar, son dönemlerde gelişerek ve dinamik regresyon modellerle birlikte entegre edilerek mekânsal ekonometri çalışmaların temelini oluşturmaktadır. Bu kapsamda, zaman içinde her bir mekânsal birim üzerindeki gözlemler arasındaki serisel bağımlılığın bulunması, zamanın her noktasındaki gözlemler arasındaki gözlemler arasındaki mekânsal bağımlılığın bulunması, gözlemlenemeyen mekânsal ve/veya zaman dönemine özgü etkilerinin bulunması, mekan ve/veya zaman yapılarının gecikmesi alınmasıyla birlikte daha fazla bağımsız değişkenlerin içselliği içermesi nedeniyle mekan-zaman boyutlu dinamik yapıdaki modellemeler, mekânsal yayılma etkilerin incelemesinde daha tutarlı sonuçlar verebilmektedir. Mekânsal panel veri modellerinin bağımlı-bağımsız değişkenlerin gecikmelerin alınmasıyla birlikte oluşturulan dinamik mekânsal panel veri modelleri, statik modellerin aksine doğrudan ve dolaylı etkilere ait sonuçları göstererek daha kapsayıcı sonuçlar vermektedir (Demirkıran vd., 2020). Bu kapsamda, bağımlı değişkenin (Y_{t-1}) ve mekânsal etkileşimi ifade eden değişkenin (WY_{t-1}) gecikmeleri alınarak oluşturulan dinamik mekânsal panel veriye (DSPD) ait notasyon;

$$Y_t = \tau Y_{t-1} + \delta WY_t + \eta WY_{t-1} + X_t \beta_1 + W X_t \beta_2 + X_{t-1} \beta_3 + W X_{t-1} \beta_4 + Z_t \theta + v_t \quad (1)$$

$$v_t = \gamma v_{t-1} + \rho W v_t + \mu + \lambda_t + l_N + \varepsilon_t \quad (1.1)$$

$$\mu = \kappa W \mu + \xi \quad (1.2)$$

şeklinde gösterilmektedir. Modelde, Y_t , t dönemindeki ($t = 1, \dots, T$) her mekânsal birim ($i = 1, \dots, N$) için bağımlı değişkende oluşan $N \times 1$ boyutlu matrisini belirtmekteyken, X_t , dışsal açıklayıcı değişkenlerin bir $N \times K$ boyutlu matrisini ve Z_t , içsel açıklayıcı değişkenlerin $N \times L$ bir boyutlu matrisini ifade etmektedir. W , mekânsal etkileşimin olduğu birimlerin komşuluk durumunu ifade eden, negatif olmayan ve baz alınan konumların kendisi ile komşu olamamaları nedeniyle köşegen elemanları sıfır (0) olan $N \times N$ boyutlu mekânsal ağırlık matrisini göstermektedir. δ , mekân-zaman boylamını gösteren değişkenin (WY_t), ve η , mekân-zaman boylamında gecikmesi alınan bağımlı değişkenin (WY_{t-1}) yanıt parametreleri olarak ifade edilmektedirken, $L \times 1$ boyutlu θ , modeldeki içsel değişkenlerin yanıt parametresini ve $K \times 1$ boyutlu $\beta_1, \beta_2, \beta_3$ ve β_4 dışsal açıklayıcı değişkenlerin yanıt parametrelerini göstermektedir. Modelde, $N \times 1$ boyutlu v_t , serisel olarak ve mekânsal düzlemde korelasyonlu/ilişkili olduğu kabul edilen modelin hata teriminin spesifikasyonunu yansıtmaktayken, γ , serisel otokorelasyon katsayısını ve ρ mekânsal otokorelasyon katsayısını ifade etmekte ve $N \times 1$ boyutlu μ , ($\mu = (\mu_1, \dots, \mu_N)^T$) mekânsal-birimsel etkileri içermektedir. Diğer taraftan, λ_t , zaman

periyoduna ($t = 1, \dots, T$) özgü etkilerini göstermekten, I_N , $N \times 1$ boyutlu bir vektörü ifade etmektedir. Son olarak, ε_t , ($\varepsilon_t = (\varepsilon_{1t}, \dots, \varepsilon_{Nt})^T$) ve ξ elemanları sırasıyla sıfır (0) ortalamaya ve sonlu varyansa sahip (σ^2 ve σ_ξ^2) olan bağımsız-özdeş dağılmış rastgele değişkenlerin bozulma terimlerini belirtmektedir. Dinamik etkilere sahip mekân-zaman modelindeki değişkenlerin kısmi türevlerinin alınması durumunda kısa dönem etkilerine ait notasyon;

$$\left[\frac{\partial Y}{\partial X_{ik}} \dots \frac{\partial Y}{\partial X_{Nk}} \right]_t = (I - \rho W)^{-1} [\beta_k I_N + \theta_k W] \quad (2)$$

şeklinde ifade edilmektedir. Modelde alınan kısmi türevler, belirli bir konumdaki belirli bir açıklayıcı değişkendir. Kısa dönemde diğer tüm birimlerin bağımlı değişken üzerindeki etkisini göstermektedir. Benzer şekilde uzun dönem etkileri;

$$\left[\frac{\partial Y}{\partial X_{ik}} \dots \frac{\partial Y}{\partial X_{Nk}} \right] = [(1 - \tau)I - (\rho + \eta)W]^{-1} [\beta_k I_N + \theta_k W] \quad (3)$$

şeklinde belirlenebilmektedir. Kısa dönem ve uzun dönemleri belirleyebilmek amacıyla yapılan işlemlerin sağ tarafında zaman bağlamının (t) olmaması dolaylı-doğrudan etkilerin zaman bağlamından etkilenmediği şeklinde açıklanabilmektedir (Yücel, 2021).

3. BULGULAR

Çalışma kapsamında, ülkelere özgü teknolojik gösterge olarak, yenilenebilir kaynaklardan elde edilen enerji miktarı (YEM); ülkelere özgü çevresel gösterge olarak, orman örtüsü kaybı (OAK), elektrik tüketim yoğunluğu (ETY) ve kaynak verimliliği (KV); ülkelere özgü demografik gösterge olarak, nüfus yoğunluğu (NY); ülkelere özgü çevresel politika göstergeleri olarak çevresel vergi gelirleri (ÇVG) ve Ar-Ge Harcaması (ARGEH) ve ekonomik büyüme ölçütleri olarak kabul edilen kişi başı gayri safi yurt içi hasıla (GSYİH) ve doğrudan yabancı yatırımlar (DYY) değişkenleri kullanılmaktadır. Çalışma kapsamında, ele alınan ülkelerin iktisadi, siyasi ve sosyal yaşamda ortak politikalar altında hareket etmesi ve birçok ülkenin mekan etkisinin görülmesini sağlayan sınır komşuluğuna sahip olması nedeniyle, Almanya, Avusturya, Belçika, Bulgaristan, Çek Cumhuriyeti, Danimarka, Estonya, Finlandiya, Fransa, Hırvatistan, Hollanda, İngiltere, İrlanda, İspanya, İsveç, İtalya, Letonya, Litvanya, Lüksemburg, Macaristan, Norveç, Polonya, Portekiz, Romanya, Slovakya, Slovenya, Türkiye ve Yunanistan ekonomilerine yönelik, dinamik sürece sahip olan mekânsal ilişkilerin uzun dönem doğrudan-dolaylı ve kısa dönem doğrudan-dolaylı etkilerinin 2010-2018 dönemleri itibarıyla ortaya konulması amaçlanmaktadır. Bu kapsamda, çalışmada kullanılan değişkenlere ait veri seti, Dünya Bankası, Avrupa İstatistik Ofisi (Eurostat), Ekonomik Kalkınma ve İşbirliği Örgütü (OECD) ve çalışma grubundaki ülkelerin kurumsal istatistik ofislerine ait açık veri kaynaklarından elde edilerek düzenlenmektedir. Tablo 1.'de eko-inovasyon düzeylerinin dinamik mekânsal etkileşiminin belirlenmesi için kurulan modeldeki değişkenlere ait tanımlayıcı istatistikler almaktadır.

Tablo 1. Tanımlayıcı İstatistikler

YEM	Yenilenebilir Kaynaklardan Elde Edilen Enerji Miktarı (Yüzde cinsinden)			
ETY	Elektrik Tüketim Yoğunluğu (Kilowatt cinsinden)			
OAK	Orman Örtüsü Kaybı (Hektar metrekare cinsinden)			
KV	Kaynak Verimliliği (Bin Ton cinsinden)			
NY	Nüfus Yoğunluğu (Bin kişi sayısı)			
ÇVG	Çevre Vergisi Geliri (GSYİH içerisindeki payı)			
ARGEH	Ar-Ge Harcama Miktarı (Devlet bütçesi içerisindeki payı)			
GSYİH	Kişi Başı Reel Gayri Safi Yurtiçi Hasıla (Euro cinsinden)			
DYY	Doğrudan Yabancı Yatırımlar (Dolar cinsinden)			
	Ortalama	Standart Sapma	Minimum Değer	Maksimum Değer
YEM	2.84552	0.6675821	1.052219	4.287056
ETY	8.718349	0.528946	7.686654	10.12226
OAK	9.658565	1.47737	5.78996	12.72546
KV	11.95054	1.153965	9.286259	14.12881
NY	4.530215	0.8274347	2.772589	6.222576
ÇVG	0.9487117	0.2295782	0.4446858	1.420696
ARGEH	0.1472956	0.3982151	-1.049822	0.7466879
GSYİH	9.962593	0.682125	8.527144	11.33224
DYY	26.27103	0.1551814	25.88119	27.07137

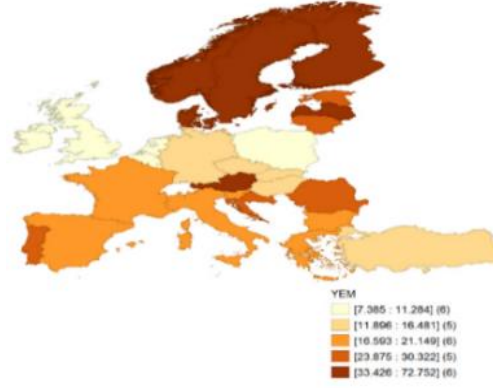
Çalışma kapsamında kullanılan değişkenlerin, düzeyde üstel bir büyüme ve azalış gösteren serilerde ortaya çıkan aşırı değişimin dengelenebilmesi, doğrusal bir formda ifade edilebilmesi ve değişkenlerin rassal dağılım gösterebilmesi amacıyla logaritmik formları alınarak analiz sürecine dahil edilmektedir. Ek olarak, doğrudan yabancı yatırım (DYY) değerlerine ilişkin verilerde negatif-pozitif değerler bir arada olması nedeniyle logaritmik formu alınmadan önce dönüşüm (transformasyon) işlemi yapılarak analiz sürecine eklenmektedir. Değişkenlere ilişkin tanımlayıcı istatistiklerin bulunduğu Tablo 1 incelendiğinde, değişkenlerin ortalama değerleri 0.14 ile 26.27 arasında, standart sapmaları 0.15 ile 1.47 arasında, minimum değerleri -1.04 ile 25.88 arasında ve maksimum değerleri 0.75 ile 27.07 değeri arasında dağılış gösterdiği söylenebilmektedir. Çalışması kapsamında kullanılan modellerde mekânsal komşuluk matrisinin standardize edilerek analiz sürecine dahil edilmesiyle birlikte durağanlık elde edilebilmektedir. Bu nedenle, kullanılan değişkenlerin birim kök içermediği ve durağan olduğu varsayılmaktadır. Çalışma grubunda bulunan ülke ekonomilerinin eko-verimlilik düzeylerinin belirlenebilmesi amacıyla oluşturulan modelde ρ mekânsal etkileşim $i = 1, \dots, N; t = 1, \dots, T$ olmak üzere;

$$YEM_{it} = \beta_0 + \beta_1(YEM)_{i,t-1} + \beta_2 \sum_{j=1}^N \rho W_{ij}(YEM)_{jt-1} + \beta_3 WARGEH_{it} + \beta_4 WÇVG_{it} + \beta_5 WKV_{it} + \beta_6 WNY_{it} + \beta_7 WOAK_{it} + \beta_8 WGSYİH_{it} + \beta_9 WDYY_{it} + \beta_{10} WETV_{it} + \varepsilon_{it} \quad (4)$$

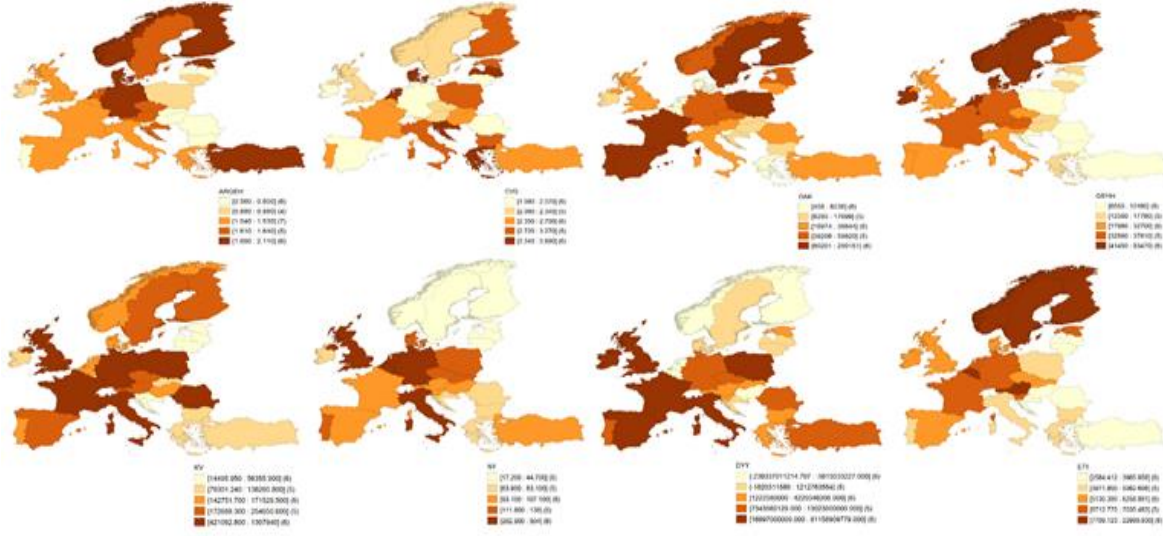
şeklinde belirlenmektedir. Modeldeki W_{ij} , her biri $i \neq j$ olmak üzere ülkelerin sınır komşuluk ilişkisi olması durumunda 1 olmaması durumunda 0 olarak ayarlanan standardize edilen ve mekânsal ilişkiyi gösteren mekânsal ağırlık matrisini ifade etmektedir. Mekânsal ilişki sürecini modele dahil edilmesini sağlayan W_{ij} , bağımlı değişken ile olan etkileşiminin $t - 1$ gecikmesini modele dahil edilerek dinamik mekânsal sürecin anlamlılığı test edilebilmektedir. Modelde de yer alan, β_2 katsayısı, herhangi bir ülke ile komşuluk ilişkilerin bulunduğu ülkelerin arasındaki eşzamanlı mekânsal korelasyonu karakterize eden mekânsal gecikme parametresi olarak adlandırılmaktadır, $\beta_2 = 0$ olması durumunda modellerin, dinamik bir mekânsal süreç içermediği ve geleneksel dinamik panel veri yöntemleri ile çözülmesi gerektiğini göstermektedir. $(YEM)_{i,t-1}$, i konumundaki bir ülkenin $t - 1$ anındaki yenilenebilir kaynaklardan elde edilen enerji miktarını göstermekteyken, her ülkenin yenilenebilir kaynaklardan elde edilen enerji miktarlarının kalıcı özelliğini yansıtabilmektedir. Modelde, $ARGEH_{it}$, i konumunda t zamanındaki araştırma-geliştirme harcama düzeyini, $ÇVG_{it}$, i konumunda t zamanındaki çevre vergisi geliri düzeyini, KV_{it} , i konumunda t zamanındaki kaynak verimlilik düzeyini, NY_{it} , i konumunda t zamanındaki nüfus yoğunluğunu, OAK_{it} , i konumunda t zamanındaki orman alanlardaki kayıp düzeyini, $GSYİH_{it}$, i konumunda t zamanındaki kişi başına düşen reel gayri safi yurtiçi hasıla değerini, DYY_{it} , i konumunda t zamanındaki doğrudan yabancı yatırım düzeyini, ETV_{it} , i konumunda t zamanındaki elektrik tüketim yoğunluğunu ve ε_{it} , i konumunda t zamanındaki hata terimlerini göstermektedir. Ek olarak, modeldeki açıklayıcı değişkenlerin önünde yer alan W ifadesi değişkenlerin mekânsal ilişkisini belirlemek amacıyla modellere dahil edilmektedir.

Türkiye ve seçil Avrupa ülkelerinin yenilenebilir kaynakların verimlilik düzeyini ifade eden YEM değerlerine ilişkin 2018 yılı baz alınarak, dağılım genişliği 5 eşit parçaya ayrılan mekânsal dağılım haritası Şekil 1.'de gösterilmektedir. Mekânsal dağılım haritasında, yenilenebilir kaynaklardan elde edilen enerji miktarının düşük olduğu ülkeler açık renkle gösterilirken yüksek düzeyde yenilenebilir kaynaklardan enerji elde eden ülkeler koyu renkle gösterilmektedir. Bu kapsamda, Türkiye ve Avrupa ekonomilerinin 2018 yılına özgü yenilenebilir kaynaklardan elde edilen enerji miktarı homojen bir dağılım göstermemekteyken, enerji verimliliği yüksek olan ülkeler, Kuzey ve orta Avrupa ülkelerinde (Norveç, Fransa, Avusturya vb. gibi) kümelenme eğilimi göstermektedir. Çalışma grubunda bulunan ülkelere özgü 2018 yıllarına ait ARGEH, ÇVG, KV, NY, OAK, GSHYİH, DYY ve ETY değişkenlerinin mekânsal dağılım haritaları Şekil 2'de yer almakta ve ilgili değişkenlerin dağılımının homojen olmadığı görülmektedir.

Şekil 1. Yenilenebilir Kaynakların Verimli Kullanılabilirliğine İlişkin Mekânsal Dağılım Haritası (2018)



Şekil 2. Yenilenebilir Enerji Dönüşüm Düzeyi Göstergelerinin Mekânsal Dağılım Haritaları (2018)



Tablo 1.'de ele alınan modele ilişkin mekânsal etkileşimin istatistiksel anlamlılığı, dinamik yapı içerip içermediği ve uygun dinamik mekânsal panel veri modeline karar verilerek, kısa ve uzun dönemdeki doğrudan ve dolaylı etkileri yer almaktadır.

Tablo 2. Yenilenebilir Kaynakların Verimli Kullanılabilirlik Düzeyinin Kısa ve Uzun Dönem Mekânsal Etkileri

	YEM_{t-1}	ARGEH	ÇVG	KV	NY	OAK	GSYİH	DYY	ETY	
	1.7817* (0.0492)	-0.2757* (0.0313)	0.0778 (0.0722)	-0.0506** (0.0223)	0.3473 (0.2736)	0.0509* (0.0119)	0.0037 (0.0985)	-0.0913* (0.0352)	0.9182* (0.1136)	
	W.YEM	W.YEM_{t-1}	W.ARGEH	W.ÇVG	W.KV	W.NY	W.OAK	W.GSYİH	W.DYY	W.ETY
	0.3436* (0.8932)	0.3864* (0.0875)	0.0868*** (0.0459)	-0.4057* (0.0911)	0.0640*** (0.0360)	-1.9351* (0.4304)	-0.0361* (0.01385)	-0.7750* (0.1159)	-0.2530* (0.0543)	-0.5275* (0.1603)
Kısa Dönem Mekânsal Etki										
Doğrudan Etki		-0.1745* (0.0303)	0.0854 (0.0713)	-0.0515** (0.0217)	0.3914 (0.2710)	0.0521* (0.0130)	0.0152 (0.0927)	-0.0832** (0.0346)	0.9383* (0.1171)	
Dolaylı Etki		0.0939** (0.0428)	-0.3943** (0.0949)	0.0624*** (0.0339)	-1.8916* (0.4398)	-0.0389* (0.0141)	-0.7476* (0.1210)	-0.2368* (0.0537)	-0.5625* (0.1757)	
Toplam Etki		-0.0805 (0.5813)	-0.3088* (0.0966)	-0.0108 (0.0409)	-1.5001* (0.04749)	0.0131** (0.0126)	-0.7323* (0.1222)	-0.3200* (0.0633)	0.3758** (0.1586)	
Uzun Dönem Mekânsal Etki										
Doğrudan Etki		0.2291* (0.0598)	0.05752 (0.1153)	0.0506 (0.0387)	0.2923 (0.4612)	-0.0623* (0.0175)	0.3383*** (0.1792)	0.3343*** (0.1783)	-1.1832* (0.1675)	
Dolaylı Etki		0.0402 (0.1723)	0.9199* (0.2980)	-0.0822 (0.1026)	0.3928* (1.3371)	0.0200** (0.0327)	0.9822* (0.5486)	0.7766* (0.2740)	0.0109 (0.4423)	
Toplam Etki		0.2694 (0.2245)	0.9769* (0.3807)	-0.3156 (0.1345)	0.6852* (1.6864)	-0.4226* (0.4266)	1.3205* (0.6921)	1.0228* (0.3460)	-1.1722** (0.5474)	
Wald Testi_{LAG (λ)}	57.95*									
Wald Testi_{ERROR (ρ)}	71.55*									
R²	0.7849									

*, ** ve ***, sırasıyla, %1, %5 ve %10 önem düzeyini göstermektedir. Ek olarak, parantez içerisindeki değerler değişkenlere ait standart hataları belirtmektedir.

Modele ait bağımlı değişkenin yaklaşık %79'u bağımsız/açıklayıcı değişkenler tarafından açıklanmaktadır. Panel bir yapıya sahip veri setinin mekânsal bağımlılığın anlamlılığı Wald testi ile incelebilmektedir. Bu kapsamda, kurulan modele ilişkin test sonuçları, gecikme ve hata değerlerinin %5 önem düzeyinde reddedildiğini göstermekte ve uygun mekânsal panel model SDM (Spatial Durbin Model) model olarak belirlenmektedir. Kurulan modele ilişkin mekânsal bağımlılığın katsayısının (**W.YEM**) istatistiksel olarak anlamlı ve pozitif olması, bağımlı değişkenler ile açıklayıcı değişkenler arasında pozitif mekânsal etkileşimin olduğunu göstergesi olarak kabul edilebilmekte ve herhangi bir ülkedeki yenilenebilir kaynakların verimli kullanım eğilimi ne yönde ise o ülkenin komşularında da aynı yönde olacağını şeklinde yorumlanabilmektedir. Diğer bir ifadeyle, her bir ülke için yenilenebilir kaynakların verimli kullanımı, komşuluk ilişkilerin bulunduğu ülke(ler)deki ilgili bağımsız değişkenlerden etkilendiği söylenebilmektedir. Bir önceki döneme ait yenilenebilir kaynakların verimli kullanım düzeyini ifade eden **YEM_{t-1}** istatistiksel olarak anlamlı ve pozitif çıkması, bir önceki dönemde yenilenebilir kaynakların verimli kullanım düzeyindeki değişimlerin bir sonraki dönemde yenilenebilir kaynakların verimli kullanım düzeyini değiştirmede pozitif bir etkiye sahip olacağını göstermektedir. Bir önceki döneme ait yenilenebilir kaynakların verimli kullanım düzeyinin mekânsal etkileşimini ifade eden **W.YEM_{t-1}** değerlerinin istatistiksel olarak anlamlı ve pozitif çıkması, komşuluk ilişkilerinin bulunduğu ülkelerde bir önceki dönemde yenilenebilir kaynakların verimli kullanım düzeyindeki değişimlerin, bir sonraki dönemde mevcut ülkedeki yenilenebilir kaynakların verimli kullanım düzeyini değiştirmede pozitif bir etkiye sahip olacağını göstermektedir. Bu nedenle, kurulan modele ilişkin mekânsal bir dinamik sürecinin olduğu söylenebilmektedir.

Tablo 2.'de yer alan ana sonuçlar incelendiğinde, araştırma-geliştirme harcamaları, kaynak verimliliği ve doğrudan yabancı yatırımlar istatistiksel olarak anlamlı ve negatif yönde etkide bulunduğunu göstermekteyken, orman örtüsü kaybı ve elektrik tüketim yoğunluğu istatistiksel olarak anlamlı ve pozitif yönde etkide bulunduğu görülmektedir. Çevre vergisi gelirleri, nüfus yoğunluğu ve kişi başı gayri safi yurtiçi hasıladaki değişimin istatistiksel olarak anlamsız çıkması nedeniyle yenilenebilir kaynakların verimli kullanılabilirliğine herhangi bir etkide bulunmamaktadır. Tablo 2.'de yer alan modele mekânsal etkinin dahil edilmesi durumunda ise sonuçlar, araştırma-geliştirme harcamaları ve kaynak verimliliğinin komşuluk ilişkilerinin bulunduğu ülkelerde yenilenebilir kaynakların verimli kullanılabilirliğine istatistiksel olarak anlamlı ve pozitif yönde etkilediğini, çevre vergisi gelirleri, nüfus yoğunluğu, orman örtüsü kaybı, kişi başı gayri safi yurtiçi hasıla, doğrudan yabancı yatırımlar ve elektrik tüketim yoğunluğunun istatistiksel olarak anlamlı ve negatif yönde etkilediğini göstermektedir.

Dinamik olmayan mekânsal modeller açıklayıcı değişkenlerin yalnızca uzun dönem etkilerini tahmin ederken, dinamik mekânsal modeller ise kısa dönem etkilerin de tahmin sürecine dahil edilmesini sağlamaktadır. Çalışma kapsamında, Türkiye ve seçili Avrupa ülkelerinin yenilenebilir kaynakların verimlilik düzeyini incelemek üzere kurulan modelin dinamik bir yapı sergilediği bilinmektedir. Bu nedenle, kurulan modele ilişkin uzun ve kısa döneme ait dolaylı ve doğrudan etkilerinin incelenmesi gerekmektedir. Dolaylı etkiler, açıklayıcı değişkenlerdeki değişimin, mekânsal etkileşimde bulunan komşu ülke(ler)deki bağımlı değişken üzerindeki değişimi gösterirken doğrudan etkiler, aynı ülkedeki açıklayıcı değişkenlerin bağımlı değişken üzerindeki değişimi ifade etmektedir. Toplam etkiler ise mevcut bir ülkedeki açıklayıcı değişkenler ile komşuluk ilişkilerinin bulunduğu ülke(ler)deki açıklayıcı değişkenlerdeki değişimin mevcut ülkedeki bağımlı değişkene olan etkisini yani dolaylı ve doğrudan (mekânsal) etkilerin toplamını ifade etmektedir. Ek olarak, doğrudan etkiler mekânsal ağırlık matrisinin köşegen elemanlarının ortalamasını, dolaylı etkiler ise matrise ait köşegen olmayan öğelerin satır/sütun toplamalarının ortalamasını belirtilmektedir. Kurulan modelin uzun, kısa ve toplam dolaylı-doğrudan etkilerine ait sonuçlar Tablo 2.'de gösterilmektedir.

Model kapsamında, kısa dönemde herhangi bir ülkedeki yenilenebilir kaynakların verimliliği, o ülkedeki araştırma-geliştirme harcamaları, kaynak verimliliği ve doğrudan yabancı yatırımlardan istatistiksel olarak anlamlı ve negatif, nüfus yoğunluğu, ormanlaşma alanında kayıp yaşanması, kişi başı gayri safi yurtiçi hasıla ve elektrik tüketim yoğunluğu düzeyinin artmasından istatistiksel olarak anlamlı ve pozitif yönde doğrudan etkilenmektedir. Kısa dönemde herhangi bir ülkedeki yenilenebilir kaynakların verimlilik kapasitesi, aynı zamanda komşuluk ilişkilerin bulunduğu ülkelerdeki araştırma-geliştirme harcamaları ve kaynak verimliliğindeki değişimden istatistiksel olarak anlamlı ve pozitif, çevre vergisi gelirleri, nüfus yoğunluğu, ormanlaşma alanından kayıp yaşanması, kişi başı gayri safi yurtiçi hasıla, doğrudan yabancı yatırımlar ve enerji tüketim yoğunluğundaki değişimlerden istatistiksel olarak anlamlı ve negatif yönde etkilenmektedir. Dolaylı ve doğrudan etkilerin toplamı olarak bilinen kısa dönem toplam etkilerde ise ülkelerin yenilenebilir kaynakların verimli kullanılabilirlik kapasitesi, elektrik tüketim yoğunluğu ve ormanlaşma alanındaki kayıp değerlerindeki değişimden istatistiksel olarak anlamlı ve pozitif, çevre vergisi gelirleri, nüfus yoğunluğu, kişi başı gayri safi yurtiçi hasıla değerlerinden

istatistiksel olarak anlamlı ve negatif yönde etkilenmekteyken, araştırma-geliştirme harcamaları, kaynak verimliliğindeki değişimlerin istatistiksel olarak anlamsız çıkması nedeniyle etkilenmemektedir.

Model kapsamında, ülkelerin yenilenebilir kaynakları verimli kullanma düzeyi uzun dönemde, araştırma geliştirme harcamaları, kişi başı gayri safi yurtiçi hasıla ve doğrudan yabancı yatırımlar düzeylerindeki değişimden istatistiksel olarak anlamlı ve pozitif, ormanlaşma alanındaki kayıplardan ve elektrik tüketim yoğunluğundaki değişimlerden istatistiksel olarak anlamlı ve negatif yönde doğrudan etkide bulunmaktayken, çevre vergisi gelirleri, kaynak verimliliği ve nüfus yoğunluğundaki değişimlerin istatistiksel olarak anlamsız çıkması nedeniyle doğrudan bir etkide bulunmamaktadır. Uzun dönemde herhangi bir ülkedeki yenilenebilir kaynakların verimli kullanılabilirlik düzeyi komşuluk ilişkilerinin bulunduğu ülkelerdeki çevre vergisi gelirleri, nüfus yoğunluğu, kişi başı gayri safi yurt içi hasıla, ormanlaşma alandaki kayıp ve doğrudan yabancı yatırımlar değerlerindeki değişimlerden istatistiksel olarak anlamlı ve pozitif yönde etkilenmekteyken, araştırma-geliştirme harcamaları, kaynak verimliliği ve elektrik tüketim yoğunluğunun istatistiksel olarak anlamsız çıkması nedeniyle dolaylı (mekânsal) olarak etkilenmemektedir. Dolaylı ve doğrudan etkilerin toplamı olarak bilinen uzun dönemdeki toplam etkilerde ise ülkelerin yenilenebilir kaynakların verimli kullanılabilirliği, çevre vergisi gelirleri, nüfus yoğunluğu, kişi başı gayri safi yurtiçi hasıla ve doğrudan yabancı yatırımlardaki değişimlerden istatistiksel olarak anlamlı ve pozitif, kaynak verimliliği, ormanlaşma alanındaki kayıplar ve elektrik tüketim yoğunluğundaki değişimlerden istatistiksel olarak anlamlı ve negatif yönde etkilenmekteyken, araştırma-geliştirme harcamalarının istatistiksel olarak anlamsız çıkması nedeniyle herhangi bir şekilde etkilenmemektedir.

4. SONUÇ

İnovasyon uygulamalarının başarıya ulaşabilmesi denetlenebilir mekanizmalara ve gözlemlenebilir süreçlere bağlı olurken, ulusal-yerel düzeyde inovatif faaliyetlerinin gerçekleştirilmesinde, nitelikli personel eksikliğinin bulunması, yüksek maliyetlerin oluşması, yatırım eksikliği bulunması, teknolojik yetersizliğin bulunması, inovatif uygulamalara olan taleplerin belirsiz olması, altyapıda eksiklerin bulunması vb. gibi zorluklarla sıklıkla karşılaşabilmektedir. Ulusal-yerel düzeyde kalkınma göstergelerinden birisi olarak ortaya çıkan eko-inovasyon uygulamalarının, hayata geçirilmesinde, yüksek düzeyde maliyetler nedeniyle finansman eksikliğinin bulunması, inovasyon faaliyetlerinin ekonomik risklerin nedeniyle çekimser kalınması, pazarda yeteri kadar eko-inovasyon talebinin oluşmaması, kalifiyeli personelin yetersiz sayıda olması, ekolojik-çevresel konularda teknik bilgi eksikliğinin bulunması vb. gibi engeller bulunmaktadır. Ek olarak, işletmelerin ve ülkelerin eko-inovasyon faaliyeti gerçekleştirmesini sermaye birikimi, çevresel hizmet altyapısı, hukuki düzenlemelerin ve devlet teşviklerinin yetersiz olması sektöre uğratabilmekteyken, çevre mevzuatı düzenlenmelerinin ve ekonomilerin “temiz üretim” ve “temiz enerji teknolojilerinin” öncelikli alanlar olarak kabul etmesi işletmeleri eko-inovatif adımlarının atılması konusunda cesaretlendirebilmektedir.

Çevresel düzenlemeler, maliyet artırıcı faktör olarak görülmesine rağmen ekonomilere pazar rekabetinde avantaj sağlayabilmektedir. Bu durum, daha az inovatif faaliyette bulunan ekonomilerin, eko-inovasyonu üretim maliyetlerini düşürmek ve minimum çevre standartlarına uyum sağlamak için bir etmen olarak kabul etmesi ve daha yüksek inovatif faaliyette bulunan ekonomilerin yeni pazarlara girebilmek için eko-inovasyonu benimsemesi olarak kanıtlanabilmektedir. Bu kapsamda, eko-inovasyon uygulamaları yeni süreç ve ürünlerde tasarrufla birlikte ekolojik/ekonomik verimliliği getirerek, ülke ekonomilerine bir çözüm yolu sunabilmektedir. Eko-inovasyonun amaçları arasında kirliliğin önlenmesi/kontrol edilmesi, atık yönetimi-arıtma teknolojisi, çevresel olarak geliştirilmiş ürünler, çevre yönetim sistemi, temiz teknoloji, üretim zincirlerinin çevresel optimizasyonu, sistem inovasyonu vb. gibi faktörler yer alması nedeniyle, eko-inovatif uygulamalar, finansal-çevresel anlamda birçok avantajı beraberinde getirmekle beraber bu tür uygulamaları hayata geçirememekten kaynaklanan riskleri de elemine edebilmektedir. Bu nedenle, politika yapıcılarının eko-inovasyonu teşvik etmek için etkili-verimli enstrümanları kullanmaları ve geliştirmeleri gerekmektedir.

Sürdürülebilir kalkınma çerçevesinde Türkiye ve seçili Avrupa ülkelerinin eko-inovasyon düzeyini belirlemek amacıyla kurulan model kapsamında, ülkelerin, araştırma-geliştirme harcamaları, ormanlaşma ve elektrik tüketim politikaları yenilenebilir enerji kapasitesinin artırılmasında doğrudan etkide bulunması, ülkelerin komşuluk ilişkilerini gözetmeden kendi iç politikalarında öncelik vermesi gereken alanlar olarak yorumlanabilmektedir. Uzun dönemde ülkelerin, komşuluk ilişkilerinin bulunduğu ülke(ler)deki çevre vergi gelirleri, nüfus yoğunluğu, kişi başı gayri safi yurtiçi hasıla ve doğrudan yabancı yatırım düzeylerinden etkilenmesi, ülkelerin, komşuluk ilişkilerini gözeterek sürdürülebilir kalkınma hedeflerini hayata geçirilmesinin yenilenebilir kaynakların verimli kullanılabilirliğinin artırılmasına ve dolaylı olarak yeşil teknoloji düzeyinin artırılmasına neden olacağını göstermektedir. Ek olarak, kişi başı gayri safi yurtiçi hasılanın kısa dönem

mekânsal etkilerinin negatif çıkararak, uzun dönemde mekânsal etkilerinin tersine dönmesi, komşuluk ilişkilerinin bulunduğu ülkelerde gelirden artış yaşandığı sürece çevresel kirliliğin azalması ve dolaylı olarak çevresel verimliliğin artmasına neden olabileceğini göstermektedir. Doğrudan yabancı yatırımlarla farklı ülkelere, özellikle gelişmekte olan ülkelere, üretim tesisleri kurulması hem sermaye hem de üretimi küreselleştirebilmekteyken, yatırım yapılan ülkelerde, beşerî-fiziki alt yapıyı geliştirebilmesiyle birlikte oluşturduğu dışsallıkla verimlilik düzeyinde artış yaşanmasına neden olarak ülkelerin kalkınmasında etkin rol oynamaktadır. Bu nedenle, doğrudan yabancı yatırımlarla birlikte ülkelerin teknoloji düzeyleri ve verimlilikleri artabilmektedir. Bu kapsamda, elde edilen teknoloji transferi sayesinde elde edilen ileri teknoloji öğrenimleri ve yüksek verimlilik düzeyleri çevresel bozulmada azalış meydana getirmektedir. Bu durum, model kapsamındaki, doğrudan yabancı yatırımlar ile yenilenebilir enerji kapasitesi arasında negatif korelasyon uzun dönemde tersine dönerek, doğrudan yabancı yatırımların uzun dönemde çevresel inovasyon ve yeşil teknoloji düzeyini doğrudan/dolaylı olarak artabilmesi ve bu sayede çevresel bozulmanın azalabilmesiyle desteklenebilmektedir. Sonuçlar, ülkelerin çevresel alanda araştırma-geliştirme faaliyetleri, harcama ve sermaye düzeyleri, enerji ve teknoloji yoğunluğunu kontrol etmesi durumunda, eko-inovasyon uygulamalarının çevresel performans üzerindeki etkisinde anlamlı bir farklılık oluşturabileceğini göstermektedir. Bu durum, araştırma-geliştirme harcamalarının kısa dönemdeki doğrudan etkisinin uzun dönemde tersine dönmesi ve kısa dönemde komşuluk ilişkileri göz önünde bulundurularak gerçekleştirilmesiyle birlikte desteklenebilmektedir. Gelişmiş ekonomiler, enerji politikası ile birlikte uygun kalkınma politikasını entegre ederek büyüme eğilimi göstermektedir. Bu kapsamda sonuçlar, çevresel verimliliği artırabilmek için, komşuluk ilişkilerini gözleterek enerji/elektrik altyapılarına yönelik uzun vadeli planlar yapılması, kendi ülkelerinde çevre dostu (yeşil) teknolojilerin benimsenmesi ve ilgili çevresel politikaların düzenlenmesi gerekliliğini göstermektedir. Ek olarak sonuçlar, çevresel bozulmanın önemli yapı taşlarını oluşturan enerji, ürün, ham madde vb. gibi kaynakların elde edilmesi sürecinde akıllı ve değer yaratma teknolojileri daha etkin-verimli bir şekilde gerçekleştirilerek çevresel tahribat azaltılabilmesi nedeniyle Endüstri 4.0 politikalarının benimsemesi gerekliliğini belirtmektedir.

Çalışma kapsamında Türkiye ve seçili Avrupa ülkelerinin eko-inovasyon düzeylerinin dinamik mekânsal ilişkisini incelemek amacıyla kurulan modelde, yenilenebilir enerji yatırımlarının teşvik edilmesi, çevreye duyarlı ileri teknoloji ile maksimum ve kaliteli üretim yapılmasını sağlayacak temiz sektör ve teknolojilere geçiş sağlanması, enerji tüketiminden tasarruf sağlamak için araştırma-geliştirme yatırımlarının artması, beşerî sermaye gelişimiyle çevre konusundaki farkındalığın artırılması, geri dönüşüm sisteminin desteklenip geliştirilmesi, kaynakların korunarak etkin kullanımının sağlanması, emisyon hacimlerinde ve kaynak kullanımında işbirliklerinin oluşturulması, çevresel bozulma yaratan alanlardan desteklerin kaldırılması, altyapı, inovasyon, enerji verimliliği vb. gibi alanlarda politikalar geliştirilmesi, temiz üretim teknolojilerini kullanarak maksimum düzeyde enerji üretimi sağlanması, enerji verimliliği seviyesini en yüksek seviyelere çıkarmak için teşviklerin oluşturulması, toprak-arazi kullanımında optimum verimlilik sağlanması, su kaynakları ve orman arazilerin korunması, ulaşım faaliyetlerin geliştirilmesi gerekliliğini göstermektedir. Ek olarak sonuçlar, çalışma grubunda bulunan ülkelerin komşuluk ilişkilerini gözleterek çevresel bozulmaları önlenmesi/azaltılması için yeni veya geliştirilmiş süreçleri, teknikleri, uygulamaları ve sistemleri içererek maliyetlerin azalmasına ve kalitenin sağlanmasına neden olan eko-inovasyon uygulamalarının benimsemesiyle birlikte çevresel alanda sürdürülebilirlik sağlayabileceğini göstermektedir. Bu çerçevede sonuçlar, herhangi bir ülkenin eko-inovasyon politikalarını benimsemesi durumunda, komşu ülkelerinde kendi ülkelerinde benzer politikaları benimseyerek uygulayabileceğini ifade etmektedir. Aksi takdirde, belirli bir konumun, çevresel sürdürülebilirlik yerine ekonomik kalkınma hedeflerini gerçekleştirmediği durumunda, komşu ülkelerin ekonomik kalkınma açısından rekabet edebilmek için benzer şekilde çevresel düzenlemeleri gevşetmesi muhtemel olabilmektedir. Bu nedenle, çalışma grubunda bulunan ülkelerin, çevresel düzenleme politikalarını gözden geçirerek ve bölgesel müşterek oluşturarak çevresel sürdürülebilirlik normlarına uygun bir şekilde düzenlemesi gerekmektedir.

Çalışma kapsamında kullanılan ülkelerin birçoğunda, (Almanya, Avusturya, Belçika, Bulgaristan, Çek Cumhuriyeti, Danimarka, Estonya, Finlandiya, Fransa, Hırvatistan, Hollanda, İngiltere, İrlanda, İspanya, İsveç, İtalya, Letonya, Litvanya, Lüksemburg, Macaristan, Polonya, Portekiz, Romanya, Slovakya, Slovenya ve Yunanistan) ekonomik, çevresel ve sosyal performans hakkında bütüncül bir bakış açısı sağlanabilmesi için eko-inovasyon endeksi hesaplanmaktadır. Eko-inovasyon endeksinin, eko-inovasyon performansını değerlendirmek ve göstermek için bir araç olarak kullanılmasının yanı sıra eko-inovasyon girdileri, eko-inovasyon faaliyetleri, eko-inovasyon çıktıları, kaynak verimliliği sonuçları ve sosyo-ekonomik sonuçlar olmak üzere beş tematik alanda gruplandırılarak farklı çıkarımlarda bulunulmasının sağlanması amaçlanmaktadır. Eko-inovasyon performansı ile birlikte ekonomilerin güçlü ve zayıf yönleri irdelenebilmektedir. Eko-inovasyon faaliyetlerinin uygulanabilirliği ve kazanımları Avrupa Birliği ve çeşitli yabancı kuruluşlar tarafından incelenmekteyken, Türkiye’de bu konu kapsamında yeterli ve gerekli incelemeler yapılamamaktadır. Türkiye’nin eko-inovasyon faaliyetleri bakımından

nerede yer aldığının, eksik yanlarının ortaya çıkartılarak geliştirilmesi için neler yapılması gerekliliğinin ve küreselleşen-çevreci yaklaşımların ön plana çıktığı piyasalarda rekabet gücünün ortaya konulmasında sıkıntılar yaşanmaktadır. Bu kapsamda, Türkiye’de ilgili çevresel mevzuat eksiklikleri belirlenerek, eko-inovasyon faaliyetlerinin düzeyinin bölgesel düzeyde ortaya çıkarılması gerekmektedir. Bu sayede, Türkiye için ekonomik, çevresel ve sosyal performans hakkında bütüncül bir bakış açısı sağlaması muhtemel olabilmektedir.

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Genel Muhasebe Dersi Alan Yabancı Öğrenciler Açısından Karşılaşılan Sıkıntılar: Bir Devlet Üniversitesi Örneği

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Özet: Günümüzde dünyadaki birçok ülkedeki farklı kültürler, ekonomik koşullar ve savaş gibi olumsuz durumlar, daha iyi ve kaliteli bir eğitim almak isteyen öğrencilerin uluslararası göç sebeplerinden biri olabilmektedir. Yabancı bir ülkeye göç ederek eğitim almak beraberinde birçok sorunu da getirebilmektedir. Bu sorunların başında, eğitim sistemi, kültür, dil, ayrımcılık vb. gelmektedir. Bununla birlikte yabancı öğrencilerin okudukları bölümlerin müfredat programlarındaki bazı temel ve zorunlu dersleri geçmede sıkıntılar yaşadıkları da görülmektedir. Türkiye'deki üniversitelerin iktisadi ve idari bilimler fakültelerinde zorunlu derslerden biri olan Genel Muhasebe (Finansal Muhasebe) dersinde de özellikle yeterli akademik Türkçe bilgisine sahip olmayan öğrenciler derste geçen kavramları anlamakta güçlük çekmekte ve akademik başarı düzeyleri de düşük kalmaktadır.

Çalışmada, bir devlet üniversitesinde iktisadi ve idari bilimler fakültesinde öğrenim görmektedir olup, fakültede yer alan bölümlerin tamamında birinci dönem zorunlu derslerinden biri olan Genel Muhasebe dersini en az bir kez almış yabancı öğrenciler açısından üniversitede ve şehirde karşılaştıkları sıkıntıların değerlendirilmesi amaçlanmaktadır. Araştırmaya katılan öğrencilerden anket yöntemiyle elde edilen veriler IBM SPSS 26 istatistik programı kullanılarak değerlendirilmiştir. Yabancı öğrencilerin cinsiyetleri, yaşları, uyrukları, Genel Muhasebe dersi harf notları, Genel Muhasebe dersini tekrar etme sayıları, Genel Muhasebe dersinden geçme/kalma durumları değişkenleri ile karşılaştıkları sıkıntılar test edilmiştir. Test sonucunda belirlenen değişkenler ile yabancı öğrencilerin karşılaştıkları sıkıntılar açısından aralarında kısmi farklılıklar olduğu tespit edilmiştir.

Anahtar Kelimeler: Genel Muhasebe Dersi, Yabancı Uyruklu Öğrenci, Öğrenci Sorunları

Problems Encountered by Foreign Students Taking General Accounting Course: A State University Example

Abstract: Today, different cultures, economic conditions and adverse situations such as war in many countries in the world can be one of the reasons for international migration of students who want to receive a better and higher quality education. Getting an education by immigrating to a foreign country can bring many problems with it. At the beginning of these problems, education system, culture, language, discrimination etc. is coming. In the General Accounting (Financial Accounting) course, which is one of the compulsory courses in the economic and administrative sciences faculties of universities in Turkey, students who do not have sufficient academic Turkish knowledge have difficulty in understanding the concepts in the course and their academic success levels remain low.

In the study, it is aimed to evaluate the problems they encounter in the university and in the city for foreign students who are studying at the faculty of economics and administrative sciences at a state university and have taken the General Accounting course at least once, which is one of the first semester compulsory courses of the departments. The data obtained from the students participating in the research by the questionnaire method were evaluated using the IBM SPSS 26 statistical program. The problems faced by foreign students were tested with variables such as gender, age, nationality, letter grades of General Accounting course, number of repeating General Accounting course, and passing/failure status of General Accounting course. It has been determined that there are partial differences between the variables determined as a result of the test and the problems encountered by foreign students

Key words: General Accounting Course, Foreign Student, Student Problems

1.GİRİŞ

Üniversitelerde yabancı uyruklu öğrenci kabulü her geçen dönem hızlı bir artış göstermektedir. Öğrencilerin okudukları bölümlerin öncelikle temel ve zorunlu derslerini geçmede sıkıntılar yaşadıkları görülmektedir. İktisadi ve İdari Bilimler Fakültelerinde okutulan temel ve zorunlu derslerden biri olan Genel Muhasebe dersinde de, derste geçen kavramları ve jargonları anlayabilecek düzeyde Türkçe bilgisine sahip olmayan öğrenciler dersi anlamakta güçlük çekmekte ve akademik başarı düzeyleri düşük kalmaktadır.

Çalışmada, bir devlet üniversitesinde iktisadi ve idari bilimler fakültesinde (İİBF) öğrenim görmektedir olup, fakültede yer alan bölümlerin birinci dönem zorunlu derslerinden biri olan Genel Muhasebe dersini en az bir kez almış yabancı öğrenciler açısından üniversitede ve şehirde karşılaştıkları sıkıntıların değerlendirilmesi amaçlanmaktadır. Araştırmaya katılan öğrencilerden anket yöntemiyle elde edilen veriler IBM SPSS 26 istatistik

programı kullanılarak değerlendirilmiştir. Yabancı öğrencilerin cinsiyetleri, yaşları, uyrukları, Genel Muhasebe dersi harf notları, açısından kısmen istatistiki farklılıklar olduğu tespit edilmiştir. Öğrencilerin büyük çoğunluğunun Genel Muhasebe dersinin uzaktan eğitimle verilmemesi görüşünde oldukları ve dersi veren öğretim üyeleri ile iyi iletişim kurabildiklerini beyan ettikleri tespit edilmiştir.

2. LİTERATÜR

Güçlü (1996), çalışmada Pittsburgh Üniversitesi'nde lisansüstü eğitim almakta olan uluslararası öğrencilerin uyum sağlayabilme sorunları ve bunların çözümü için kendi geliştirdikleri yöntemler araştırılmıştır. Uluslararası eğitim gören bu öğrencilerin yaşadıkları sıkıntılar içinde en fazla İngilizce dil bilgisi ve maddi konular belirtilmiştir. Vatan hasreti ve yalnızlık hislerini giderebilmek için ailelerine sık sık mektup yazdıkları, telefon ettikleri ve bulundukları üniversitede yakın arkadaşlıklar kurmaya çalıştıkları belirtilmiştir.

Allaberdiyev (2007), çalışması bir tez çalışması olup, Türki devletlerden yükseköğrenim amaçlı olarak Türkiye'ye gelen öğrencilerin karşı karşıya kaldıkları sorunlar araştırılmıştır. Eğitim sistemi, kültürel yaşam, Türkçeyi yeterli konuşamamak ve ekonomik sebepler gibi çeşitli konuların öğrencilerin okudukları üniversiteye ve bulundukları çevre koşullarına uyumlarını zorlaştırdığı belirtilmektedir. Ayrıca bu durumların da akademik başarılarını da etkilediği çalışmada önemli olarak vurgulanmıştır.

Yiğit (2012), çalışmada uluslararası öğrencilerin psikolojik ihtiyaçlarını belirlediği bazı değişkenler açısından incelemiştir. Analiz sonucunda öğrencilerin yaşlarına ve bulunan sınıflarına, annelerinin eğitim düzeyleriyle özerklik ve psikolojik temel ihtiyaçları bakımından aralarına anlamlı farklılık bulunduğu belirtilmiştir.

Özçetin (2013) çalışmasının amacı Türkiye'de eğitim gören uluslararası öğrencilerin yaşadıkları sıkıntı ve uyum sorunlarının incelenmesidir. Bursa'da iki yüz yirmi bir öğrenciye anket uygulanmıştır. Öğrencilerin genelinin Orta Asya ve Orta Doğu ülkelerinden geldikleri ve neredeyse tamamının Türkiye'de aldıkları eğitim için memnun oldukları, arkadaşlık kurma, Türk toplum ve kültürüne uyum sağlamada fazla sıkıntı yaşamadıkları, en çok sıkıntı yaşadıkları konuları ise; barınma, Türkçe konuşma, kültürel farklılık ve yalnızlık olduğu belirtilmektedir.

Şahin ve Demirtaş (2014), çalışmalarında İnönü Üniversitesindeki yabancı uyruklu öğrencilerin akademik başarı durumlarını ve yaşadıkları sorunları belirlemek üzere betimsel araştırma yöntemi kullanarak öğrencilerden veri toplamışlardır. Araştırmada genel olarak yabancı uyruklu öğrencilerin akademik başarısının çok düşük olduğu saptanmıştır. Öğrencilerin önde gelen sorunlarının daha çok ekonomik olup; okul harçları, yemek kartı ve beslenme, ulaşım, dil ve barınma gibi konularda yoğunlaştığı belirlenmiştir.

Gündüzyeli (2015), çalışmada Beykent Üniversitesi'nde doksandokuz yabancı öğrenci üzerinde yaptığı anket uygulamasının amacı, Türkiye'de eğitim gören yabancı öğrencilerin üniversite tercihi sebeplerini ortaya koymak olup, araştırma sonunda öğrencilerin aldıkları tavsiyelerin Türkiye'de okumaya karar verdikleri, katkı paylarının uygun olmasının, yaşam koşullarının, iş bulma olanaklarının, kampüs imkânlarının, üniversite prestijinin, bölümün, lokasyonun ve burs imkânlarının üniversitenin seçiminde önemli olduğu belirtilmektedir.

Suluo (2016) çalışmada, Darüselam Üniversitesi İşletme Bölümü'nde yabancı öğrencilerin Muhasebeye Giriş dersine uyum sürecini kolaylaştırmada dil faktörünü incelemek amacıyla odak grup görüşmeleri öğrencilerden veri toplamış ve tematik olarak analiz etmiştir. Analiz sonucunda genel olarak Muhasebeye Giriş dersinin zorlayıcı olarak görüldüğü ve bu sebeple de derste başarılı olmak için öğrenciler arasında işbirliği yapmanın en iyi çalışma stratejisi olarak görüldüğü belirtilmektedir. Çalışmada İngilizce yeterliliğinin yabancı öğrencilerin uyumunu etkilediği tespit edilse de, etkisinin nispeten daha az önemli olduğu belirtilmektedir. Çalışmada İngilizce konuşulmayan bir ülkede yabancı öğrencilerin uyum sürecinde yerel konuşulan dilin önemli olduğu belirtilmektedir.

Sungur ve diğ.(2016), çalışmalarında yabancı uyruklu öğrencilerin sosyal akademik uyumları ile yaşam doyumlarını inceleyerek bunlara etki eden faktörlerin tespiti amacıyla Düzce Üniversitesinde eğitim görmekte olan 72 öğrenci üzerinde bir anket çalışması yapmıştır. Yabancı uyruklu öğrencilerin akademik başarılarının artması için öncelikle Türkçe dil eğitimi ve maddi konular üzerinde çalışmalar yapılmasının önemi belirtilmektedir.

Han (2016), tez çalışmada Sakarya Üniversitesinde eğitim alan yabancı öğrencilerin sosyal dışlanmışlık algı düzeylerinin tespiti için üç yüz öğrenci ile anket uygulamıştır. Sonuçlara göre; öğrencilerin sosyal dışlanmışlık algılarını yedi farklı yaşam alanı olarak ifade etmişlerdir. Bu sosyal dışlanma alanlarını ise; sağlık/sosyal güvenlik, eğitim olanaklarından faydalanma, ikamet/barınma olanakları, kültürel-sportif-sanatsal ortamlardan faydalanma alanı, sosyal faaliyetler alanı, sağlıklı beslenme alanı ve zorunlu tüketimler yaşam alanıdır.

Üniversiteye Afrika, Ortadoğu ve Türki Cumhuriyetlerden geldikleri belirtilen araştırmada sosyal dışlanma düzeylerinin, öğrencilerin geldikleri ülkeye bağlı olarak farklılaştığı analiz sonuçlarında ifade edilmektedir.

Maleki (2017), çalışmasında Ondokuz Mayıs Üniversitesi'nde eğitim alan yüz doksan yabancı uyruklu öğrenci üzerinde, destek, yalnızlık ve kaygı algılarının tespiti amacıyla anket uygulayarak araştırma sonucunda öğrencilerin aldıkları eğitimden memnun olmadıklarını belirten yabancı öğrencilerin yalnızlık ölçeği ile ilgili puanlama ortalamasının daha yüksek olduğunu belirtmektedir. Yabancı öğrencilerin sosyal yönlü destek puanlarının arttıkça yalnızlık puanlarının azaldığı ve kaygı durumlarının da artış gösterdiği belirtilmiştir.

Çelik (2019), çalışmasında Sakarya Üniversitesinde okumakta olan 20 yabancı, 20 Türk öğrenci üzerinde fenomenoloji deseni ile uyguladığı mülakat sonucunda Türk öğrencilerle yabancı öğrencilerin kampüs ortamında ortak kullanım alanlarındaki iletişimin, kültürel temasın anlaşılması ve betimlenmesi amaçlıdır. Öğrencilerin eğitimle ilgili konularda birbirleriyle ilgili algı farklılıkları olduğu belirtilmektedir. Yabancı uyruklu öğrencilerin Türkiye'ye gelme nedenleri eğitim olup, iyi bir eğitim için sıkıntıları göze aldıklarını belirtmişlerdir. Yabancı uyruklu öğrencilerin anlamaya, Türk öğrencilerin ise ezbere yöneldiği belirtilmektedir. Özellikle öğretim elemanlarının davranışlarından memnun oldukları belirtilmiştir. Türk öğrenciler yabancı öğrencilerin Türkiye'de eğitim görmesi ile kültürlerin birbiriyle kaynaşacağı yönünde olumlu gördüklerini belirtmişlerdir.

Topal ve Tauscher (2020), araştırmalarında Türkiye'de yükseköğretim kurumlarında öğrenim gören yabancı öğrencilerin sıkıntı ve sorunlarıyla ilgili literatür çalışması ile ayrıca Sakarya Üniversitesi'nde okuyan yabancı öğrencilerden anket yöntemiyle topladıkları verileri analiz ederek, öğrencilerin akademik sorunları ve sosyal yaşam sıkıntıları açısından incelemişlerdir. Öğrencilerin yaşadıkları sıkıntılar; uyum sağlama, iletişim, nitelsiz eğitim, maddi konular ve ülke hasreti başlıkları altında belirtilmektedir. Sonuç olarak, literatür incelemesinde karşılaşılan problemlerin analiz sonucuyla benzer olduğu belirtilmektedir.

Eynullayeva (2020), çalışmasında Samsun'da eğitim alan yabancı öğrencilerin akademik ve kültürel uyum süreçleri ve akademik başarılarıyla ilişkisi incelenmiştir. Araştırmada altı yüz yetmiş uluslararası öğrenci verilerine göre Türk kültürüne uyum sağlayabilme ile öğrencilerin eğitim düzeyi arasında anlamlı ilişki olduğu belirtilmiştir. Yabancı uyruklu öğrencilerin akademik başarı sıralarına göre farklı düşüncelerde oldukları tespit edilmiştir. Öğrenciler için en önemli problemin dil problemi olduğu ve argo kelimeleri anlama ve telaffuz konularında zorluklar yaşadıkları belirtilmiştir.

Mardaliyeva (2022), çalışmasında yabancı uyruklu öğrencilerin Türkiye'de eğitim ve yaşam tecrübeleri araştırmak, uyum sorunlarını ve uyum sağlamalarını etkileyen unsurları tespit etmek amacıyla üç yüz elli yedi öğrenci üzerinde yapılan anket verileriyle elde ettiği sonuçlara göre; akademik adaptasyon ve eğitim düzeyi arasında istatistiki fark olduğu tespit edilmiştir. Akademik adaptasyon ile yabancı öğrencilerin Türkiye'yi seçme sebepleri arasında istatistiki fark tespit edilememiştir.

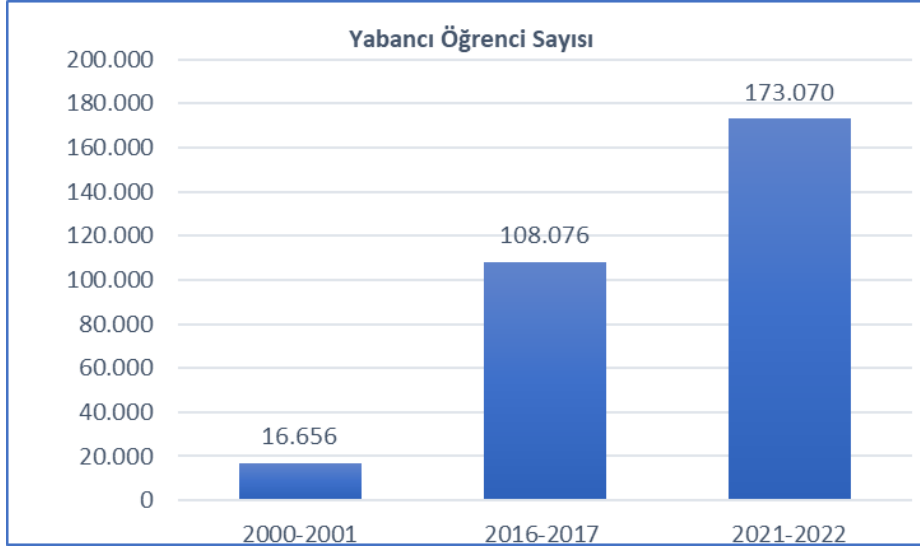
Öztırak ve Karaşin (2022), çalışmalarında Türkiye'ye eğitim amacıyla gelen yabancı öğrencilerin üniversitelerinden memnuniyet durumları ve tavsiye etme niyetleri arasında ilişki olup olmadığını test etmek amacıyla Kütahya Dumlupınar Üniversitesi'nde eğitim gören üç yüz beş öğrenciye anket uygulanmıştır. Yapılan analiz sonucunda öğrencilerin memnuniyet düzeyleri ile okudukları üniversiteyi tavsiye etme niyetleri arasında pozitif yönde bir ilişki olduğunu belirlemişlerdir.

3.YÖNTEM

3.1. Araştırmanın Amacı ve Önemi

Yapılan çalışmanın amacı; İktisadi ve İdari Bilimler Fakültesi (İİBF)'nde öğrenim gören ve temel zorunlu derslerden biri olan Genel Muhasebe dersine kalsın veya geçsin en az bir kere girmiş olan yabancı öğrencilerin öğrenim gördüğü üniversite ve şehirde karşılaştıkları sıkıntıları; öğrencilerin cinsiyetleri, yaşları, uyrukları, Genel Muhasebe dersi harf notları, Genel Muhasebe dersini tekrar etme sayıları, Genel Muhasebe dersinden geçme/kalma durumları değişkenleri açısından değerlendirmektir.

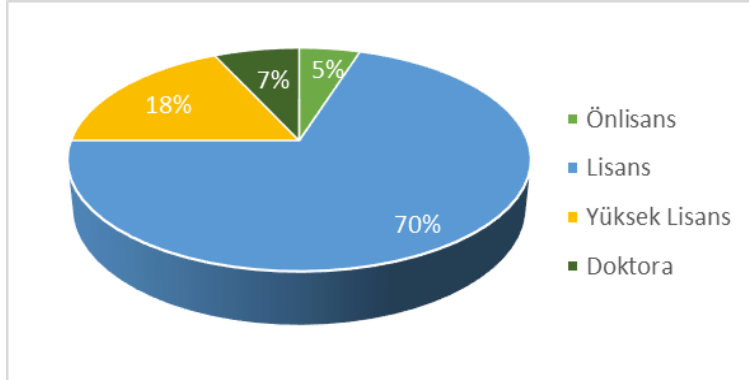
Şekil 1: Yükseköğrenime Kayıtlı Yabancı Öğrenci Sayıları



Kaynak: Yükseköğretim Bilgi Yönetim Sistemi, (2022)

Şekil 1’de görülen 2022 yılı Yükseköğretim istatistiklerine bakıldığında 2021-2022 eğitim döneminde Türkiye’de yükseköğretim kurumlarına kayıtlı yabancı uyruklu öğrenci sayısının 173.070 öğrenci olduğu görülmektedir. 2016-2017 eğitim döneminde bu sayı 108.076 öğrenci, 200-2001 eğitim döneminde ise 16.656 öğrencidir. 21 yılda yabancı öğrenci sayısında yaklaşık 10 kat artış olduğu görülmektedir.

Şekil 2: Yükseköğrenime Kayıtlı Öğrencilerin Eğitim Türlerine Göre Dağılımı (2022)



Kaynak: Yükseköğretim Bilgi Yönetim Sistemi, (2022)

Şekil 2’de 2022 yılı Yükseköğretim istatistiklerine göre Türkiye’de kayıtlı olan yabancı uyruklu öğrencilerin kayıtlı oldukları eğitim türleri verilmektedir. Öğrencilerin % 70’i lisans türünde eğitim alırken, % 18’i yüksek lisans, % 7’si doktora ve % 5’i de ön lisans türünde eğitim almaktadır.

Yapılan literatür incelemesinde yabancı uyruklu öğrenci sayısındaki bu artış önemli olup, öğrencilerin Türkiye’de okudukları üniversite ve yaşadıkları şehirde yaşadıkları sıkıntılarla ilgili çok fazla çalışma yapılmadığı tespit edilmiştir. Yapılan az sayıdaki çalışmada da yabancı öğrencilerin Türkiye’de okudukları süre içerisinde bulundukları şehir, üniversite, barınma koşulları ve kültürel olanaklar ya da imkansızlıklar ve Türkçe bilgisi gibi konularda yaşadıkları sıkıntıların çok az incelendiğini göstermiştir. Yükseköğretim kurumlarında eğitim alan yabancı öğrencilerin yaşadıkları sıkıntıların tespit edilerek, ilgili paydaşlar ile birlikte bunlara çözüm yollarının geliştirilmesi gerekmektedir. Öğrencilerin okudukları bölümlerde aldıkları derslerde de farklı sıkıntılarla karşılaştıkları dikkate alındığında, yapılacak çalışmalarda öğrencilerin yaşadıkları sıkıntıların bu açıdan da değerlendirilmesi gerektiği ve üniversitelerin bu öğrencilerinin sıkıntılarının giderilmesine fayda sağlayacağı söylenebilir.

3.2. Veri Toplama Yöntemi ve Test Edilen Hipotezler

Araştırmada nicel bir araştırma olup, yüz yüze anket yöntemi ile veriler toplanmıştır. Elde edilen veriler IBM SPSS 26 istatistik programı ile analiz edilmiştir. Araştırmanın evrenini Bilecik Şeyh Edebali Üniversitesi İİBF tüm bölümlerinde 2021-2022 eğitim-öğretim güz dönemini tamamlamış olan yabancı öğrenciler oluşturmaktadır. Anketin uygulanmasından önce Üniversite Etik Kurulu'ndan etik kurul onayı alınmıştır.

Çalışmada analizi yapılan anket sorularından demografik sorular yedi adet, öğrencilerin yaşayabilecekleri genel sıkıntılarla ilgili olan sorular ise 12 adettir. Bu sorular için (1.Hiçbir Zaman, 2.Nadiren, 3.Bazen, 4.Çoğu Zaman, 5.Her Zaman) şeklindeki ölçek kullanılmıştır. Bu çalışmada test edilen araştırma hipotezleri aşağıdaki gibidir;

- H1: Cinsiyete göre yabancı öğrencilerin yaşadığı sıkıntılar farklıdır.
- H2: Yaşa göre yabancı öğrencilerin yaşadığı sıkıntılar farklıdır.
- H3: Uyruklarına göre yabancı öğrencilerin yaşadıkları sıkıntılar farklıdır.
- H4: Genel muhasebe dersi harf notlarına göre yabancı öğrencilerin yaşadıkları sıkıntılar farklıdır.
- H5: Genel Muhasebe dersinden geçenler ve kalanlar açısından yabancı öğrencilerin yaşadıkları sıkıntılar farklıdır.
- H6: Sınava çalışma süresine göre yabancı öğrencilerin yaşadıkları sıkıntılar farklıdır.
- H7: Genel Muhasebe Dersini Tekrar Etme Sayısına göre yabancı öğrencilerin yaşadıkları sıkıntılar farklıdır.

3.3. Araştırmanın Güvenilirlik Düzeyi

Araştırmada yer alan ölçekli sorular için Alpha güvenilirlik düzeyi değeri 0,825 olarak tespit edilmiş olup, sosyal bilimler alanında yüksek bir değer olarak kabul edilmektedir. Anketin uygulandığı dönemde (Şubat-Mart 2022) kayıtlı öğrenci sayısı beş yüz dokuzdur. Güvenilirlik düzeyi %95 için örnek büyüklüğü üç yüz kırk yedi öğrenci olarak (Coşkun vd., 2015: 137) belirlenmiştir. Değerlendirmeye uygun olarak görülen iki yüz yirmi öğrencinin anketleri analize dahil edilmiştir.

3.4. Araştırmanın Varsayım ve Sınırlılıkları

Anketi cevaplayan öğrencilerin soruları gönüllü olarak cevapladıkları ve soruları aynı şekilde algıladıkları varsayılmıştır. Araştırma kapsamına yalnızca İİBF bölümlerinde Genel Muhasebe dersine katılmış olan yabancı öğrenciler girmektedir. Araştırma 2022 bahar döneminde aktif olarak derslere katılan yabancı öğrenciler ile sınırlıdır.

3.5. Araştırmanın Frekans Sonuçları

Öğrencilere sorulan demografik sorulara verilen cevapların dağılımları aşağıda Tablo 1-7 arasında verilmektedir. Cinsiyet dağılımına göre katılımcıların % 25,5'i kadın, % 74,5'i erkektir. Üniversiteye gelen yabancı uyruklu öğrencilerin çoğunluğunun erkek olmasından ötürü ankete katılımda kadın oranı düşük görülsede toplam kadın öğrenci sayısı açısından yüksek bir katılım sağlandığı söylenebilir.

Tablo 1: Cinsiyete Göre Dağılım

Cinsiyet	N	%
Kadın	38	25,5
Erkek	111	74,5
Toplam	149	100,0

Tablo 2'de yaş gruplarına göre katılımcı öğrencilerin dağılımı verilmektedir. Ankete katılan öğrencilerin yaklaşık % 50 si 17-20 yaş arasındadır. Yaş sorusunda öğrencilerin % 17,4'ü cevap vermedikleri görülmektedir.

Tablo 2: Yaş Gruplarına Göre Dağılım

Yaş Grubu	N	%
17-20 yaş arası	74	49,7
21 ve üzeri	49	32,9
Cevapsız	26	17,4
Toplam	149	100,0

Tablo 3: Yabancı Öğrencilerin Uyruklarına Göre Dağılımları

Öğrencilerin Uyrukları	N	%
Azerbaycan	72	48,3
Çad	23	15,4
Kazakistan	15	10,1
Mısır	6	4,0
Somali	6	4,0
Diğer Ülkeler	27	18,1
Toplam	149	100,0

Tablo 3'te ankete katılan öğrencilerin uyruklarına göre dağılımı verilmektedir. Öğrencilerin yaklaşık yarısı Azerbaycan uyrukludur. İkinci sırada % 15,4 oranda Çad uyruklu öğrenci olduğu görülmektedir. Diğer ülke grubunda 37 farklı ülkeden gelen öğrenci yer almakta olup, % 18,1 orandadır.

Tablo 4: Yabancı Öğrencilerin Genel Muhasebe Dersi Harf Notlarına Göre Dağılımları

Öğrencilerin Aldıkları Harf Notları	N	%
A-B Grubu	26	17,4
C ve D Arası	63	42,3
FF	53	35,6
Cevapsız	7	4,7
Toplam	149	100,0

Tablo 4'te ankete katılan öğrencilerin Genel Muhasebe dersinden en son aldıkları harf notları dağılımı verilmektedir. Öğrencilerin % 17,4'ü A ve B harf not aralıklarından not alarak dersi geçtiklerini beyan etmiştir. Öğrencilerin % 42,3'ü C ve D harf not aralıklarından not alarak dersi geçtiklerini beyan etmişlerdir. Öğrencilerin % 35,6'sı ise dersten henüz geçememişlerdir.

Tablo 5: Yabancı Öğrencilerin Genel Muhasebe Dersi Tekrar Etme Durumu

Dersi Tekrar Etme	N	%
Tek seferde	54	36,2
1-4 kez arasında	46	30,9
Kalanlar	49	32,9
Toplam	149	100,0

Tablo 5'te yabancı öğrencilerin Genel Muhasebe dersini kaç kez tekrar ettiği ile ilgili soruya verdikleri cevaplar görülmektedir. Tek seferde dersi geçenlerin oranı % 36,2, 1 ve 4 arasında tekrar edenler % 30,9 olarak görülmektedir.

Tablo 6' da yabancı öğrencilerin Genel Muhasebe dersinden geçme durumları verilmektedir. Öğrencilerin % 59,7'si geçer not aldıklarını belirtmiştir.

Tablo 6: Yabancı Öğrencilerin Dersi Geçme/Kalma Durumu

Geçenler/Kalanlar	N	%
Geçer Not Alanlar	89	59,7
FF ile Kalanlar	53	35,6
Cevapsız	7	4,7
Toplam	149	100,0

Tablo 7: Yabancı Uyruklu Öğrencilerin Genel Muhasebe Dersi Sınavına Çalışma Sürelerine Göre Dağılımları

Sınava çalışma Süreleri	N	%
1-10 saat	84	56,4
11 saat ve üzeri	63	42,3
Cevapsız	2	1,3
Toplam	149	100,0

Tablo 7'de yabancı öğrencilerin Genel Muhasebe Dersi sınavı için çalışma süreleri verilmektedir. Öğrencilerin % 56,4'ü 1 ve 10 saat arasında sınava çalıştığını, % 42,3'ü 11 saatten fazla çalıştığını belirtmiştir.

Tablo 8: Yabancı Öğrencilerin Yaşadıkları Sıkıntı Konuları Frekans Sonuçları

Sıkıntı Konuları	Hiçbir Zaman	Nadiren	Bazen	Çoğu Zaman	Her Zaman	Ortalama
Öğretim Üyelerinin Davranışları	58,4	21,5	13,4	2,7	3,4	1,70
Sosyal / kültürel şartlar	49,7	23,5	18,1	3,4	4,0	1,87
Ayrımcılık	45,6	20,1	25,5	5,4	2,0	1,97
Konaklama koşulları	42,3	25,5	20,1	6,0	3,4	2,00
Kampüs Şartları	37,6	32,2	17,4	8,1	2,0	2,02
Ulaşım Sorunu	43,6	22,1	21,5	4,0	6,7	2,06
Halkın davranışları	38,3	20,8	30,2	5,4	4,7	2,17
Dil sorunu	30,2	28,9	25,5	5,4	9,4	2,34
Sınav sistemi	24,8	24,2	30,9	12,1	6,0	2,49
Şehrin pahalı olması	26,8	22,8	24,8	14,8	9,4	2,56
Stres	23,5	18,1	38,3	14,1	5,4	2,59
Sınavların zorluğu	6,7	20,8	41,6	24,2	5,4	3,01

Tablo 8’de yabancı öğrencilerin yaşadıkları sıkıntı konuları frekans sonuçları verilmektedir. En düşük ortalama değeri (1,70) ile öğretim üyelerinin davranışları ile ilgili sıkıntı yaşanıp yaşanmadığı maddesine verilmiştir. Öğrencilerin çoğunluğu dersin öğretim üyeleriyle sıkıntı konusuna nadirene yakın cevaplar vermiştir. En yüksek ortalama (3,01) değeri ile sınavların zorluğu ile ilgili sıkıntı yaşanıp yaşanmadığı konusuna verilmiştir. Öğrencilerin sınavlarla ilgili bazen sıkıntı yaşadıklarını belirtmişlerdir. Öğrencilerin çoğunluğunun belirtilen sıkıntılarla ilgili olarak nadiren sıkıntı yaşadıklarını belirttikleri görülmektedir.

Yabancı öğrencilerin yaşadıklarını belirttikleri sıkıntı konuları ile ilgili olarak frekans ve ortalama değerleri ile yorum yapıldığında bu sonuçlar ortaya çıkmakla birlikte, çalışmada test edilen bazı değişkenler açısından farklı sonuçlar da elde edilmiştir.

3.6. Araştırmanın Hipotez Testleri Sonuçları

Analizde kullanılan testlerden biri; bağımsız olan iki grup ve bir bağımlı değişken arasında istatistiki olarak ilişki olup olmadığının tespitinde kullanılan Independent Sample T-testidir. Kullanılan diğer test ise One-Way Anova testidir. Karşılaştırılacak grupların arasında istatistiki anlamlı bir ilişkinin olup olmadığı ve bu ilişkinin hangi yönde olduğunun tespit edilmesinde ise çalışmada Scheffe testi kullanılmıştır (Coşkun vd., 2015: 188-201).

Tablo 9: Yabancı Öğrencilerin Türkiye’de Eğitim Alırken Sıkıntı Yaşadıkları Konuların Cinsiyet Değişkenine Göre Independent Sample T-Testi Sonuçları

Konular	Cinsiyet	N	$\bar{x}$	SS	p	sig.(2-tailed)
Dil sorunu	Kadın	37	2,70	1,222	0,764	0,041
	Erkek	111	2,23	1,219		
Ayrımcılık	Kadın	37	2,16	1,041	0,900	0,195
	Erkek	110	1,90	1,066		
Sınavların zorluğu	Kadın	36	2,81	0,920	0,937	0,155
	Erkek	111	3,07	0,988		
Stres	Kadın	37	2,70	1,127	0,512	0,512

	Erkek	111	2,56	1,165		0,507
Sınav sistemi	Kadın	35	2,43	1,119		0,711
	Erkek	111	2,51	1,197	0,670	0,702
Kampüs Şartları	Kadın	36	2,06	1,094		0,818
	Erkek	109	2,01	1,032	0,998	0,824
Konaklama koşulları	Kadın	37	1,97	1,118		0,863
	Erkek	108	2,01	1,098	0,819	0,865
Sosyal / kültürel şartlar	Kadın	37	1,81	1,076		0,700
	Erkek	110	1,89	1,095	0,613	0,698
Ulaşım Sorunu	Kadın	37	2,16	1,214		0,559
	Erkek	109	2,03	1,205	0,964	0,561
Şehrin pahalı olması	Kadın	37	2,43	1,119		0,474
	Erkek	110	2,61	1,348	0,049	0,434
Halkın davranışları	Kadın	37	2,62	1,139		0,005
	Erkek	111	2,02	1,112	0,825	0,007
Öğretim Üyelerinin Davranışları	Kadın	37	1,62	0,953		0,581
	Erkek	111	1,73	1,053	0,553	0,563

*Aralarında fark olan gruplar, $p \leq 0,05$

“H1: Cinsiyete göre yabancı öğrencilerin yaşadığı sıkıntılar farklıdır” şeklindeki hipotezin test sonuçları Tablo 9’da görülmektedir. “*Dil Sorunu*” sıkıntı başlığı ile ilgili olarak kadın ve erkek öğrenciler arasında istatistiki fark olduğu tespit edilmiştir. Ortalama değerlerine ($\bar{x}$) de bakıldığında kadın öğrencilerin erkek öğrencilere kıyasla dil sorunu sıkıntısını bazene yakın ölçekte yaşadıkları görülmektedir. “*Halkın davranışları*” sıkıntı başlığı ile ilgili olarak da yine $p \leq 0,05$ sonucu ile kadın ve erkek öğrenciler arasında istatistiki fark olduğu tespit edilmiştir. Bu soruda da yine kadın öğrencilerin bazene yakın cevapları daha fazla verdikleri ortalama değerlerinden de görülmektedir. Öğrencilere sorulan 12 adet konu başlığından sadece iki tanesinde istatistiki fark tespit edilmiş olup H1 hipotezi bu iki soru için kabul edilmiştir. Soruların 10 tanesinde de kadın ve erkek öğrenciler arasında istatistiki fark olmadığı tespit edilmiştir.

Tablo 10: Yabancı Öğrencilerin Türkiye’de Eğitim Alırken Sıkıntı Yaşadıkları Konuların Yaş Değişkenine Göre Independent Sample T-Testi Sonuçları

Konular	Yaş	N	$\bar{x}$	SS	p	sig.(2-tailed)
Dil sorunu	17-20	74	2,04	1,091	0,018	0,001
	21 ve üzeri	49	2,82	1,409		0,002*
Ayrımcılık	17-20	74	1,91	0,939	0,004	0,137
	21 ve üzeri	49	2,20	1,274		0,163
Sınavların zorluğu	17-20	74	3,19	0,917	0,694	0,045*
	21 ve üzeri	49	2,84	0,986		0,049
Stres	17-20	74	2,81	1,167	0,661	0,092
	21 ve üzeri	49	2,45	1,138		0,090
Sınav sistemi	17-20	74	2,55	1,148	0,315	0,629
	21 ve üzeri	47	2,45	1,248		0,636
Kampüs Şartları	17-20	73	2,10	1,108	0,921	0,430
	21 ve üzeri	47	1,94	1,030		0,423
Konaklama koşulları	17-20	74	2,05	1,181	0,310	0,501
	21 ve üzeri	47	1,91	0,974		0,483

Sosyal / kültürel şartlar	17-20	74	1,86	1,114	0,499	0,558
	21 ve üzeri	48	1,75	0,957		0,545
Ulaşım Sorunu	17-20	74	1,93	1,051	0,002	0,065
	21 ve üzeri	48	2,35	1,451		0,086
Şehrin pahalı olması	17-20	74	2,47	1,274	0,670	0,197
	21 ve üzeri	48	2,79	1,398		0,206
Halkın davranışları	17-20	74	2,07	1,114	0,974	0,337
	21 ve üzeri	49	2,27	1,114		0,337
Öğretim Üyelerinin Davranışları	17-20	74	1,66	0,896	0,039	0,353
	21 ve üzeri	49	1,84	1,179		0,380

*Aralarında fark olan gruplar, $p \leq 0,05$

“H2: Yaşa göre yabancı öğrencilerin yaşadığı sıkıntılar farklıdır” şeklindeki hipotezin test sonuçları Tablo 10’da görülmektedir. Öğrencilerin yaşlarına göre 12 adet sıkıntı başlığı karşılaştırıldığında “Dil sorunu” ve “Sınavların zorluğu” sorularında 17-20 yaş grubu yabancı öğrenci ile 21 yaş ve üzerinde olan yabancı öğrenciler arasında istatistiki fark olduğu tespit edilmiştir. 21 yaş ve üzeri yabancı öğrencilerin 17-20 yaş grubundaki öğrencilere kıyasla dil sorunu daha fazla yaşadıklarını belirttikleri ortalama değerlerden de anlaşılmaktadır. Sınavların zorluğu ile ilgili sıkıntıyı ise 17-20 yaş grubundaki öğrenciler daha fazla yaşadıklarına dair cevaplar verdikleri ortalama değerlerden görülmektedir. H2 hipotezi bu iki soru için kabul edilmiştir. Diğer 10 soru için ise ret sonucu elde edilmiştir.

Tablo 11. Yabancı Öğrencilerin Türkiye’de Eğitim Alırken Sıkıntı Yaşadıkları Konuların Uyrak Değişkenine Göre Anova Ve Scheffe Testi Sonuçları

Konular	Ülke Grupları	N	$\bar{x}$	SS	F	p	Karşılaştırmalı Gruplar	Ort. Fark	p	
Dil Sorunu	1.Grup	72	1,81	0,959	11,646	0,000	1.Grup-2.Grup	-1,325*	0,000**	
	2.Grup	23	3,13	1,217			1.Grup-3.Grup	-0,794	0,104	
	3.Grup	15	2,60	0,632	1.Grup-4.Grup	-,984*	0,000**			
					2.Grup-3.Grup	0,530	0,564			
	4.Grup	38	2,79	1,436	2.Grup-4.Grup	0,341	0,721			
					3.Grup-4.Grup	-0,189	0,958			
	Ulaşım Sorunu	1.Grup	72	1,90	1,140	4,243	0,007	1.Grup-2.Grup	-0,097	0,990
		2.Grup	21	2,00	1,225			1.Grup-3.Grup	0,369	0,742
3.Grup		15	1,53	0,743	1.Grup-4.Grup	-,702*	0,032**			
					2.Grup-3.Grup	0,467	0,706			
4.Grup		38	2,61	1,306	2.Grup-4.Grup	-0,605	0,307			
					3.Grup-4.Grup	-1,072*	0,032**			

*1.Grup: Azerbaycan, 2.Grup: Çad, 3.Grup: Kazakistan, 4.Grup:Diğer Ülkeler

** $p \leq 0,05$

“H3: Uyraklarına göre yabancı öğrencilerin yaşadıkları sıkıntılar farklıdır” şeklindeki hipotezin test sonuçları Tablo 11’de görülmektedir. Uyraklara göre 4 gruba ayırdığımız öğrenciler arasında istatistiki fark olup

olmadığının testi için Anova ve Scheffe testleri uygulanmıştır. 12 adet sıkıntı başlığı içinde sadece *dil sorunu* ve *ulaşım sorunu* sıkıntı başlığında öğrenciler arasında istatistiki fark olduğu görülmüştür. *Dil sorunu* sıkıntı başlığında Azerbaycan ve Çad uyruklu öğrenciler arasında ve Azerbaycan ve diğer ülke grubundaki öğrenciler arasında farklı görüşler olduğu ve farkın yönünün Çad ve diğer ülke grubundaki öğrenciler lehine olduğu görülmüştür. Azerbaycanlı öğrencilerin Çad ve diğer ülke grubundaki öğrencilere kıyasla *dil sorunu* ve *ulaşım sorunu* sıkıntısının olmadığı yönünde cevaplar vermişlerdir.

“H4: Genel muhasebe dersi harf notlarına göre yabancı öğrencilerin yaşadıkları sıkıntılar farklıdır” şeklindeki hipotezin test sonuçları Tablo 12’de görülmektedir. Yabancı öğrencilerin aldıkları harf notları üç gruba ayrılarak analiz edildiğinde 12 adet sorun başlığından iki tanesinde öğrenciler arasında farklılık olduğu tespit edilmiştir. *Ayrımcılık* ve *halkın davranışları* sorunlarında öğrencilerden A-B harf not aralığında notları olduğunu belirtenler ile FF notunda olan öğrenciler arasında istatistiki fark olduğu tespit edilmiştir.

Tablo 11 ve Tablo 12 de analiz sonuçları verilen hipotezlerde veriler fazla yer kapladığı için sadece fark tespit edilen sıkıntı konu maddelerinin sonuçları verilmiştir.

Tablo 12: Yabancı Öğrencilerin Göre Türkiye’de Eğitim Alırken Sıkıntı Yaşadıkları Konuların Genel Muhasebe Dersi Harf Notları Değişkenine Göre Anova Ve Scheffe Testi Sonuçları

Konular	Harf Notları	N	$\bar{x}$	SS	F	p	Karşılaştırmalı Gruplar	Ort. Fark	p
Ayrımcılık	1.Grup	26	2,35	1,129	3,917	0,022	1.Grup-2.Grup	0,299	0,477
	2.Grup	63	2,05	1,128			1.Grup-3.Grup	0,673*	0,031**
	3.Grup	52	1,67	0,901			2.Grup-3.Grup	0,375	0,167
Halkın Davranışları	1.Grup	26	2,58	1,102	3,541	0,032	1.Grup-2.Grup	0,307	0,512
	2.Grup	63	2,27	1,125			1.Grup-3.Grup	0,692*	0,043**
	3.Grup	52	1,88	1,166			2.Grup-3.Grup	0,385	0,198

*1.Grup:A-B , 2.Grup: C-D, 3.Grup: FF, **p≤0,05

Tablo 13: Yabancı Öğrencilerin Türkiye’de Eğitim Alırken Sıkıntı Yaşadıkları Konuların Genel Muhasebe Dersinden Geçme/Kalma Durumu Değişkenine Göre Independent Sample T-Testi Sonuçları

Konular	Geçen/Kalan	N	$\bar{x}$	SS	p	sig.(2-tailed)
Dil sorunu	Geçer Not Alanlar	89	2,34	1,243	0,910	0,622
	FF ile Kalanlar	52	2,23	1,215		0,620
Ayrımcılık	Geçer Not Alanlar	89	2,13	1,130	0,108	0,013*
	FF ile Kalanlar	52	1,67	0,901		0,009
Sınavların zorluğu	Geçer Not Alanlar	88	2,91	0,990	0,836	0,155
	FF ile Kalanlar	52	3,15	0,958		0,152
Stres	Geçer Not Alanlar	89	2,61	1,193	0,399	0,594
	FF ile Kalanlar	52	2,50	1,057		0,582
Sınav sistemi	Geçer Not Alanlar	88	2,44	1,163	0,776	0,410
	FF ile Kalanlar	52	2,62	1,239		0,418
Kampüs Şartları	Geçer Not Alanlar	87	1,95	1,011	0,089	0,330
	FF ile Kalanlar	52	2,13	1,121		0,343
Konaklama koşulları	Geçer Not Alanlar	88	2,05	1,113	0,836	0,666
	FF ile Kalanlar	51	1,96	1,113		0,666
Sosyal / kültürel şartlar	Geçer Not Alanlar	88	1,92	1,064	0,595	0,853
	FF ile Kalanlar	52	1,88	1,166		0,856
Ulaşım Sorunu	Geçer Not Alanlar	88	2,23	1,229	0,350	0,073
	FF ile Kalanlar	52	1,85	1,161		0,069

Şehrin pahalı olması	Geçer Not Alanlar	88	2,76	1,313	0,753	0,030*
	FF ile Kalanlar	52	2,27	1,223		0,027
Halkın davranışları	Geçer Not Alanlar	89	2,36	1,121	0,975	0,018*
	FF ile Kalanlar	52	1,88	1,166		0,020
Öğretim Üyelerinin Davranışları	Geçer Not Alanlar	89	1,73	1,063	0,916	0,918
	FF ile Kalanlar	52	1,71	1,016		0,917

*Aralarında fark olan gruplar, $p \leq 0,05$

“H5: Genel Muhasebe dersinden geçenler ve kalanlar açısından yabancı öğrencilerin yaşadıkları sıkıntılar farklıdır” şeklindeki hipotezin test sonuçları Tablo 13’te verilmektedir. Genel Muhasebe dersinden geçmiş veya kalmış olanlar arasında *ayrımcılık*, *şehrin pahalı olması* ve *halkın davranışları* konularıyla ilgili aralarında fark olduğu yapılan analiz sonucunda tespit edilmiştir. *Ayrımcılık* konusunda dersten kalmış olan öğrenciler hiçbir zaman cevabına yakın cevaplar verdikleri görülürken, geçer not alan öğrencilerin nadiren ve bazen cevabına yakın cevaplar verdikleri görülmektedir. Dersten geçen öğrenciler kalanlara göre biraz daha fazla ayrımcılık yaşadıklarını belirtmiş görünmektedirler. *Şehrin pahalı olması* ve *halkın davranışları* konularında da yine dersten kalmış olan öğrencilere kıyasla dersten geçmiş olan öğrencilerin “bazen” cevabına yakın cevaplar verdikleri görülmektedir.

Tablo 14: Yabancı Öğrencilerin Genel Muhasebe Dersi Sınavına Çalışma Süresine Göre Türkiye’de Eğitim Alırken Sıkıntı Yaşadıkları Konular İçin Independent Sample T-Testi Sonuçları

Konular	Sınava çalışma süresi	N	$\bar{x}$	SS	p	sig.(2-tailed)
Dil sorunu	1-10 saat	84	2,20	1,220	0,867	0,169
	11 saat ve üzeri	62	2,48	1,211		0,169
Ayrımcılık	1-10 saat	84	1,83	1,039	0,919	0,065
	11 saat ve üzeri	62	2,16	1,074		0,067
Sınavların zorluğu	1-10 saat	84	3,08	0,972	0,639	0,189
	11 saat ve üzeri	61	2,87	0,957		0,188
Stres	1-10 saat	84	2,57	1,133	0,570	0,768
	11 saat ve üzeri	62	2,63	1,204		0,770
Sınav sistemi	1-10 saat	84	2,52	1,167	0,693	0,652
	11 saat ve üzeri	60	2,43	1,212		0,655
Kampüs Şartları	1-10 saat	83	2,01	1,018	0,349	0,832
	11 saat ve üzeri	60	2,05	1,096		0,834
Konaklama koşulları	1-10 saat	82	1,89	1,077	0,405	0,198
	11 saat ve üzeri	62	2,13	1,123		0,201
Sosyal / kültürel şartlar	1-10 saat	83	1,84	1,131	0,651	0,744
	11 saat ve üzeri	62	1,90	1,036		0,741
Ulaşım Sorunu	1-10 saat	83	1,89	1,036	0,022	0,078
	11 saat ve üzeri	62	2,24	1,339		0,090
Şehrin pahalı olması	1-10 saat	83	2,34	1,172	0,124	0,011*
	11 saat ve üzeri	62	2,89	1,392		0,013
Halkın davranışları	1-10 saat	84	2,02	1,108	0,507	0,086
	11 saat ve üzeri	62	2,35	1,189		0,089
Öğretim Üyelerinin Davranışları	1-10 saat	84	1,68	1,077	0,416	0,784
	11 saat ve üzeri	62	1,73	0,961		0,781

*Aralarında fark olan gruplar, $p \leq 0,05$

“H6: Sınava çalışma süresine göre yabancı öğrencilerin yaşadıkları sıkıntılar farklıdır” şeklindeki hipotezin test sonuçları Tablo 14’te verilmektedir. Genel Muhasebe dersi sınavına çalışma süreleri açısından öğrencilerin verdikleri cevaplar analiz edildiğinde, sadece *şehrin pahalı olması* konusunda öğrenciler arasında “1-10 saat” çalışanlar ile “11 saat ve üzeri” çalışanlar arasında fark olduğu tespit edilmiştir. “11 saat ve üzeri” çalıştığını belirten öğrencilerin *şehrin pahalı olması* konusunda bazen cevabına yakın cevaplar verdikleri görülmektedir.

“H7: Genel Muhasebe Dersini Tekrar Etme Sayısına göre yabancı öğrencilerin yaşadıkları sıkıntılar farklıdır” şeklindeki hipotezin test sonuçları Tablo 15’te verilmektedir. Tablo 15’te veriler fazla yer kaplayacağı için sadece farklılık tespit edilen konular görünmektedir. *Dil sorunu*, *ayrımcılık*, *şehrin pahalı olması* ve *halkın davranışları* konularında öğrencilerin Genel Muhasebe dersini tekrar etme sayısı açısından aralarında farklılık olduğu tespit edilmiştir. *Dil sorunu* konusunda tek seferde geçenlerle 4 kereye kadar tekrar edenler arasında fark olup, 4 kereye kadar tekrar edenler lehine bir sonuç ortaya çıkmıştır. *Ayrımcılık* ve *şehrin pahalı olması* konusunda tek seferde geçenlerle 4 kereye kadar tekrar edenler arasında fark olup, 4 kereye kadar tekrar edenler lehine bir sonuç ortaya çıkmış, ayrıca 4 kereye kadar tekrar edenler ile geçemediğini belirten öğrenciler arasında 4 kereye kadar tekrar edenler lehine bir sonuç ortaya çıkmıştır.

Tablo 15: Yabancı Öğrencilerin Türkiye’de Eğitim Alırken Sıkıntı Yaşadıkları Konuların Genel Muhasebe Dersini Tekrar Sayısı Değişkenine Göre Anova Ve Scheffe Testi Sonuçları

Konular	Tekrar Sayısı	N	$\bar{x}$	SS	F	p	Karşılaştırmalı Gruplar	Ort. Fark	p
	Tek seferde geçtim	54	2,07	1,061	4,243	0,016	1.Grup-2.Grup	-,687*	0,020**
Dil sorunu	4 kereye kadar	46	2,76	1,336			1.Grup-3.Grup	-0,176	0,764
	Geçemedim	48	2,25	1,229			2.Grup-3.Grup	0,511	0,125
	Tek seferde geçtim	53	1,83	0,995	6,628	0,002	1.Grup-2.Grup	-,583*	0,021**
Ayrımcılık	4 kereye kadar	46	2,41	1,166			1.Grup-3.Grup	0,143	0,783
	Geçemedim	48	1,69	0,903			2.Grup-3.Grup	,726*	0,003**
	Tek seferde geçtim	53	2,36	1,145	4,837	0,009	1.Grup-2.Grup	-,685*	0,029**
Şehrin pahalı olması	4 kereye kadar	46	3,04	1,414			1.Grup-3.Grup	0,025	0,995
	Geçemedim	48	2,33	1,226			2.Grup-3.Grup	,710*	0,026**
	Tek seferde geçtim	54	2,11	1,144	3,252	0,042	1.Grup-2.Grup	-0,389	0,232
Halkın davranışları	4 kereye kadar	46	2,50	1,049			1.Grup-3.Grup	0,194	0,686
	Geçemedim	48	1,92	1,182			2.Grup-3.Grup	,583*	0,046**

*1.Grup: Tek seferde geçtim, 2.Grup: 4 kereye kadar, 3.Grup: Geçemedim, **p≤0,05

4. SONUÇ

Yabancı uyruklu öğrencilerin çalışmada belirtilen konularla ilgili olarak verdikleri cevapların frekans sonuçları incelendiğinde; (1,70) ortalama değeri ile en düşük ortalama değerini *öğretim üyelerinin davranışları* maddesinin aldığı tespit edilmiştir. Yabancı uyruklu öğrencilerin genelinin derslerine giren öğretim üyeleriyle nadiren sıkıntı yaşadığını belirtmiştir. *Sınavların zorluğu* maddesi ise en yüksek ortalama (3,01) değeri ile öğrencilerin sınavlarla ilgili bazen sıkıntı yaşadıkları sonucunu göstermiştir. Diğer sıkıntı konu başlıkları ile ilgili olarak da öğrencilerin verdikleri cevaplara göre öğrencilerin nadiren sıkıntı yaşadıklarını belirttikleri tespit edilmiştir.

Yabancı öğrencilerin cinsiyetleri, yaşları, uyrukları, Genel Muhasebe dersi harf notları, sınava çalışma süreleri ve dersi tekrar etme sayıları açısından kısmen istatistiki farklılıklar olduğu tespit edilmiştir. *Halkın davranışları* sıkıntı başlığı ile ilgili olarak da yine $p \leq 0,05$ sonucu ile kadın ve erkek öğrenciler arasında istatistiki fark olduğu tespit edilmiştir.

17-20 yaş grubu yabancı öğrenci ile 21 yaş ve üzerinde olan yabancı öğrenciler arasında *dil sorunu* ve *sınavların zorluğu* sıkıntıları açısından fark olduğu tespit edilmiştir. 21 yaş ve üzeri yabancı öğrencilerin 17-20 yaş grubundaki öğrencilere kıyasla dil sorunu daha fazla yaşadıklarını belirttikleri tespit edilmiştir. *Sınavların zorluğu* hakkında ise 17-20 yaş grubundaki öğrenciler daha fazla sıkıntı yaşadıklarına dair cevaplar verdikleri ortalama değerlerden görülmektedir. Genç öğrencilerin Genel Muhasebe dersinde daha fazla sıkıntı yaşadıkları söylenebilir.

Uyruklara göre *“dil sorunu”* ve *“ulaşım sorunu”* sıkıntı başlığında yabancı öğrenciler arasında fark olduğu görülmüştür. Azerbaycan ve Çad uyruklu öğrenciler arasında ve Azerbaycan ve diğer ülke grubundaki öğrenciler arasında *dil sorunu* sıkıntı başlığında farklı görüşler olduğu tespit edilmiştir. Azerbaycanlı öğrencilerin Çad ve diğer ülke grubundaki öğrencilere kıyasla dil sorunu ve ulaşım sorunu sıkıntısının olmadığı yönünde cevaplar vermişlerdir.

Yabancı öğrencilerin aldıkları harf notları açısından yapılan test sonucunda *ayrımcılık* ve *halkın davranışları* sıkıntı konu maddelerinde öğrencilerden A-B harf not aralığında olanlar ile FF ile kalmış olan öğrenciler arasında istatistiki fark olduğu tespit edilmiştir.

Genel Muhasebe dersinden geçmiş veya kalmış olanlar arasında yapılan analize göre *ayrımcılık*, *şehrin pahalı olması* ve *halkın davranışları* konularıyla ilgili aralarında fark olduğu tespit edilmiştir. *Ayrımcılık* konusunda dersten kalmış olan öğrencilerin hiçbir zaman cevabına yakın cevaplar verdikleri görülürken, geçer not alan öğrencilerin nadiren ve bazen cevabına yakın cevaplar verdikleri görülmüştür. Dersten geçen öğrenciler kalanlara göre biraz daha fazla ayrımcılık yaşadıklarını belirtmişlerdir. *Şehrin pahalı olması* ve *halkın davranışları* konularında dersten geçmiş olan öğrenciler bazen cevabına yakın cevaplar verdikleri tespit edilmiştir.

Genel Muhasebe dersi sınavına çalışma süreleri açısından sadece *şehrin pahalı olması* konusunda yabancı öğrenciler arasında *“1-10 saat”* çalışanlar ile *“11 saat ve üzeri”* çalışanlar arasında fark olduğu tespit edilmiştir.

Genel Muhasebe dersini tekrar etme sayısı açısından *dil sorunu*, *ayrımcılık*, *şehrin pahalı olması* ve *halkın davranışları* konularında yabancı öğrencilerin aralarında farklılık olduğu tespit edilmiştir. *Dil sorunu* konusunda tek seferde geçenlerle 1-4 kez tekrar edenler arasında fark olup, 1-4 kez tekrar edenler lehine bir sonuç ortaya çıkmıştır. *Ayrımcılık* ve *şehrin pahalı olması* konusunda tek seferde geçenlerle 1-4 kez tekrar edenler arasında fark olup, 1-4 kez tekrar edenler lehine bir sonuç ortaya çıkmış, ayrıca 1-4 kez tekrar edenler ile geçemediğini belirten öğrenciler arasında 1-4 kez tekrar edenler lehine bir sonuç ortaya çıkmıştır.

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Algılanan Örgütsel ve Yönetmel Destegın Örgütsel Vatandaşlık Davranışına Etkisi: Kırgızistan’da Öğretmenler Üzerine Bir Araştırma

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Özet: Eğitim sisteminin ve kalite kavramının da her geçen gün değiştiğı ve rekabetin arttığı dünyada eğitim kurumları varlıklarını sürdürebilmek ve daha kaliteli eğitim verebilmek için, öğretmenlerine ve çalışanlarına olduğundan daha fazla önem vermeye başlamışlardır. Bu bağlamda öğretmenlerin katkısını ve katılımını bir değer kabul eden okullar için algılanan örgütsel destek, yönetsel destek ve örgütsel vatandaşlık davranışları önemli dinamikler arasındadır. Bu çalışmanın amacı özel okullarda ve devlet okullarında çalışan öğretmenlerin örgütsel destek ve yönetsel destek algılarını belirlemek, bu algıların örgütsel vatandaşlık davranışına etkisini incelemektir. Bu kapsamda Kırgızistan’ın başkenti Bişkek’te kamu ve özel okullarda görev yapan öğretmenlere bir anket uygulanmıştır. Kolayda örnekleme yöntemi ile toplanan veriler istatistik yöntemlerle analiz edilmiştir. Yapılan analizler ölçeklerin güvenilir olduğunu göstermektedir. Ölçek ifadeleri ortalamaları üzerinden değerlendirmeler yapılarak ifadelere katılım düzeyleri değerlendirmiştir. Korelasyon analizi bulgularına göre algılanan örgütsel ile yönetsel destek ve örgütsel vatandaşlık davranışı arasında anlamlı ve pozitif yönde bir ilişki olduğu sonucuna varılmıştır. Elde edilen sonuçlara göre, örgütsel destek ve yönetici destek algısı yüksek düzeyde olan çalışanlar kendilerini daha fazla örgüte bağlılık duymakta ve buna bağlı olarak örgütsel vatandaşlık olarak bilinen olumlu davranışları sergilemektedirler.

Anahtar Kelimeler: Örgütsel destek, Yönetsel destek, Örgütsel vatandaşlık davranışı

The Effect of Perceived Organizational and Managerial Support on Organizational Citizenship Behavior: A Research on Teachers in Kyrgyzstan

Abstract: In the world where the education system and the concept of quality are changing day by day and competition is increasing, education institutions have started to give more importance to their teachers and employees in order to maintain their existence and provide better quality education. In this context, perceived organizational support, managerial support and organizational citizenship behaviors are among the important dynamics for schools that consider teachers' contribution and participation as a value. The aim of this study is to determine the perceptions of organizational support and managerial support of teachers working in private and public schools and to examine the effects of these perceptions on organizational citizenship behavior. In this context, a questionnaire was applied to teachers working in public and private schools in Bishkek, the capital of Kyrgyzstan. The data collected by convenience sampling method were analyzed with statistical methods. The analyzes show that the scales are reliable. The levels of participation in the statements were evaluated by making evaluations over the averages of the scale statements. According to the correlation analysis findings, it was concluded that there is a significant and positive relationship between perceived organizational and managerial support and organizational citizenship behavior. According to the results obtained, employees with a high perception of organizational support and managerial support feel more committed to the organization and accordingly exhibit positive behaviors known as organizational citizenship.

1. GİRİŞ

Günümüzde çalışan bireylerin iş memnuniyetini sağlamak organizasyonlar için temel amaçlardan birisi olarak görülmektedir. Çünkü, çalıştıkları organizasyona bağlanan iş görenler örgütün başarılı olmasına ve daha uzun süre boyu yaşamını sürdürebilmesine büyük katkıda bulunmaktadır. Bu bağlamda örgütler daha verimli ve başarılı olabilmektedirler. Bu yüzden örgütler sürekli olarak çalışanlarına değer ve destek vermeye çalışmalıdırlar. Böylece işgörenler kendisine hak ettiği düzeyde değer verildiğini ve önemsendiğini hissettiklerinde örgütün amaçların gerçekleştirmek için daha fazla çaba harcamaya ve daha iyi performans göstermeye başlamaktadırlar. Ayrıca yeterince örgütsel/yönetmel destek alan iş görenlerin örgütsel vatandaşlık davranış gösterme düzeylerinin artacağı da beklenmektedir.

Yapılan bu araştırmanın temel amacı Kırgızistan’daki özel okullarda ve devlet okullarında çalışan öğretmenlerin örgütsel destek ve yönetsel destek algılarını belirlemek ve bu algıların örgütsel vatandaşlık davranışına etkisini incelemektir.

2. KAVRAMSAL ÇERÇEVE

2.1. Algılanan Örgütsel Destek (Perceived Organizational Support)

1986'dan bu yana örgütsel davranış alanının konusu haline gelmiş olan algılanan örgütsel destek kavramı, çalışan performansı ve motivasyonunu önemli bir belirleyicisi olduğu ortaya konulmuştur. Algılanan örgütsel destek, algı ve örgütsel destek kavramlarının sonucu olarak ortaya çıkmıştır ve iş görenin çalıştığı kurumun kişisel gelişimine ve bireysel kariyerine yönelik gönüllü katkı sağladığına ve kendisinin sahiplenildiğine olan inancıdır. Başka bir ifade ile çalışanların işletmeye sağladıkları katkılarının ne derece karşılık alabildiğine ve mutluluklarının kurum tarafından ne kadar önemsendiğine dair olumlu ya da olumsuz yargılarıdır. Algılanan örgütsel destek, literatürde yer alan başka bir tanıma göre; bir iş görenin içerisinde bulunduğu işletmenin katkılarını verdiği değerin boyutları hakkında kendisinde oluşan inancıdır (Diken vd, 2019: 3).

İlkokul, ortaokul, lise, üniversiteler ve diğer eğitim kurumlarında öğretmenlerin davranışları, örgütlere olan bağlılıkları kurumlarda motive ediciler tarafından yönlendirilmektedir. Özellikle eğitim kurumlarının öğretmenlerini bir değer kabul etmesi, memnuniyetlerini önemsemesi ve bunları hissettirmesi, çalışanların örgüt ile olan duygusal ilişkilerini olumlu yönde etkilemektedir. Kurumlarda öğretmenlere gösterilen örgütsel ve yönetsel destek eğitim kalitesi ve kurumdaki refahın, huzurun sağlanmasıyla doğrudan ilişkilidir.

2.2. Algılanan Yönetici Desteği (Perceived Supervisor Support)

Yönetsel destek, yöneticinin iş görenlere verdiği değer, cesaretlendirme ve desteğin iş görenler tarafından algılama derecesidir. Yönetici desteğinin derecesi iş görenlerin performanslarını doğrudan etkileyebilir (Babin ve Boles, 1996: 60). Başka bir tanıma göre, yönetici desteği – iş görenlerin yöneticileri tarafından desteklenmesini; iş arkadaşları desteği ise – aynı kademede ve pozisyonda çalışan işçilerin desteğini ifade etmektedir (Yoon ve Lim, 1999: 925).

Algılanan yönetsel destek, örgütsel desteğin önemli bileşeni olarak sayılmakta ve *bilgisel, duygusal ve maddi destek* boyutlarından oluşmaktadır. Bilgisel destek, yöneticilerin iş görenlerini iş için ihtiyaç duyulan bilgi, beceri ve yardımlarla destek vereceğine olan olumlu algısıdır. Duygusal destek, iş görenlerin çalışma hayatında sık sık yaşadığı stres, çatışma, iletişim sorunları gibi problemlerle karşılaştıklarında yöneticiler tarafından destekleneceğine ilişkin algılarıdır. Maddi destek ise, iş görenlerin iş için gereksinim duyacağı beşerî ve maddi kaynaklara sahip olabilmesine ilişkin yönetici desteği şeklinde ifade edilebilmektedir (Üstün, 2018: 563). Örgütsel destek algı düzeyi, algılanan yönetici desteği ile artırılabilir (Adiloğulları, 2017: 190). Yüksek düzeyde yönetici desteği hisseden iş görenlerin örgüte olan bağlılıkları artar, güçlü duygular besler ve sonuçta örgütsel sadakati de yükselmesi beklenmektedir (Eisenberger, Fasolo ve Lamastro, 1990: 57).

2.3. Örgütsel Vatandaşlık Davranışı (Organizational Citizenship Behavior)

Örgütsel vatandaşlık davranışı fenomeni ilk olarak 1980'lerde (Smith vd., 1983) tanımlanmış ve o zamandan beri farklı araştırmacılar arasında önemli bir ilgi odağı haline gelmiştir. Örgütsel vatandaşlık davranışı terimi orijinalde Organ (1988) tarafından şu şekilde tanımlanmıştır “organizasyonun etkin işleyişini teşvik eden resmi ödül sistemi tarafından doğrudan veya açıkça tanınmayan isteğe bağlı bireysel davranıştır” (Demir, 2015; Thiruvengadam ve Durairaj, 2017; Cetin vd., 2015; Kim, 2006). Örgütsel vatandaşlık davranışı, formal iş tanımlarının ötesinde, belirlenmiş rol gereklerini ve beklentilerini aşan, çalışanların örgüte katkıda bulunmak için gönüllü olarak gösterdikleri ekstra rol davranışlarıdır (Kaya, 2013). Bu tanımlar örgütsel vatandaşlık davranışının 3 temel özelliğini vurgulamaktadır. Birincisi, davranışlar gönüllü olmalıdır. İkincisi, davranış organizasyona fayda, katkı sağlamalıdır. Üçüncüsü, örgütsel vatandaşlık davranışı çok boyutludur.

Örgütsel vatandaşlık teriminin temelini koyan Organ (1988) örgütsel vatandaşlık davranışının 5 kategorisini önermiştir (Kim, 2006; Uzun, 2018; Podsakoff vd.). Dürüstlük (conscientiousness), çalışanların resmi iş tanımlarının ötesinde sergiledikleri belirli rol davranışlarını temsil eder. Altruizm, başkalarına (iş arkadaşlarına) yardım ettiklerini ima etmektedir. Sportmenlik (sportmanship), önemsiz şeylerden şikâyet etmemek anlamına gelmektedir. Nezaket (courtesy), çalışanların başkalarına saygılı davrandığını gösterir. Sivil erdem (civic virtue), organizasyonda olan şeylerden farkında olmak anlamına gelmektedir.

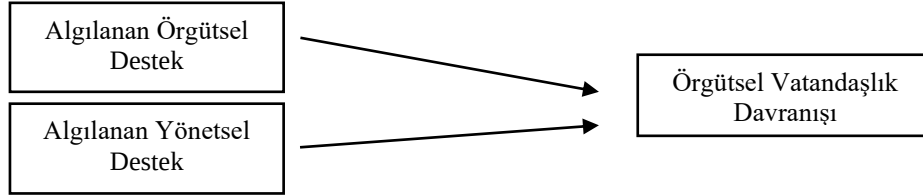
Genel olarak, örgütsel vatandaşlık davranışı organizasyonun etkin faaliyet göstermesine, organizasyon içinde olumlu atmosferin oluşmasına katkı sağlayan, organizasyon içindeki taraflara fayda getiren yapıcı ve olumlu her şeyi kapsayan bir terimdir.

3.YÖNTEM

3.1. Araştırma Modeli

Öğretmenlerin örgütsel vatandaşlık davranışı sergilemelerinde örgütsel ve yönetsel destek algılarının etkisinin olup olmadığının belirlenmesi amacıyla yapılan bu çalışmada oluşturulan araştırma modeli Şekil 1’de yer almaktadır.

Şekil 1: Araştırma Modeli



3.2. Örneklem Seçimi

Algılanan örgütsel ve yönetsel destek ile örgütsel vatandaşlık davranışı arasındaki ilişkiyi ortaya koymak amacıyla gerçekleştirilen bu araştırmanın evrenini Kırgızistan genelinde faaliyet gösteren özel ve kamu eğitim kurumlarında çalışan öğretmenler oluşturmaktadır. Veri toplamak amacıyla anket tekniği kullanılan çalışmada basit tesadüfi örneklem yöntemine gidilmiştir. Anket Kırgızca ve Rusça dillerinde online olarak uygulanmıştır. 165 öğretmenden geri dönüş sağlanıp, bu sayıdaki anket değerlendirilmeye alınmıştır.

3.3. Araştırmada Kullanılan Ölçekler

Örgütsel destek algısının belirlenmesinde Eisenberger, Huntington, Hutchison ve Sowa (1986) tarafından geliştirilen “Algılanan Örgütsel Destek Ölçeği” ile ölçülmüştür. Algılanan yönetici desteği ise Karasek vd. (1985) tarafından geliştirilen 7 maddeli ölçekle değerlendirilmiştir. Örgütsel vatandaşlık davranışlarını ölçmek için DiPaola, Tarter ve Hoy (2005) tarafından geliştirilen “Örgütsel Vatandaşlık Davranışı Ölçeği” kullanılmıştır. Çalışmada kullanılan ölçekler araştırmacılar tarafından Türkçe, Kırgızca ve Rusça’ya çevirilmiştir. Araştırmada öğretmenlerin bu ölçeklerde yer alan ifadelerle ne derecede katıldıklarını gösteren, “1 – kesinlikle katılmıyorum”, “5 – kesinlikle katılıyorum” şeklinde 5’li Likert ölçeği kullanılmıştır. Ankette bu ölçeklerin dışında, öğretmenlerin demografik özellikleri kapsamında yaş, cinsiyet, eğitim durumu, çalıştığı eğitim kurumunun sahiplik türü ve ortalama aylık gelirlerini belirlemeye yönelik sorular da yer almaktadır. Ayrıca öğretmenlere toplam çalışma süreleri (mesleki kıdemi) de sorulmuştur.

4. ANALİZ VE BULGULAR

Bu bölümde elde edilen analiz bulguları sunulmuştur. Yapılan çalışmada 5 basamaklı Likert tipindeki ve önceden güvenilirliği kanıtlanmış olan ölçekler kullanılmıştır. Elde edilen veriler SPSS 26.0 for Windows adlı istatistik paket programıyla analiz edilmiştir. Toplam 27 ifadeden elde edilmiş olan veriler güvenilirlik, frekans ve korelasyon analizlerine tabi tutulmuştur.

4.1. Güvenirlilik Analizi

Tablo 1. Değişkenlerin Güvenirliliği

DEĞİŞKENLER	SORU SAYISI	CRONBACH ALFA KATSAYILARI (α)
Örgütsel Vatandaşlık	12	,930
Örgütsel Destek	8	,840
Yönetsel Destek	7	,954

Yukarıdaki Tablo 1’de görüldüğü gibi değişkenlerin güvenilirliği analiz edilmiştir. Sonuçta güvenilirlikleri 0,84 ile 0,95 arasında olduğu tespit edilmiştir. Yani analiz edilen değişkenlerin güvenilirlikleri kabul edilebilir düzeydedir.

4.2. Demografik Bilgiler

Aşağıdaki Tablo 2’de ankete katılan öğretmenlerin demografik özelliklerine ilişkin bilgiler sunulmuştur. Araştırmaya katılanların 143’ü (%86,7) kadın, 22’si (%13,3) erkekten oluşmuştur. Öğretmenlerin % 3,6’sı 25’e kadar, % 31,5’i 25-35, %29,1’i 35-45, % 24,8’i 45-55 ve %10,9’u 55 ve üzeri yaş gruplarına girdiklerini görebiliriz. Katılımcıların eğitim durumlarına göre 6’sı (%3,6) önlisans, 37’si (%22,4) mesleki, 28’i (%17,0) lisans, 83’ü (%50,3) yüksek lisans ve 11’i (%6,7) akademik ünvan düzeyindeki eğitime sahiptir.

Tablo 2. Katılımcıların Demografik Özellikleri

Demografik Özellikler		N	%	Demografik Özellikler		N	%
Cinsiyeti	Kadın	143	86,7	Kurumun Sahiplik Türü	Devlet	152	92,1
	Erkek	22	13,3		Özel	13	7,9
	Toplam	165	100,0		Toplam	165	100,0
Yaşı	25 kadar	6	3,6	Mesleki Kıdemi	5 kadar	44	26,7
	25-35	52	31,5		5-10	17	10,3
	35-45	48	29,1		10-15	17	10,3
	45-55	41	24,8		15-20	19	11,5
	55 üzeri	18	10,9		20 üzeri	68	41,2
	Toplam	165	100,0		Toplam	165	100,0
Eğitim Durumu	Önlisans	6	3,6				
	Mesleki	37	22,4				
	Lisans	28	17,0				
	Yüksek Lisans	83	50,3				
	Akademik Ünvan	11	6,7				
	Toplam	165	100,0				

Araştırmaya katılanların 152’si (%92,1) devlet ve kalan 13’ü (%7,9) özel eğitim kurumlarında çalışan personelden oluşmaktadır. Katılımcıların 44’ü (%26,7) 5 yıla kadar, 17’si (%10,3) 5-10 yıl, 17’si (%10,3) 10-15 yıl, 19’u (%11,5) 15-20 yıl, 68’i (%40,6) 20 ve üzeri yıl kıdeme sahip olduklarını belirtmişlerdir.

4.3. Frekans Analizleri

Aşağıdaki Tablo 3’te katılımcıların Örgütsel Vatandaşlık, Örgütsel ve Yönetmel Destek Ölçeklerin verilen cevapların ortalama ile standart sapma sonuçları verilmiştir.

Tablo 3. Ölçek Maddeleri Ortalama ve Standart Sapmaları

İFADELER	ORT	SS
1. Kişisel zamanlarımda öğrencilere yardımcı olurum.	3,17	1,517
2. Ders süresini etkili geçiririm.	3,32	1,558
3. Yeni öğretmenlere yardımcı olurum.	3,03	1,629
4. Okulda oluşturulan yeni kurullarda çalışmaya gönüllüyüm.	2,98	1,502
5. Müfredat dışı etkinliklere destek olmaya gönüllüyüm.	3,11	1,555
6. İşe ve toplantılara zamanında gelirim.	3,40	1,664
7. Benim yerime gelen öğretmenlere yardımcı olurum.	2,98	1,587
8. Derse zamanında girerim ve ders zamanımı etkili kullanırım.	3,67	3,961
9. Çeşitli konular ile ilgili bilgileri meslektaşlarım ile paylaşıyorum.	3,17	1,584
10. Kendi işlerime çok fazla zaman ayırıyorum.	2,83	1,290
11. Okuldaki çalışma kurullarında verimli çalışırım.	3,07	1,415
12. Okulu geliştirme yönünde yapıcı önerilerde bulunurum.	2,91	1,397
13. Okul, onun refahına sağladığım katkıma değer veriyor.	2,83	1,374
14. Okul benim gösterdiğim fazla çabayı takdir etmiyor.	2,58	1,206
15. Okul benden gelen şikayeti görmezden geliyor.	2,50	1,174

16. Okul benim refahımı gerçekten önemsiyor.	2,48	1,250
17. Mümkün olan en iyi işi yapsam bile okul bunu fark etmeyecek.	2,53	1,243
18. Okul iş yerimdeki genel memnuniyetimi önemsiyor.	2,50	1,237
19. Okul benim için çok az ilgi gösteriyor.	2,42	1,135
20. Okul işteki başarılarımdan gurur duyuyor.	2,87	1,426
21. Amirim, emrinde çalışanların işyerindeki huzur ve mutluluğu ile yakından ilgilidir.	2,68	1,408
22. Amirim, iş ile ilgili görüş ve düşüncelerimi dikkate alır.	2,71	1,392
23. Amirim, işlerin yapılmasına yardımcı olur.	2,63	1,511
24. Amirim, yapılan işlerin ekip çalışması ile yapılmasını sağlamak konusunda başarılıdır.	2,65	1,498
25. Amirim, yaptığım iyi işler için beni takdir eder.	2,75	1,474
26. Amirim, küçük şeyleri bile eleştirir.	2,70	1,438
27. Amirim, herhangi bir problem ile karşılaştığımda destek verir.	2,61	1,507

Tablo 3'te görüldüğü gibi katılımcılar “Derse zamanında girerim ve ders zamanımı etkili kullanırım” ifadesine (Ort = 3,67) en yüksek düzeyde katılım göstermişlerdir. Bununla birlikte, “İşe ve toplantılara zamanında gelirim” (Ort = 3,40), “Ders süresini etkili geçiririm” (Ort = 3,32) ifadelerine de “katılıyorum” düzeyinde yüksek bir katılım göstermişlerdir.

Katılımcıların “Okul benim refahımı gerçekten önemsiyor” (Ort = 2,48), “Okul iş yerimdeki genel memnuniyetimi önemsiyor” (Ort = 2,50), “Okul benden gelen şikayeti görmezden geliyor” (Ort = 2,50), “Mümkün olan en iyi işi yapsam bile okul bunu fark etmeyecek” (Ort = 2,53) ifadelerine katılım düzeylerinin düşük düzeyde olduğu dikkat çekicidir. Özellikle, öğretmenlerin “Okul benim için çok az ilgi gösteriyor” davranışına (Ort = 2,42) katılım düzeylerinin “en düşük” düzeyde olduğu görülmektedir.

4.4. Korelasyon Analizi

Örgütsel vatandaşlık, Örgütsel destek ve Yönetimsel destek ile ilişkin pearson korelasyon analizi yapılmıştır. Yapılan Pearson korelasyon analizi sonuçları Tablo 4’de görülmektedir.

Tablo 4. Korelasyon Analizi Sonuçları

	1	2	3
1 Örgütsel Vatandaşlık	1		
2 Örgütsel Destek	,796**	1	
3 Yönetimsel Destek	,793**	,792**	1

**p<0,01

Korelasyon analizi sonuçlarına göre örgütsel vatandaşlık ile örgütsel destek arasında ($r=0,796$, $**p<0,01$) güçlü pozitif yönlü ve anlamlı bir ilişki söz konusudur. Örgütsel destek ile yönetimsel destek arasında ($r=0,792$, $**p<0,01$) anlamlı ve pozitif yönlü bir ilişki gözlemlenmiştir. Yönetimsel destek ile örgütsel vatandaşlık arasında ($r=0,793$, $**p<0,01$) güçlü pozitif yönlü ve anlamlı bir ilişki gözlemlenmiştir.

5. SONUÇ

Organizasyonlar resmi iş sorumluluklarının ötesine geçen ve yapmak zorunda olmadığı görevi başarmak için zamanını ayıran ve enerjisini veren çalışanları sayesinde başarılı olmaktadır ve rekabet avantajı sağlamaktadır. Böyle bir davranışın sergilemesinde önemli bir motivasyon unsuru olarak örgüt ve yöneticiler tarafından çalışanlara yönelik gösterilen destek öne çıkmaktadır.

Örgüt ve yöneticiler tarafından yeterince desteklendiklerini algılayan çalışanlar örgüte yönelik olumlu tutumlara sahip olmaktadır ve buna bağlı olarak bağlılık, sadakat, güven, performans, iş tatmin düzeyleri artmaktadır.

Algılanan örgütsel destek ve örgütsel vatandaşlık davranışı üzerine yapılan birçok bilimsel araştırmada bu iki değişken arasında anlamlı ve pozitif yönde bir ilişki olduğu sonucuna varılmıştır. Bu çalışma da aynı sonuçları göstermiştir. Öğretmenlerin algıladığı örgütsel destek ile örgütsel vatandaşlık davranışının arasında olumlu bir ilişki olduğu tespit edilmiştir. Örgütsel desteğin önemli bir bileşeni olan öğretmenlerin yönetici destek algısı ve örgütsel vatandaşlık davranışı arasında da pozitif ilişkinin bulunduğu ortaya çıkmıştır. Bu sonuçlara göre, örgütsel destek ve yönetici destek algısı yüksek düzeyde olan çalışanlar kendilerini daha fazla örgüte bağlılık duymakta ve buna bağlı olarak örgütsel vatandaşlık olarak bilinen olumlu davranışları sergilemektedirler.

Bu çalışmanın bulguları eğitim kurum idarecilerine öğretmenlere kendilerini kurumun bir parçası olarak hissetmelerine, rahat bir çalışma ortamı yaratmaları konusunda faydalı olacağına umut etmekteyiz. Söz konusu çalışma farklı sektördeki organizasyonlarda çalışan personeller üzerine ve daha geniş bir örneklem kitlesi ele alınarak incelenmesi önerilmektedir.

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Tavuk Eti Tüketim Profili ve Tüketimi Etkileyen Faktörler: TRA1 Bölgesi Örneği

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Özet: İnsan yaşam kalitesinin altında yatan en temel özellik dengeli ve yeterli beslenmedir. Yaşam evresinin her aşamasında dengeli ve yeterli beslenmek, hayvansal kaynaklı proteinleri doğru miktarda almakla gerçekleşmektedir. Kırmızı ve beyaz et hayvansal protein alımında önemli bir kaynak oluşturmaktadır. Son yıllarda, kırmızı et sektöründe yaşanan olumsuz gelişmeler tavuk eti tüketimini olumlu yönde etkilemiştir. TÜİK güncel verilerine göre; Türkiye’de 2021 yılında kırmızı et üretim miktarının aksine tavuk eti üretiminde iki kat daha fazla artış olmuştur. Tavuk eti talebinin artmasında, tüketici zevk ve tercihlerinin yanında tüketici geliri ve tavuk eti fiyatı önemli rol oynamaktadır. Bu bakımdan, hayvansal kaynaklı protein ihtiyacının karşılanmasında tavuk eti önemli bir alternatif tüketim ürünü olarak hanelerin harcamalarında yerini almıştır. Bu çalışmada, hayvansal protein alımında yer tutan tavuk eti esas alınmıştır. Türkiye’nin özellikle Doğu ve Güneydoğu Anadolu Bölgesinde yaşayan hanelerin mutfak kültüründe ağırlıklı olarak kırmızı et tüketilmektedir ve son yıllarda yaşanan tüketim kalıplarındaki değişimler hanelerin tüketim profilini etkilemiştir. Çalışmanın temel amacı, Türkiye’nin istatistikî bölgelerinden birisi olan TRA1 bölgesindeki tavuk eti tüketim profilini ortaya koymak ve hanehalklarının tavuk eti tüketimini etkileyen faktörleri belirlemektir. Bu amaçla TRA1 bölgesinde bulunan Erzurum, Erzincan ve Bayburt illeri araştırma kapsamına alınmıştır. Bu amaca yönelik, araştırma bölgesindeki il merkezlerinde yaşayan hanehalklarının tavuk eti tüketimi ve hanehalklarının tavuk eti tüketim alışkanlıklarını etkileyen sosyo-ekonomik faktörler incelenmiştir. Araştırmanın sonuçlarının, yatırımcıların uzun vadeli planlarında, iç pazarın şekillenmesinde ve karar vericilerin bölge için uygulayacağı hayvansal üretim politikalarında nispeten fayda sağlayacağı düşünülmektedir.

Anahtar Kelimeler: Tavuk Eti, Tüketim Profili, TRA1 Bölgesi

Chicken Meat Consumption Profile and Factors Affecting Consumption: Case of TRA1 Region

Abstract: The most basic feature underlying human quality of life is balanced and adequate nutrition. A balanced and adequate nutrition at every stage of life is achieved by taking the right amount of animal-derived proteins. In this context, red and white meat is an important source of animal protein intake. In recent years, the negative developments in the red meat sector have positively affected the consumption of chicken meat in Turkey. According to the current data of TÜİK, contrary to the amount of red meat production in Turkey in 2021, there was a double increase in chicken meat production. In addition to consumer preferences, consumer income and chicken meat price play an important role in the increase in chicken meat demand. In this respect, chicken meat has taken its place in the expenditures of households as an important alternative consumption product in providing the protein needs of animal origin. In this study, chicken meat, which has a place in animal protein intake, was taken as the basis. Red meat is mainly consumed in the culinary culture of the households living in the Eastern and Southeastern Anatolia Regions of Turkey, and the changes in consumption patterns in recent years have affected the consumption profile of the households. The main purpose of this study is to reveal the chicken meat consumption profile in the TRA1 region, which is one of the statistical regions of Turkey, and to determine the factors affecting the chicken meat consumption of households. For this purpose, Erzurum, Erzincan and Bayburt provinces in the TRA1 region were included in the research. For this purpose, the chicken meat consumption and the socio-economic factors affecting the chicken meat consumption habits of the households were examined. It is thought that the results of this research will be relatively beneficial in the long-term plans of the investors, the shaping of the domestic market and the animal production policies that the decision makers will implement for the region.

Key Words: Chicken Meat, Consumption Profile, TRA1 Region

1. GİRİŞ

Hayvansal kaynaklı gıdalar, insanların ihtiyaç duyduğu miktarda tüm gerekli amino asitleri sağlayan, en kaliteli proteinleri içeren, enerjisi yoğun gıdalardır (Gebretsadik ve ark., 2022). İnsanların tüm yaşam evrelerinde temel ihtiyaç olan beslenme, kendi başına yeterli olmamakla birlikte tüketilen gıdaların yeterli kalitede olmasını gerektirir (Tüzemen, 2018). Dünyada yaşanan yetersiz ve dengesiz beslenme; zayıflık, bodurluk, düşük kilo gibi insan sağlığını uzun vadede tehdit edecek durumların yaşanmasına sebep olmuştur. Bununla birlikte, yetersiz protein, vitamin veya minerallerin alınımı, obeziteyi ve bunun sonucunda ortaya çıkan diyetle bağlı bulaşıcı

olmayan hastalıkları ortaya çıkarmıştır. Dünya Sağlık Örgütü (WHO, 2020) verilerine göre, küresel olarak, 5 yaşın altındaki 149 milyon çocuğun bodur (yaşına göre çok kısa), 45 milyonunun boyuna göre çok zayıf ve 38,9 milyonunun fazla kilolu veya obez olduğu bildirilmiştir. Bu veriden yola çıkarak yetersiz beslenmenin küresel yükünün ekonomik, sosyal ve tıbbi etkileri; bireyler ve aileler, toplumlar ve ülkeler için ciddi ve kalıcı sorunlara neden olduğu söylenebilir. Gebretsadik ve ark.,'nın (2022) yapmış oldukları araştırmada belirttikleri gibi her yıl, bu tür yetersiz beslenme sorunları Etiyopya'ya 4,7 milyar ABD dolarına ya da başka bir deyişle Gayri Safi Yurtiçi Hasılasının (GSYİH) %16'sına mal olmaktadır. Dünyadaki her ülke bahsi geçen bir veya daha fazla yetersiz beslenme biçiminden etkilenmektedir. Yetersiz ve dengesiz beslenmenin tüm biçimleriyle mücadele etmek, en büyük küresel sağlık sorunlarından biri olarak değerlendirilmektedir. Yoksulluk, yetersiz ve dengesiz beslenme riskini ve buna bağlı riskleri de beraberinde getirmektedir. Bundan ötürü sağlıklı ve dengeli beslenmenin en önemli koşullarından biri kişi başına yeterli ve gerekli besin öğelerini karşılamaktır (Aydemir ve ark., 2021).

Ülkelerin gelişmişlik seviyeleri hanelerin tüketim alışkanlıklarına yansımaktadır. Gelişmiş ülkelerde bireylerin tüketimlerinde hayvansal kaynaklı proteinler ilk sırada yer almaktadır. Gelişmekte olan ülkelerde hayvansal kaynaklı gıdalara ulaşım sınırlı ve yetersiz olabilmektedir. Oysaki bireylerin sağlıklı beslenme diyetlerinde protein ihtiyacının %40-50'si hayvansal kaynaklı gıdalardan sağlanması gerekmektedir (Niyaz, 2018). Büyümenin ve gelişmenin şartı olan protein ihtiyacının 1/3'ü bitkisel, 2/3'ü hayvansal kaynaklı olmalıdır. Dengeli ve yeterli beslenen bireylerde yaşlara göre protein alımı hafif farklılık gösterse de kilogram vücut ağırlığı başına ortalama 1-1.2 gr olarak değişmektedir. Bu durumda, 60 kg olan bir bireyin günlük asgari alması gereken protein miktarı 60-62 gr olmaktadır (Anonim, 2022). Oysaki Türkiye'de kırmızı ve beyaz etten sağlanan hayvansal kaynaklı protein miktarı günlük kişi başı ortalama sadece 13 gr civarındadır.

Hayvansal proteinler beyaz ve kırmızı et, süt ve süt ürünleri ile kümes hayvanları yumurtalarında bulunmaktadır. Bu nedenle tavuk eti kaliteli protein, düşük yağ, zengin mineral ve vitamin kaynağı, sindirimi daha kolay olması bakımından dengeli ve yeterli beslenmede dikkat çekmektedir. Son yıllarda gerek dünyada gerekse Türkiye'de diğer et türlerine göre en fazla üretimi yapılan et tavuk eti olmuştur (Ergün ve Bayram, 2021). Günümüzde tavuk eti üretimi dünyada yaklaşık 124 milyon tona ulaşmıştır ve üretilen toplam et miktarının %37'sini tavuk eti oluşturmaktadır (FAO, 2020). Türkiye'de tavuk eti üretiminde dünyadaki üretime benzer bir üretim görülmektedir. TÜİK (2022) verilerine göre; 2021 yılında 1 milyon 952 bin ton kırmızı et üretimi yapılmışken, tavuk eti üretimi ise 2 milyon 245 bin ton olarak gerçekleşmiştir. Türkiye tavuk eti üretimi ile dünyada 10.sırada yer almaktadır. Dolayısıyla Türkiye'nin tavuk eti üretimi ile dünya pazarında stratejik bir öneme sahip olduğu söylenebilmektedir. Bu bakımdan istihdam yaratan, tarımsal üretimi destekleyen tavuk üretiminin ülke ekonomisine olan katkısı önemli ölçüde dikkat çekmektedir. Bu amaç doğrultusunda ayrıntılı hane gıda tüketim araştırmaları gıda tüketim alışkanlıklarının, enerji ve besin öğeleri alım miktarlarının belirlenmesi ve izlenmesi ile gıda üretiminin ve buna bağlı olarak talebin artırılması için önemli olmaktadır (Pekcan, 2020). Tavuk eti arzına bağlı olarak hanelerin gıda tüketim desenlerinde tavuk eti tüketiminin önemli bir pay aldığı görülmektedir. Yaşam tarzlarında beslenmeye yönelik yapılan değişimler, öznel algıya dayalı deneyim, tüketicinin gıda ürünü ile ilgili sahip olduğu mevcut bilgiler talebin artmasında öne çıkmaktadır (İslam ve ark., 2018). Günümüzde daha sağlıklı et ürünlerine yönelik tüketici algıları artık esas olarak etin nasıl üretildiği ve işlendiği, fiziksel ve kimyasal bileşimi, beslenme kalitesi, duyuşal özellikleri ve sosyal, etik veya dini yönleriyle ilişkilendirilmektedir (Teixeira ve Rodrigues, 2021).

Türkiye'de kişi başı kırmızı et tüketimi yaklaşık 10 kg iken, tavuk eti tüketimi 21 kg'a ulaşmıştır. Tavuk eti arzı ve talebinin artması uzun vadede talebin artacağı yönündeki tahminleri doğrulamaktadır (Talukder ve ark., 2020). Kırmızı et sektöründe yaşanan olumsuz gelişmeler fiyatların yükselmesine bunun sonucu olarak da hayvansal kaynaklı protein ihtiyacının karşılanmasında tavuk etinin tercih edilmesine sebep olmuştur (Şengül ve Zeybek, 2020). Hayvancılık sektöründeki olumsuz gelişmeler ve hane gelirleri kırmızı et tüketiminde belirleyici faktörler olarak karşımıza çıkmaktadır (Wong ve ark., 2018). Tavuk eti üretim sektörünün sürdürülebilirliğinin sağlanabilmesi için alınması gereken bazı önlemler vardır. Bunlardan birincisi; ulusal düzeyde tutarlı hayvancılık politikalarının uygulanması gibi korumacı ve kısıtlayıcı önlemler almaktır. Diğer bir seçenek de, ürün özelliklerini ve seçimlerini ve tüketim kararlarını yönlendiren ilgili faktörleri belirleyerek tüketicilerin talep profillerindeki mevcut boşlukları ele almaktır. Çünkü bireylerin gıda talebi ve tüketim desenleri fiyat ve hijyen özelliklerine, ülkedeki gelir dağılımına, ürün hakkındaki bilgi düzeyine, eğitim düzeyine bağlı olarak ortaya çıkmaktadır (Ayyıldız ve Çiçek, 2019). TRA1 bölgesinde yaşayan hanelerin mutfak kültüründe kırmızı et tüketiminin yaygın olduğu bir gerçektir. Benzer tüketim alışkanlıkları gösteren TRA1 bölgesinde (Erzurum, Erzincan, Bayburt) yaşayan hanelerin tavuk eti tüketim alışkanlıklarındaki değişmeyi ortaya koymak bu çalışmanın ana hedefini oluşturmaktadır. Bu nedenle bu çalışma, ulusal düzeyde tavuk eti tüketimi ve ilişkili faktörlere yönelik bilgi boşluğunu doldurmayı amaçlamaktadır.

2. MATERYAL VE YÖNTEM

Bu çalışmanın birincil verileri Türkiye İstatistik Bölge Birimleri Sınıflamasında yer alan TRA1 Düzey 2 Bölgesi içinde bulunan Erzurum, Erzincan ve Bayburt illerindeki 400 hanehalkı reisi ile yüz yüze gerçekleştirilen anketlerden elde edilmiştir. Çalışmada gayeli örnekleme yöntemi kullanılmıştır. Anket çalışmasında yarı yapılandırılmış anket formu kullanılmıştır. Anket formunun ilk bölümünde görüşülen tüketicilerin demografik özellikleri, ikinci bölümünde ise hanehalkının tavuk eti tüketimindeki satın alma davranışları yer almıştır. Araştırma bulguları basit tanımlayıcı istatistikler ile açıklanmıştır. Ayrıca, verilerin istatistiksel yorumlanmasında non-parametrik testlerden yararlanılmıştır.

3. ARAŞTIRMA BULGULARI

3.1. Katılımcıların Demografik Özellikleri

Erzurum, Erzincan ve Bayburt illerini kapsayan TRA1 bölgesinde görüşülen katılımcıların demografik özellikleri Tablo 1’de verilmiştir. Görüşülen katılımcıların %85.25’i erkek, %14.75’i kadın bireylerden oluşmaktadır. Yaş gruplarına göre katılımcıların dağılımına bakıldığında, %61.81’inin 25 ile 45 yaş arasında bulunduğu ve %32.41’inin 45 yaşından büyük olduğu görülmektedir. Benzer bulguya Aytıp’un (2019) yaptığı tavuk eti tüketimi konulu çalışmasında rastlanılmıştır. Gaziantep ilinde anket yapılan hanelerin %44.28 gibi büyük bir çoğunluğu 31-45 yaş aralığında bulunmuştur. Bu araştırmada, görüşmeye katılan katılımcıların %84 gibi önemli bir kısmı evli iken, %15.50’si bekârdır.

Et tüketimi ile ilgili yapılan benzer çalışmalara bakıldığında eğitim düzeyi arttıkça et tüketiminin arttığı görülmüştür. Bu bulgudan yola çıkarak bu çalışmada eğitim düzeyinin tavuk eti tüketimine olan etkisi ortaya koyulmaya çalışılmıştır. Eğitim düzeyi açısından katılımcıların ilkökul (%26.32), lise (%29.32) ve lisans (%21.30) olmak üzere üç grupta yoğunlaştığı belirlenmiştir. Coşun ve Çevik (2020) tarafından yapılan bir araştırmada elde edilen sonuca göre, hanehalkı reisinin eğitim düzeyi arttıkça deniz ürünleri ve kırmızı et tüketiminin arttığı fakat tavuk eti tüketiminin artmadığı görülmektedir. Bu çalışmada ise araştırma kapsamına alınan tüketicilerden elde edilen oransal dağılıma bakıldığında, eğitim düzeyinin tavuk eti tüketiminde etkili olmadığı anlaşılmaktadır. Faaliyet gösterdikleri mesleklerle göre katılımcıların dağılımı incelendiğinde, en önemli payı %36.13 ile kamuda çalışan memurlar almaktadır. Bunu özel sektör çalışanları (%12.98), serbest meslek sahibi olanlar (%12.72), çiftçiler (%9.41) ve emekliler (%7.38) takip etmektedir. Parlakay ve ark.’nın (2022) yapmış oldukları araştırmada meslek faktörüne ilişkin bu bulgu, bu çalışmadaki bulgu ile örtüşmektedir. İlgili araştırmada, anket yapılan tüketicilerin yaklaşık %34 gibi çoğunluğunun kamu sektöründe çalışan memur olduğu bulunmuştur.

Katılımcıların %68’inin hanehalkı büyüklüğü 4 kişiden az iken, %32’si 4 ve daha fazla sayıda kişiden oluşan hanehalkı büyüklüğüne sahiptir. Aylık hanehalkı geliri açısından katılımcılar düşük ve orta gelirli grupta yoğunlaşmaktadır. Araştırmanın yapıldığı dönemin koşulları göz önüne alınarak yapılan gelir dağılımına göre, 458 US\$’dan az, 458-1371 US\$, 1372-2285 US\$ ve 2285 US\$’dan fazla gelire sahip olanlar olmak üzere dört gelir grubu göz önüne alınmıştır. Bu gelir gruplarına göre katılımcıların oransal dağılımı sırasıyla; %29.57, %35.59, %23.31 ve %11.53 şeklinde saptanmıştır.

Tablo 1: Katılımcıların Demografik Özellikleri

Özellikler	%	Özellikler	%
Cinsiyet		Meslek	
Kadın	14.75	Kamuda memur	36.13
Erkek	85.25	Özel sektör çalışanı	12.98
Yaş (yıl)		Serbest meslek	12.72
25’ten küçük	5.78	Çiftçi	9.41
25-45	61.81	İşçi	7.89
45’ten büyük	32.41	Emekli	7.38
Medeni durum		Diğer	13.49
Evli	84.00	Hanehalkı büyüklüğü	
Bekar	15.50	4’ten az	68.00
Boşanmış	0.50	4 ve daha fazla	32.00
Eğitim düzeyi		Aylık hanehalkı geliri	
Okur-yazar değil	2.01	458 US\$*’dan az	29.57
Okur-yazar	3.01	458-1371 US\$	35.59

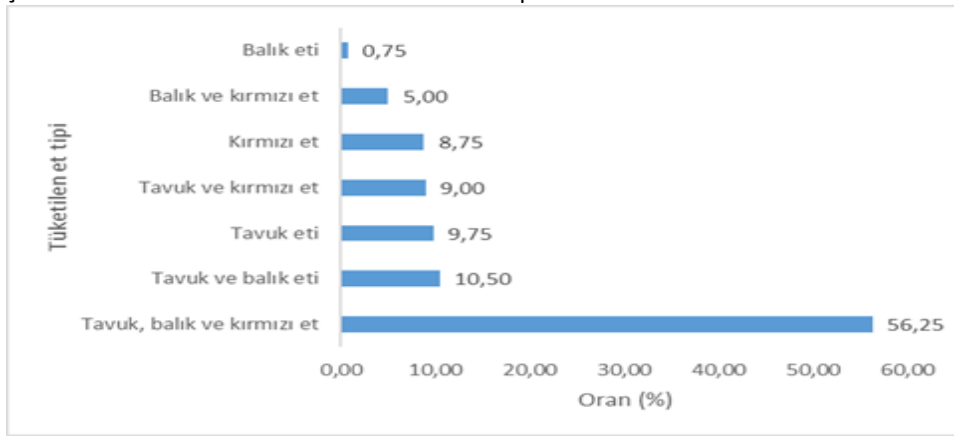
İlkokul	26.32	1372-2285 US\$	23.31
Lise	29.32	2285 US\$’dan fazla	11.53
Önlisans	7.27		
Lisans	21.30		
Lisansüstü	10.77		

Not: 1US\$ = 2.1879 TL (2014 yılı aylık ortalama döviz kuru-Türkiye Cumhuriyet Merkez Bankası (TCMB), 2014).

3.2. Katılımcıların Et Tüketim Profili

Bu bölümde katılımcıların et tüketim profili içinde tavuk etinin yeri ortaya konulmuştur. Katılımcıların tercih ettiği et tipleri Şekil 1’de gösterilmiştir. Genel olarak katılımcılar tarafından tercih edilen et tipleri içinde tavuk eti yer almaktadır. Ancak, sadece tavuk eti tüketenlerin oranı oldukça az olup, bu oran %9.75’tir. Katılımcıların %56.25’i tavuk yanında balık ve kırmızı et, %10.50’si tavuk ve balık eti, %9’u tavuk ve kırmızı et tüketmektedir. Bu yönüyle tavuk eti katılımcıların yaklaşık %75’inin tercih ettiği et tipleri içinde yer alan önemli bir gıda ürünü olduğu anlaşılmaktadır.

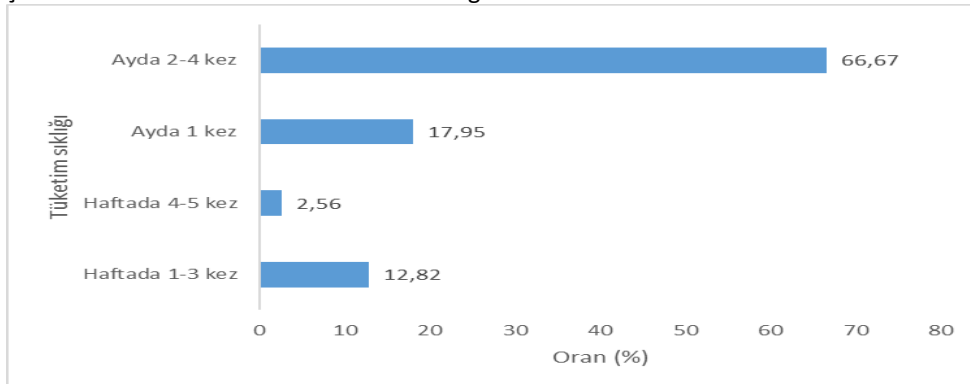
Şekil 1: Katılımcılar tarafından tercih edilen et tipleri



3.3. Katılımcıların Tavuk Eti Satın Alma Davranışları

Görüşülen katılımcıların tavuk eti tüketim sıklığı Şekil 2’de verilmiştir. Şekil 2’den de görüldüğü gibi, katılımcıların %66.67’si gibi önemli bir oranı ayda 2 ila 4 kez aralığında tavuk eti tüketmektedir. Ayda 1 kez tavuk eti tüketenlerin oranı %17.95 iken, bunu %12.82 ile haftada 1-3 kez ve %2.56 ile haftada 4-5 kez tavuk eti tüketenler izlemektedir. Bu bulgulardan da anlaşıldığı gibi, görüşülen katılımcıların dâhil olduğu hanehalkının haftalık tavuk eti tüketimi oldukça azdır. Genelde hanehalkı tavuk eti tüketiminin aylık düzeye indirgenecek bir sıklıkta olduğu, tavuk etinin araştırma kapsamına alınan bölgede yaşayan hanehalklarının %75’i tarafından tüketilmiş olsa bile tüketim sıklığının yeterli olmadığı görülmektedir.

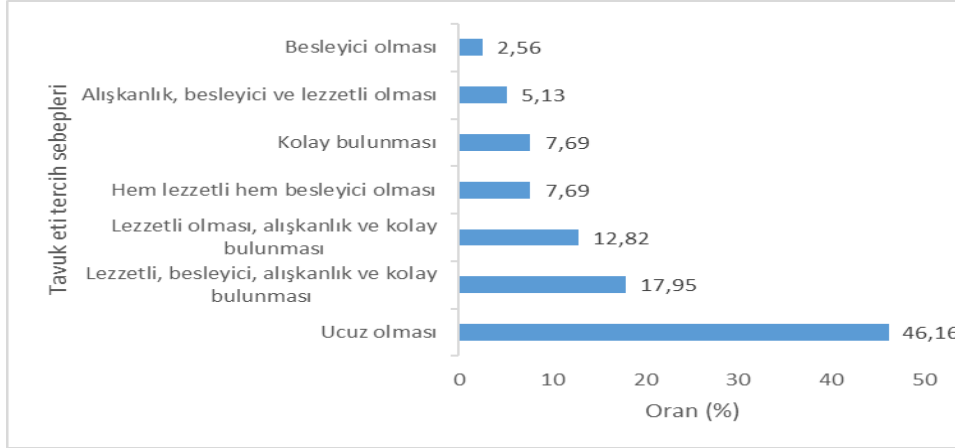
Şekil 2: Katılımcıların tavuk eti tüketim sıklığı



Görüşülen katılımcıların tavuk eti tercih etme sebepleri Şekil 3’te gösterilmiştir. Katılımcıların yarısına yakın bir kısmının (%46.16) tavuk eti tercih sebebi ürünün ucuz olmasına dayanmaktadır. Tumbuan ve ark.’nın (2022) Endonezya’da bir il merkezinde tavuk eti tüketim profili konusunda yapmış oldukları çalışmada ifade ettikleri gibi bir ürünün fiyatı, tüketici talebinin belirleyicisidir. Ürün fiyatı ne kadar yüksek olursa, tüketiciler tarafından

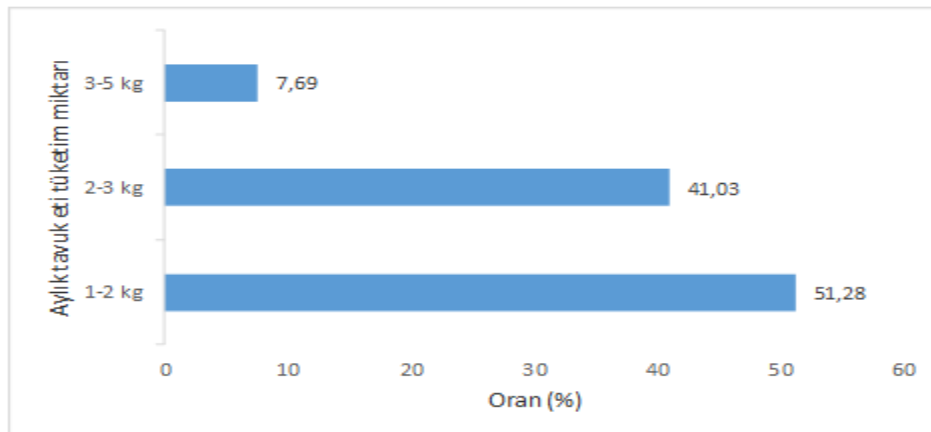
o kadar az talep edilir oysaki bir ürünün fiyatı ne kadar düşükse, tüketiciler o kadar çok talep ederler. Aral ve ark. (2013) tarafından Ankara il merkezinde yürütülen benzer bir araştırmada da belirtildiği üzere tavuk etini ilk seçenek olarak tercih eden hanelerde tavuk eti tüketim tercihlerini etkileyen en önemli faktörün fiyat olduğu belirlenmiştir. Katılımcıların %17.95'inin tavuk eti tercih sebepleri lezzetli, besleyici, alışkanlık ve ürünün kolay bulunmasıdır. Tavuk eti tercih sebeplerini lezzetli olması, alışkanlık ve ürünün kolay bulunması faktörlerine dayandıran katılımcıların oranı ise %12.82'dir. Bazı katılımcılar (%7.69) tavuk eti tercih sebepleri arasında lezzet ve besleyicilik faktörlerinin etkili olduğunu ifade etmiştir. Bazı katılımcılar da (%7.69) tavuk eti tercihlerindeki başlıca sebebi ürünün kolay bulunmasına ya da ürüne kolay erişim imkânına dayandırmışlardır.

Şekil 3: Katılımcıların tavuk eti tercih sebepleri



Katılımcılardan elde edilen bilgiler doğrultusunda hanehalkı başına aylık tavuk eti tüketim miktarları Şekil 4'te verilmiştir. Şekil 4'ten de görüldüğü gibi, hanehalkı başına aylık tavuk eti tüketimi 1-2 kg arasında yoğunlaşmaktadır. Nitekim katılımcıların %51.28'i aylık tavuk eti tüketim miktarlarının 1 ile 2 kg arasında olduğunu belirtmiştir. Hanehalkı başına aylık tavuk eti tüketim miktarının 2-3 kg arasında olduğunu belirten katılımcıların oranı ise %41.03'tür. Aylık tavuk eti tüketimi 3-5 kg arasında olanların oranı oldukça az olup, görüşülen katılımcıların %7.69'unu oluşturmaktadır. TRA1 bölgesinde görüşülen katılımcılardan elde edilen bulgular, Türkiye'de daha önce gerçekleştirilen çalışmaların sonuçları ile tutarlılık göstermektedir. Nitekim Aral ve ark. (2013) tarafından Ankara il merkezinde yürütülen araştırmada hanehalkı aylık tavuk eti tüketimi 3,31 kg olarak belirlenmiştir.

Şekil 4: Katılımcıların hanehalkı başına aylık tavuk eti tüketim miktarı (kg)



Katılımcıların yanıtlarına göre hanehalkı başına aylık tavuk eti tüketim harcaması 23.28 US\$'dır. Bu harcama tutarı 6.86 ile 137.12 US\$ arasında değişkenlik göstermektedir (Tablo 2).

Tablo 2: Katılımcıların Aylık Hanehalkı Tavuk Eti Harcaması (US\$)

	Minimum	Maksimum	Ortalama	Standart sapma
Ortalama Harcama Tutarı (US\$)	6.86	137.12	23.28	15.96

Tavuk eti tüketimi için yapılan aylık harcama tutarı hanehalkı büyüklüğüne göre değişmektedir. Beklenildiği gibi hanehalkı büyüklüğü arttıkça tavuk eti için yapılan harcama tutarı da artmaktadır. Nitekim bu harcama tutarı hanehalkı büyüklüğü 4 kişiden az olanlarda 21.49 US\$, 4 kişi ve daha fazla sayıda olanlarda 27.18 US\$'dır. Mann-Whitney U testi de iki hanehalkı büyüklüğünün harcama tutarları arasında istatistiksel olarak anlamlı bir farklılık olduğunu ortaya koymaktadır (Tablo 3).

Aylık hanehalkı gelir grupları ile tavuk eti tüketimi için yapılan aylık harcama tutarı arasındaki ilişki de incelenmiştir. Bu kapsamda gerçekleştirilen analizde (Kruskal-Wallis testi) hanehalkının gelir düzeyi arttıkça tavuk eti için yapılan aylık harcama tutarının istatistiksel olarak anlamlı bir şekilde arttığı ortaya konulmuştur. Hanehalkının tavuk eti için yapmış olduğu aylık harcama tutarı birinci gelir grubunda (458 US\$'dan az) 17.24 US\$ iken, ikinci (458-1371 US\$), üçüncü (1372-2285 US\$) ve dördüncü (2285 US\$'dan fazla) gelir gruplarında sırasıyla; 22.17 US\$, 27.30 US\$ ve 41.59 US\$'dır. Tavukçuluk Araştırma Enstitüsü tarafından Türkiye'deki tavuk eti tüketimini ve tüketici eğilimlerini belirlemek amacıyla yapılan bir araştırmada hanehalkı gelir düzeyi ile tavuk eti tüketimi arasında pozitif bir ilişki bulunmuştur (Durmuş ve ark., 2012). Kaygısız ve ark.'nın yapmış oldukları bir araştırmada elde edilen bulguya göre, hanelerin ürün satın alımında sosyo-ekonomik faktörlerden en etkili olanı hane geliridir. Söz konusu araştırmaya göre, hanelerin aylık geliri arttıkça, organik tavuk gibi yüksek fiyatlı ürünleri satın alma olasılıkları %50.8 oranında artmıştır.

Tablo 3: Hanehalkı Büyüklüğü ve Gelirine Göre Tavuk Eti Harcaması

Özellikler	Aylık tavuk eti harcama tutarı (US\$)	Mann-Whitney U değeri	Sig.(p değeri)
Hanehalkı büyüklüğü		10354.500	0.001*
4'ten az	21.49		
4 ve daha fazla	27.18		
		Kruskal-Wallis Ki-kare değeri	
Aylık hanehalkı geliri		50.552	0.000*
458 US\$'dan az	17.24		
458-1371 US\$	22.17		
1372-2285 US\$	27.30		
2285 US\$'dan fazla	41.59		

* %5 önem düzeyinde istatistiksel olarak anlamlı (p-values ≤ 0.05)

4. SONUÇ

Bu çalışmada Türkiye İstatistiki Bölge Birimleri Sınıflamasında yer alan TRA1 Düzey 2 Bölgesi içinde bulunan Erzurum, Erzincan ve Bayburt illerinde gerçekleştirilen anket verilerine dayanarak hanehalkının tavuk eti tüketimine yönelik davranışları analiz edilmiştir. Bu araştırmanın bulguları tavuk etinin katılımcıların yaklaşık %75'inin tercih ettiği et tipleri içinde yer aldığını, ayda 2 ile 4 kez aralığında tavuk eti tüketenlerin yaygın olduğunu, tavuk eti tercih sebebinde çoğunlukla ürünün ucuzluğunun ön plana çıktığını, hanehalkı başına aylık tavuk eti tüketiminin 1-2 kg arasında yoğunlaştığını ve hanehalkı büyüklüğü ile gelir düzeyindeki artışın tavuk eti için yapılan aylık harcama tutarını anlamlı bir şekilde artırdığını ortaya koymuştur.

FAO ve OECD'nin önümüzdeki on yıl için tüketim tahminlerini vurgulayan "Tarımsal Görünüm (2022-2031)" raporuna göre, tavuk eti tüketimi hemen hemen tüm ülke ve bölgelerde artış göstermiştir. Bu artışta etkili olan başlıca faktörler arasında düşük fiyatlar ve daha yüksek protein/düşük yağ içeriği gösterilmektedir (OECD, 2022). Bununla birlikte, Türkiye özelinde yurtiçi tavuk tüketimindeki artışın çok fazla olmadığı belirtilmektedir. 2023'te yurtiçi tavuk eti tüketiminin 2022'ye göre %5 daha yüksek olacağı ve bunun 1,7 milyon ton olarak gerçekleşeceği tahmin edilmektedir. Bu tahmini tüketim artışının sektörün beklentilerinin altında kalacağı belirtilmektedir. Bunun başlıca nedeni Türkiye'nin yüksek gıda enflasyonu ile ilişkilendirilerek perakende satış noktalarında beklenen yüksek fiyatlara bağlanmaktadır. Yüksek fiyatlarda yüksek üretim maliyetinin önemli bir rol oynadığı dile getirilmektedir. Yüksek üretim maliyetinde ise ham yem malzemeleri ve yetiştirme materyalleri (kuluçkalık yumurta, civciv, vb.) gibi girdilerin tedarikinde yabancı ülkelere yüksek derecede bağımlılık oldukça etkili olarak görülmektedir (Duyum, 2022). Yüksek fiyatların tavuk eti tüketiminin artmasını baskılayacağı açıktır. Bu baskıyı azaltma noktasında girdi tedarikinde dışa bağımlılığı azaltacak politika önlemlerinin alınması ve bunların hayata geçirilmesi önemli görülmektedir. Türkiye'nin tavuk eti tüketimini, kişi başına tüketim açısından güçlü büyüme oranlarına sahip olan Çin, Hindistan, Endonezya, Malezya, Pakistan, Peru, Filipinler ve Vietnam gibi ülkelerle karşılaştırmak pek doğru olmayabilir. Nitekim tavuk eti söz konusu ülkelerin ulusal

beslenmelerinde önemli bir rol oynamaktadır. Ancak, Türkiye’de kişi başına tavuk eti tüketimini artıracak önemli bir potansiyel olduğu göz ardı edilmemelidir.

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TCMB'nin Uyguladığı Para Politikaları ile Enflasyon Arasındaki İlişkinin İncelenmesi

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Özet: Merkez bankaları, para politikası araçlarını kullanarak ekonomide para politikasını yönetmektedirler. Merkez bankalarının politika araçlarını kullanarak uyguladıkları para politikaları enflasyonla mücadelede önemli rol oynamaktadır. Türkiye'de para politikasının yürütücüsü olan Türkiye Cumhuriyet Merkez Bankası (TCMB)'nin temel amacı fiyat istikrarını sağlamak ve sürdürmektir. Buna göre merkez bankası, para politikası araçlarını kullanarak enflasyonun kontrol edilmesini hedeflemektedir. 2008 Küresel Finansal Kriz'in çıkış noktası ve etkileri nedeniyle 2010 yılının üçüncü çeyreğinden itibaren finansal istikrara yönelik farkındalık artmıştır. Bu doğrultuda TCMB'nin kullandığı politika araçları zamanla değişim göstermiş ve TCMB, politika araçlarını fiyat istikrarının yanında finansal istikrarı da gözeterek şekilde genişletmiştir. Bu çalışma, 2011:01-2022:07 dönemini kapsamaktadır. Çalışmada Türkiye'de, TCMB'nin para politikası araçlarını kullanarak aldığı önlemlerin enflasyon üzerinde etkili olup olmadığı ve bu etkinin nedensellik boyutunda olup olmadığı araştırılmaktadır. Çalışmada para politikası göstergelerinden; net fonlama tutarı, merkez bankası tarafından alınan menkul kıymet büyüklüğü (devlet iç borçlanma senetleri; DİBS) ve ağırlıklı ortalama fonlama maliyeti değişkenleri kullanılmıştır. Enflasyon göstergesi olarak ise tüketici fiyat endeksi (TÜFE) modele dahil edilmiştir. Çalışmada, değişkenler arasındaki nedensellik ilişkisini araştırmak için Toda ve Yamamoto (1995) tarafından geliştirilen Granger nedensellik testi uygulanmıştır. Toda-Yamamoto testinden elde edilen bulgular enflasyonun DİBS ve ağırlıklı ortalama fonlama maliyeti ile çift yönlü ilişkili olduğunu göstermektedir. Bulgulara göre, net fonlama tutarı ile enflasyonun kısa dönemde birbirine etkisi bulunmamaktadır. DİBS'in ise, seçilmiş diğer politika önlemlerinden ve enflasyondan nedensellik seviyesinde etkilendiğini göstermektedir. Çalışmada elde edilen bulguların, beklentiler ve teori ile uyumlu olduğu görülmektedir. TCMB'nin uyguladığı çeşitli para politikası tedbirleri farklı kanallardan enflasyonu etkilemektedir.

Anahtar Kelimeler: Merkez bankası, para politikası, enflasyon, Toda-Yamamoto modeli.

Examining the Relationship Between the Monetary Policies of the CBRT and Inflation

Abstract: Central banks, manage monetary policy using monetary policy tools in the economy. The monetary policies implemented by central banks using their policy instruments play an important role in combating inflation. The main objective of the Central Bank of the Republic of Turkey (CBRT), which is the administrator of monetary policy in Turkey is to ensure and maintain price stability. According to this, the central bank aims to control inflation by using monetary policy tools. The awareness about financial stability has increased since the third quarter of 2010 due to the starting point and effects of the 2008 Global Financial Crisis. Accordingly, the policy instruments used by the CBRT have changed over time and the CBRT has expanded its policy instruments to take into account financial stability as well as price stability. This study covers the period 2011:01-2022:07. In the study, it is investigated whether the measures taken by the CBRT using monetary policy instruments have an effect on inflation in Turkey and whether this effect is in the dimension of causality. Net funding amount, the size of securities purchased by the central bank (government domestic debt securities; DIBS) and weighted average funding cost variables were used as monetary policy indicators in the study. The consumer price index (CPI) is included in the model as an inflation indicator. In the study, Granger causality test developed by Toda and Yamamoto (1995) was applied to investigate the causality relationship between variables. The findings obtained from the Toda-Yamamoto test show that inflation is bidirectionally correlated with DIBS and weighted average funding cost. According to the findings, there is no effect of net funding amount and inflation on each other in the short term. On the other hand, it shows that the DIBS is affected by other selected policy measures and inflation at the causality level. It is seen that the findings obtained in the study are compatible with expectations and theory. The various monetary policy measures implemented by the CBRT affect inflation through different channels.

Key words: Central bank, monetary policy, inflation, Toda-Yamamoto model.

1. GİRİŞ

Dünyada siyasi ve iktisadi değişimlere bağlı olarak zamanla ekonomi alanında paradigma değişimi yaşanmış ve bu değişime paralel olarak merkez bankalarının rolü ve görevleri ile ilgili tartışmalar başlamıştır. Bu süreçte para politikasının amaçları ve bu amaçlar için kullanılan araçlar da değişim göstermiştir. Değişen konjktür ve hedefler yeni politika araçlarının kullanılmasını gerekli kılmıştır. Para politikasının temel amacı para arzını etkileyerek parasal tabanı kontrol etmektir. Bu süreçte kullanılan stratejiler ve kararlar bütününe para politikası denir.

Bir ekonomideki enflasyon sorunu, ekonomik performansı bozarak ekonomik istikrarsızlığı artırmaktadır. Bu noktada merkez bankalarının uyguladığı para politikalarının enflasyonu kontrol etmedeki rolü önemlidir. Para politikasının enflasyonu kontrol etme rolüne yönelik yaklaşımlar, iktisadi düşünce okullarına göre farklılık göstermektedir. Buna yönelik temel yaklaşımlar arasında merkez bankalarının bağımsızlığı, Para Kurulu, enflasyon hedeflemesi gibi politika yaklaşımları yer almaktadır. Bu yaklaşımlar, çeşitli para politikası araçları yoluyla enflasyonunun kontrol edilmesini hedeflemektedir (Oktar ve Dalyancı, 2011).

Türkiye Cumhuriyet Merkez Bankası (TCMB), temel amacı olan fiyat istikrarını sağlamak ve sürdürmek için geleneksel para politikası çerçevesinde bir hafta vadeli repo ihale faiz oranını (politika faiz oranını) temel politika aracı olarak kullanmıştır. Ancak 2008 Küresel Finansal Kriz'in ortaya çıkardığı yeni konjonktürde merkez bankaları fiyat istikrarı ile birlikte finansal istikrarın önemine işaret etmişlerdir. Gelişmiş ülkelerin uyguladığı parasal genişleme stratejilerinin etkisi sonucu gelişmekte olan ülkelerde ve Türkiye'de tasarlanan yeni para politikası bileşeni Kriz'den çıkış yolunda kullanılmıştır. Bu doğrultuda TCMB, 2010 yılı sonrasında geleneksel olmayan yeni bir para politikası çerçevesine geçmiş ve kısa vadeli politika faizi yerine faiz koridorunu aktif politika aracı olarak kullanmaya başlamıştır. TCMB, politika kararları alınırken fiyat istikrarı ve enflasyon hedefinden taviz verilmeyeceğini vurgulamış, ancak kredi genişlemesi, sermaye akımları ve iktisadi temellerden kopuk kur oynaklığı gibi makro finansal riskler göz ardı edilmeden finansal istikrarın hedefe dahil olacağını vurgulamıştır. Fiyat istikrarı ile finansal istikrarının birbirini tamamlayan iki önemli hedef olduğunu belirtmiştir (TCMB, 2010). Bu durum, TCMB'nin fiyat istikrarı olan temel amacından sapmadığını, finansal istikrarı desteklediğini göstermektedir. TCMB (2010), enflasyonu kontrol etmeye yönelik kullandığı temel politika aracının bir hafta vadeli repo ihale faiz oranı olduğunu yeniden ifade etmiş, ancak bunun yanında para politikasının etkinliğini artırmak ve makro finansal riskleri sınırlamak amacıyla, zorunlu karşılıklar ve likidite yönetimi gibi ek politika araçlarının da aktif olarak kullanılacağını eklemiştir.

Çalışmada, TCMB'nin kullandığı bazı para politikası araçlarının 2011 yılından sonra Türkiye'de enflasyonu etkileyip etkilemediği araştırılmaktadır. Bunun için çalışmada, TCMB tarafından uygulanan para politikası araçlarını büyük ölçüde yansıtan ve etkilerinin çeşitli kanallarla piyasaya yansıdığı dikkate alınan göstergeler seçilmiştir (Kartal, 2020). Çalışmada kullanılan para politikası göstergeleri; net fonlama tutarı, merkez bankası tarafından alınan menkul kıymet büyüklüğü (devlet iç borçlanma senetleri; DİBS) ve ağırlıklı ortalama fonlama maliyeti, enflasyon göstergesi ise tüketici fiyat endeksi (TÜFE)'dir.

2. LİTERATÜR

Barro ve Gordon (1983), petrol krizinin ardından hükümetlerin enflasyonla mücadelede zayıf kalmaları, yüksek enflasyon ve durgunluğun birlikte yaşanması gibi olgulara dikkat çekmişlerdir. Bu noktada merkez bankalarının temel hedefinin enflasyonla mücadele olması gerekliliği tartışmaları yükselmiş ve Bernanke ve Blinder (1992)'in da para politikasının etkinliği ile ilgili söylemleri akademik çalışmalarda ön plana çıkmıştır.

Kara ve Orak (2008), fiyat istikrarının bir toplumun iktisadi ve sosyal refahının sağlanması açısından önemine dikkat çekerek para politikasının birincil amacının fiyat istikrarı olmasının gerekliliğini vurgulamaktadırlar. Buna göre fiyat istikrarının sağlanamadığı durumda, finansal piyasaların verimliliği azalmakta, uygulanan politikalara güvensizlik oluşmakta ve bu durum hükümetlerin tasarladığı ekonomi politikalarını bozmaktadır. Fiyatların istikrarsız olması ayrıca, ekonominin dış piyasalarda rekabet gücünü azaltmakta, sermaye piyasalarını bozmakta, işgücü piyasalarının etkinliğini düşürmekte, gelir dağılımını bozmakta ve enflasyonun atalet kazanmasına neden olmaktadır.

Merkez bankasının uyguladıkları para politikalarının amaçları ve araçları, iktisadi konjonktüre göre şekillenmekte ve değişmektedir. Ancak, para politikalarının amacı büyük ölçüde ekonomide makroekonomik istikrarı sağlamaya yönelik kullanılmaktadır. En başta gelen para politikası, fiyat istikrarının sağlanması (düşük enflasyon oranı) ve bunun sürdürülmesidir (Clarida ve Gertler, 1997; Khan vd., 2003; Mankiw, 2007).

Türkiye'de merkez bankası tarafından uygulanan para politikası amaç ve araç seti zaman içerisinde değişmiştir. 2000 Kasım ve 2001 Şubat Kriz'lerinin ardından merkez bankacılığı da dâhil olmak üzere ekonominin birçok alanında kalıcı yapısal bir dönüşümün sağlanması hedeflenmiştir. Bu kapsamda, 2001 yılının Mayıs ayında "Güçlü Ekonomiye Geçiş Programı" uygulanmaya başlanmıştır. Programda, bankacılık sektörüne ilişkin tedbirler alınarak finansal piyasalardaki belirsizliğin azaltılması, faiz oranlarında ve döviz kurunda istikrarın sağlanması, makroekonomik politikaların enflasyonla mücadelede etkin bir şekilde kullanılması ve sürdürülebilir büyüme ortamının oluşturulması amaçlanmıştır (TCMB, 2013).

2008 Küresel Finansal Kriz, hem gelişmiş hem de gelişmekte olan ülke ekonomilerini ciddi düzeyde sarsmıştır. Küresel Kriz'den çıkarılan derslerden birisi de finansal istikrarın göz ardı edilmesinin orta ve uzun vadede makroekonomik istikrarı ve fiyat istikrarını tehdit edebileceği olmuştur. Yaşanan küresel koşullar merkez bankalarını alternatif politika arayışlarına yönlendirmiştir. Küresel finansal sistemdeki kırılmalıklar sermaye akımlarında ciddi oynaklıklara ve belirsizliklere sebep olmuştur. Bu gelişmeler Türkiye gibi ülkelerde makroekonomik ve finansal istikrarı tehdit etmiş ve geleneksel olmayan daha esnek politika arayışlarını tetiklemiştir (Kara,2012).

Enflasyon ile DİBS faiz oranı arasındaki nedensellik ilişkisini inceleyen Doğan vd. (2016), 2003-2015 dönemini ele almışlardır. Elde ettikleri bulgular, enflasyondan faiz oranına doğru bir nedensellik ilişkisinin olduğunu, ancak faiz oranından enflasyona doğru bir nedensellik ilişkisinin bulunmadığını göstermektedir. Yazarlar, Merkez Bankasının para politikası çerçevesinde belirlediği faiz oranlarının aktarım kanalları ile enflasyonu etkilerken faiz oranlarının uyum sürecinde gecikmeler yaşanacağı için faiz oranlarında yapılan değişikliklerin enflasyon oranlarını etkilemesinin zaman aldığını vurgulamaktadırlar. Benzer bulgular Öztürk ve Öner'in (2020) çalışmalarında da görülmektedir.

3. VERİ, YÖNTEM ve BULGULAR

Bu kısımda modelde kullanılan değişkenler açıklandıktan sonra serilerin durağanlık testleri yapılmakta ve çalışmada kullanılan ampirik yöntem anlatılmaktadır. Ardından modelden elde edilen bulgulara yer verilmektedir.

3.1 Veri ve Yöntem

TCMB, dünyada yaşanan bazı risk faktörleri nedeniyle (küresel risk iştahındaki bozulma, dünyada derinleşen borç sorunu vb.) oluşan bozulmanın, Türk lirasında aşırı değer kaybına yol açmasıyla orta vadeli enflasyon beklentilerini kontrol altına almak için açık piyasa işlemleri yoluyla fonlamayı politika aracı olarak kullanabilmektedir (TCMB, 2016). Bunun yanında pandemi döneminde merkez bankasının, finansal piyasalara yönelik aldığı para politikası tedbirleri genel olarak fonlama kanalının açık tutulması şeklinde olmuştur (Kartal, 2020). Yine fiyat istikrarını sağlama temel amacıyla çelişmemek kaydıyla, TCMB, likidite sıkıntısını gidermek için ikinci el piyasadan doğrudan DİBS satın alabilmekte ve piyasa likiditesini dengeleyebilmektedir (TCMB, 2016; Eroğlu ve Eroğlu, 2010). AOFM, bankacılık sisteminin merkez bankasından yaptığı borçlanmanın ağırlıklı ortalama faizini temsil etmektedir. Merkez Bankası, kısa vadeli faizler üzerinden piyasayı AOFM'yi kullanarak fonlamaktadır. AOFM farklı vadelerdeki faiz oranlarının birlikte kullanılmasıyla oluşan efektif fonlama faizidir. Kullanılan bu faizlerin ağırlıklı ortalaması alınarak hesaplanmaktadır. Fonlama yapılırken gösterge faizi olarak kullanılır (Kuzu, 2017). TCMB'nin politika metinlerinde AOFM'ye sıkça atıfta bulunulduğundan söz konusu faiz, piyasa tarafından para politikası duruşunun önemli bir göstergesi olarak algılanmaktadır. Bu nedenle AOFM de, parasal aktarım mekanizması açısından önemli olma potansiyeli taşıyan bir diğer değişken olarak ampirik çalışmalara dahil edilmektedir (Binici vd., 2016).

Bu doğrultuda bu çalışmada, Türkiye'de yeni para politikasının uygulandığı dönemde TCMB'nin uyguladığı politika önlemlerinin enflasyon ile ilişkisi nedensellik boyutunda incelenmektedir. Çalışma 2011M01-2022M07 dönemini kapsamaktadır. Politika önlemlerini yansıtan göstergeler net fonlama tutarı (NETFON), merkez bankası tarafından alınan menkul kıymet büyüklüğü (devlet iç borçlanma senetleri; DİBS) ve ağırlıklı ortalama fonlama maliyeti (AOFM) olarak belirlenmiştir. Enflasyonu yansıtan gösterge tüketici fiyat endeksi (TÜFE)'dir. Reel efektif döviz kuru (REER) ise modele dışsal değişken olarak dahil edilmiştir (Tablo 1). Göstergelere ait aylık veriler, TCMB Elektronik Veri Dağıtım Sistemi'nden elde edilmiştir. Çalışmada para politikası göstergeleri ile enflasyon serileri arasındaki doğrusal ve doğrusal olmayan dinamikleri araştırmak Toda ve Yamamoto (TY, 1995) tarafından önerilen genişletilmiş vektör otoregresyon (augmented-VAR) modeli kullanılmıştır.

Tablo 1. Değişkenler

	Simge	Tanım	Açıklama
Bağımlı değişken			
Tüketici fiyat endeksi	TÜFE	Tüketici fiyat endeksi (enflasyon göstergesi)	Logaritmik formda kullanılmıştır. Mevsimsellikten arındırılmıştır.
Bağımsız değişkenler			
Net fonlama tutarı	NETFON	TCMB net fonlama miktarı	Logaritmik formda kullanılmıştır. Mevsimsellikten arındırılmıştır.
Devlet iç borçlanma	DİBS	TCMB tarafından satın alınan	Logaritmik formda kullanılmıştır.

senetleri	devlet iç borçlanma senetleri	
Ağırlıklı ortalama AOFM fonlama maliyeti	TCMB ağırlıklı ortalama fonlama maliyeti (%)	Logaritmik formda kullanılmıştır.
Dışsal Değişken		
Döviz Kuru	REER	Reel efektif döviz kuru
		Logaritmik formda kullanılmıştır.

Çalışmada Toda-Yamamoto yönteminin tercih edilmesinin nedeni, TY modelinin değişkenlerin durağanlıklarından bağımsız olarak nedensellik testine olanak sağlıyor olmasıdır. Bunun için, öncelikle VAR modeline ait uygun gecikme uzunluklarının tespit edilmesi gerekmektedir. Ghosh and Kanjilal'a göre (2014), değişkenler arasındaki uzun dönem ilişkisi test edebilmek için serilerin düzeyde durağan olmamaları, I(1) düzeyinde ya da farklı bir düzeyde bütünleşik olmaları gerekmektedir. TY (1995)'nin geliştirdiği genişletilmiş VAR modeli (k+dmax) bu sorunu ortadan kaldırmaktadır.

Bu çalışmada değişkenlerin durağanlıklarını sınamak için Augmented Dickey-Fuller (ADF) ve Phillips-Perron (PP) birim kök testlerinden faydalanılmıştır.

Tablo 2. Durağanlık Analizleri: ADF ve PP Test Bulguları

Değişkenler	Düzye/Fark	ADF		PP	
		Sabit Terim	Trend ve Sabit Terim	Sabit Terim	Trend ve Sabit Terim
TÜFE	Düzye	3.0114 (1.000)	1.9426 (1.0000)	4.2802 (1.0000)	3.8515 (1.0000)
	Birinci fark	-3.3237** (0.0157)	-3.9976** (0.0109)	-5.7997* (0.0000)	-6.6202* (0.0000)
NETFON	Düzye	-1.4662 (0.5478)	-2.7145 (0.2325)	-1.4070 (0.5773)	-2.8042 (0.1984)
	Birinci fark	-13.6575* (0.0000)	-13.6220* (0.0000)	-13.6437* (0.0000)	-13.6103* (0.0000)
DİBS	Düzye	-1.5223 (0.5194)	-2.5916 (0.2849)	-1.6767 (0.4408)	-2.7280 (0.2272)
	Birinci fark	-10.7587* (0.0000)	-10.7250* (0.0000)	-10.7296* (0.0000)	-10.6925* (0.0000)
AOFM	Düzye	-1.7858 (0.3862)	-3.2292*** (0.0832)	-1.8766 (0.3425)	-2.6836 (0.2451)
	Birinci fark	-8.9908* (0.0000)	-8.9644* (0.0000)	-9.1851* (0.0000)	-9.1590* (0.0000)
REER	Düzye	-0.0556 (0.9509)	-2.4147 (0.3704)	0.5311 (0.9873)	-2.0905 (0.5461)
	Birinci fark	-9.5925* (0.0000)	-9.6225* (0.0000)	-9.0891* (0.0000)	-10.2649* (0.0000)

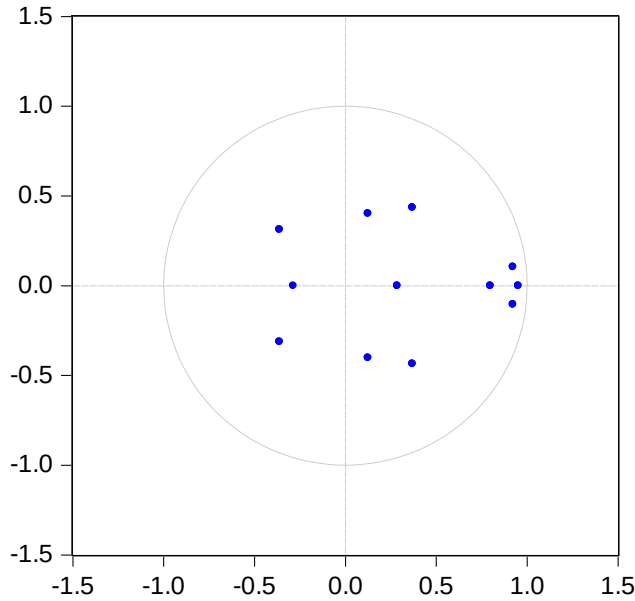
Açıklama: Birim kök testinde kullanılan gecikme sayısı Schwarz Bilgi Kriteri'ne (SIC) göre otomatik olarak belirlenmektedir. PP birim kök testinde Newey-West bant genişliği kullanılmaktadır. * işareti %1'lik, ** işareti %5'lik, *** işareti ise %10'luk MacKinnon kritik değerlerinde serinin durağan olduğunu göstermektedir. Parantez içindeki değerler olasılıkları göstermektedir.

Tablo 2'de gösterildiği üzere, seriler birim kök içermektedir. Toda-Yamamoto nedensellik testi (seemingly unrelated regression model) serilerin durağanlıklarına duyarlı olmadığı için, para politikası değişkenleri ile enflasyon arasındaki karşılıklı nedensellik ilişkisinin tahmini Toda-Yamamoto (1995) modeli ile araştırılmıştır.

Modelde, serilerin bütünleşme dereceleri test edildikten sonra, serilerdeki maksimum bütünleşme derecesine bakılmaktadır (d_{max}). Durağanlık testlerinden görüldüğü üzere, seriler arasındaki maksimum bütünleşme derecesi bir'dir ($d_{max}=1$). Bir diğer aşama, bütünleşme derecelerinden bağımsız olarak seriler için kısıtsız VAR modelinin kurulması ve çeşitli kriterlere bakılarak uygun gecikme uzunluğunun belirlenmesidir. Bu çalışmada Schwarz Information Criterion (SIC)'e göre uygun gecikme uzunluğu 2 olarak belirlenmiştir. TY nedensellik testinin yapılabilmesi için gecikme uzunluğuna fazladan bir gecikme ekleyerek VAR (k+1) (adjusted VAR model) modeli kurulmaktadır. Bu nedenle bu çalışmada 3 gecikme uzunluğu ile model kurulmuştur.

Modelin anlamlılığını test etmek amacıyla VAR modelinin AR polinom ters köklerine ait grafikler incelenmiştir (Şekil 1).

Şekil 1 AR Polinom Ters Kökleri



Şekil 1 incelendiğinde AR Polinom ters köklerin birim çember içerisinde dağılım gösterdiği görülmektedir. Modelin anlamlılığı test edildikten sonra TY (1995) nedensellik testi aşağıdaki şekilde kurulmaktadır.

Denkelmede yer alan θ, δ, Ψ sembolleri modelin parametrelerini, $d_{\max}$ ise değişkenlerin maksimum bütünleşme derecesini göstermektedir.

$$TÜFE_t = \mu_0 + \sum_{i=1}^k \theta_i NETFON_{t-i} + \sum_{i=k+1}^{k+d_{\max}} \theta_i NETFON_{t-i} + \sum_{i=1}^k \delta_i DİBS_{t-i} + \sum_{i=k+1}^{k+d_{\max}} \delta_i DİBS_{t-i} + \sum_{i=1}^k \Psi_i AOFM_{t-i} + \sum_{i=k+1}^{k+d_{\max}} \Psi_i AOFM_{t-i} + \varepsilon_{1t}$$

3.2 Bulgular

TY (1995) metodolojisine dayanan Granger nedensellik testinin ampirik bulguları Tablo 2’de gösterilmektedir.

Tablo 2. TY nedensellik testi bulguları

	Gecikme (k)	Gecikme (k+d _{max})	Ki-kare	P-değeri	Nedensellik yönü
Bağımlı değişken: TÜFE					
Bağımsız değişken: NETFON	2	3	5.1856	(0.158)	TÜFE ↔ DİBS TÜFE ↔ AOFM
DİBS	2	3	8.0635	(0.044)**	
AOFM	2	3	17.478	(0.000)*	
Bağımlı değişken: NETFON					
Bağımsız değişken: TÜFE	2	3	1.5444	(0.672)	NETFON ↔ DİBS
DİBS	2	3	8.5153	(0.036)**	
AOFM	2	3	5.4807	(0.139)	
Bağımlı değişken: DİBS					
Bağımsız değişken: TÜFE	2	3	13.7502	(0.003)*	DİBS ↔ TÜFE DİBS ↔ NETFON AOFM → DİBS
NETFON	2	3	13.7702	(0.003)*	
AOFM	2	3	10.0061	(0.018)**	

Bağımlı değişken: **AOFM**

Bağımsız değişken: TÜFE	2	3	8.8716	(0.031)**	TÜFE ↔ AOFM
NETFON	2	3	9.0624	(0.028)**	NETFON → AOFM
DİBS	2	3	5.0914	(0.1652)	

Açıklama a) *, ** ve *** sırasıyla %1, %5 ve %10 anlamlılık düzeyini göstermektedir. b) → Tek yönlü nedensellik ve ↔ karşılıklı (çift yönlü) nedensellik ilişkisini göstermektedir.

Türkiye’de esnek enflasyon hedeflemesi dönemine yönelik yapılan araştırmada, ağırlıklı fonlama maliyetinin %1 seviyesinde, TCMB’nin satın aldığı devlet iç borçlanma senetlerinin ise %5 düzeyinde enflasyon göstergesi olarak kullanılan TÜFE değişkeni üzerinde nedensellik seviyesinde etkili olduğu bulgusuna ulaşılmıştır. Ayrıca bu iki göstergenin de TÜFE’den etkilendiği, dolayısıyla karşılıklı nedensellik ilişkisinin var olduğu görülmektedir. Net fonlamanın ise enflasyon üzerinde anlamlı bir etkiye sahip olmadığı belirlenmiştir. Diğer taraftan, değişkenler arasındaki karşılıklı nedensellik ilişkilerinin tümü incelendiğinde; net fonlama tutarının karşılıklı, ağırlıklı ortalama fonlama maliyeti ise DİBS ile tek yönlü nedensellik düzeyinde ilişkili olduğu görülmektedir.

4. SONUÇ

2008 Küresel Finansal Kriz’in ardından, özellikle Türkiye gibi gelişmekte olan ülkelerde geleneksel olmayan politika arayışları ön plana çıkmıştır. Küresel Kriz öncesi dönemde TCMB, temel amacı olan fiyat istikrarını sağlamak için geleneksel para politikası çerçevesinde bir hafta vadeli repo ihale faiz oranını temel politika aracı olarak kullanmıştır. Ancak 2008 Küresel Finansal Kriz’in ortaya çıkardığı yeni konjonktürde, 2010 yılında para politikasının etkinliğini artırmak ve makro finansal riskleri sınırlamak amacıyla, zorunlu karşılıklar ve likidite yönetimi gibi politika araçlarını da aktif olarak kullanılacağını ifade etmiştir. Bu çerçevede çalışmada TCMB’nin para politikası çerçevesinde aldığı bazı önlemlerin 2011 yılından sonra Türkiye’de enflasyonu etkileyip etkilemediği araştırılmıştır.

Çalışmada kullanılan para politikası göstergeleri; net fonlama tutarı, merkez bankası tarafından alınan menkul kıymet büyüklüğü (devlet iç borçlanma senetleri) ve ağırlıklı ortalama fonlama maliyeti, enflasyon göstergesi ise TÜFE’dir. Toda-Yamamoto modelinden elde edilen bulgular, ağırlıklı fonlama maliyetinin ve TCMB’nin satın aldığı devlet iç borçlanma senetlerinin TÜFE değişkeni üzerinde nedensellik seviyesinde etkili olduğunu göstermektedir. Ayrıca bu iki göstergenin de TÜFE’den etkilendiği bulgusu elde edilmiştir. Net fonlamanın ise enflasyon üzerinde anlamlı bir etkiye sahip olmadığı belirlenmiştir. Değişkenler arasındaki diğer nedensellik ilişkileri yorumlandığında ise, net fonlama tutarının DİBS ile karşılıklı, ağırlıklı ortalama fonlama maliyeti ile tek yönlü nedensellik düzeyinde ilişkili olduğu görülmektedir. Bulgular, TCMB’nin uyguladığı çeşitli para politikası önlemlerinin, çalışmada ele alınan dönem içerisinde, farklı kanallardan enflasyon üzerinde etkili olduğunu göstermektedir.

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BIRCS-T Ülkeleri: Büyüme ve Ar-Ge İlişkisi

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Özet: Küreselleşen dünya ekonomisinde ülkelerin dışa bağımlılıklarını minimum düzeye indirebilmeleri, küreselleşme sonucunda diğer ekonomiler ile rekabet edilebilecek düzeye gelebilmeleri ve ekonomik sistemde kendilerine daha iyi bir yer edinebilmeleri adına ülkeler Araştırma ve Geliştirme (Ar-Ge)'ye ihtiyaç duyup bu çalışmalara büyük önem vermektedirler. Ar-Ge bir ülkenin yalnızca gelişmişlik seviyesine katkıda bulunmadığı gibi diğer makroekonomik değişkenler üzerinde de büyük bir öneme sahiptir. Günümüz dünya ekonomisinde daha pek çok ülkede emek yoğun üretim anlayışı hâkim olup, teknolojik gelişmişlik seviyelerini yükselterek teknoloji esaslı Ar-Ge'lerini geliştirebilmek için çalışmalarını bu yönden yapmaktadırlar. Bu sayede istikrarlı ve anlamlı bir ekonomik büyüme ve kalkınma hedefine odaklanmışlardır. Büyüme ve gelişme hedefinde olan birçok az gelişmiş ve gelişmekte olan ekonomilerde Ar-Ge'ye büyük önem verilmektedir. Ekonomistlerin ve araştırmacıların da yapmış olduğu pek çok çalışmada AR-GE ile makroekonomik değişkenler arasındaki ilişkiyi konu edinip gelişmiş ve gelişmekte olan ülkeler üzerinde çalışmaların yapıldığı görülmektedir. Ülkelerin Ar-Ge seviyeleri, Ar-Ge harcamaları, Ar-Ge çeşitleri gibi faktörlerin ekonomik parametreler ile olan ilişkileri ve bu ilişkilerin yönü araştırmalara konu olmaya devam etmektedir. Bu çalışmada büyüme ve Ar-Ge'nin yükselen ekonomiler olarak dikkat çeken BIRCS-T ülkeleri üzerinde ki etkisi incelenmektedir. Çalışmada panel veri analiz yöntemi kullanılması planlanmakta ve özellikle son dönem verileri ile bu ilişkinin yönü ortaya konulmaya çalışılacaktır.

Anahtar Kelimeler: Ar-Ge, Ekonomik Büyüme, BIRCS-T, Panel Veri

1. GİRİŞ

Araştırma ve Geliştirme (Ar-Ge) ; insan, kültür ve toplum ilişkilerinden oluşan bilgi sermayesinin çoğaltılması ve bilgi sermayesini dönüştürerek, yeni alanlar ve yeni uygulamalar oluşturmak amacıyla sistematik olarak yapılan çalışmalardır (Frascati, 2002:30). Araştırma ve geliştirme çalışmalarını içermekte olan Ar-Ge kavramı, ilk olarak araştırmayı yani var olmamış bilgiyi veya ürünü bulmayı devamında ise elde edilen bilgiyi ve ürünü geliştirmeyi içermektedir (İncekara vd. 2014:3).Ar-Ge, yeni ürünün üretilmesi, var olan ürünün kalitesini, niteliğini veya donanımının artırılması, maliyet düşürücü üretim teknolojilerinin oluşturulması, var olan teknolojilerin iyileştirilmesi ve bu teknolojilere yeni üretilen bilginin uyarlanması için, bilimsel metotlara göre yürütülen çalışmaları ve bu çalışmaların sonuçlarını kapsamaktadır (Kaymakçı, 2006:21).Günümüz küreselleşen dünya ekonomisinde gelişmiş ülkeler, gelişmekte olan ülkeler ve az gelişmiş ülke grupları da istikrarlı ve anlamlı ekonomik büyümeyi oluşturabilmeleri adına AR-GE ' ye büyük önem vermektedirler. Gelişmekte olan ve az gelişmiş ülke ekonomilerine bakıldığında zaman büyük bir yoğunluğu emek yoğun olan iş gücünün hakim olduğu ürün ve hizmet gruplarının ihrac edildiği, bilgi birikimi-sermayesi gerekli olan yüksek teknoloji, donanım gerektiren ürün gruplarının ise ithal olarak satın alınarak ülke içerisinde yer aldığı görülmektedir. Bu işleyişin tam tersi olan gelişmiş ülke gruplarında ise ülkeler, yüksek teknoloji, bilgi ve donanım içeren ürünleri kendileri elde ederek diğer gelişmişlik seviyesi düşük olan ülke gruplarına ihrac ederken, düşük maliyete sahip olan emek ve iş gücü yoğun olan malları ise bu ülke gruplarından ithal olarak elde etmektedirler. Bu işleyişin sonucunda ise gelişmiş ülkeler daha az bir maliyetle ihtiyaçlarını temin ederken, az gelişmiş ve gelişmekte olan ülkeler ise daha yüksek bir maliyetle ürün ihtiyaçlarını temin ederek dış ticaretlerinde açık vererek bu da ülke ekonomilerini büyümelerini olumsuz olarak etkilemektedirler (Avdar, 2019:205).Bu bağlamda Ar-Ge ülke ekonomilerine, dış ticaret açıklığı veya fazlalığını, istikrarlı ve sürdürülebilir bir ekonomik büyüme, bilgi sermayesi ve yüksek teknoloji ürün içeren mal gruplarını ithal ederek değil de ihrac edebilir seviyeye gelebilmeleri adına son derece önemli bir etkiye sahiptir. Böylelikle AR-GE 'ye bakıldığında zaman sadece bir ülkenin ekonomik parametrelerine katkı sağlamamakla beraber bunun yanında dünya ekonomisinde rekabet edilebilecek seviyeye gelmelerine katkı sağlamaktadır. Böylece AR-GE'ye hakin olan ülkeler dışa bağımlılıklarını azaltmaktadırlar. AR-GE seviyeleri düşük olan yeterli ve gerekli önemi-payı veremeyen ülkeler ise zamanla dünya ekonomisinde yerlerini alamayıp zamanla bağımlılıklarını artırarak ve ihtiyaçları olan ürün gruplarını yüksek maliyetle ithal ederek dış ticaret açıklıklarını artırarak bunun yanında devlet borçlanmaları ile bağımlılıklarını şiddetlendirerek ve belirli bir süre sonrasında ise artık rekabet edebilecek durumda olamayıp dünya ekonomisinden çekilmek durumunda kalmaktadırlar (Göçer, 2013: 116-141). Ekonomi de meydana gelen rekabet ile beraber birçok ülke ve ülke grupları da araştırmalara çeşitli özellikleriyle dahil olmuştur. Bu çalışmada ise BRICS-T ülkeleri ele alınarak AR-

GE ile ilişkisi panel veri analizi kullanarak son dönem verileri ile incelenmektedir. BRICS-T ülkeleri; Brezilya, Rusya, Hindistan, Çin, Güney Afrika ve Türkiye'nin baş harflerinden oluşan bir kısaltmadır. BRICS (Brezilya, Rusya, Hindistan, Güney Afrika ve Çin) terimi ilk olarak 2001 yılında Goldman Sachs Yönetim Kurulu Başkanı iktisatçı Jim O' Neill tarafından öne sürülmüş ve literatürde yerini almıştır. Yükselen ekonomiler olarak dikkat çeken BRICS-T, yüksek nüfusları, doğal kaynak zenginlikleri, milli gelirlerindeki hızlı artışlar ve iç tüketici sayılarının yüksekliği dikkat çekmektedir(Aşçı,2019:40). BRICS-T ülkelerinin büyüme ve AR-GE ilişkisine bakıldığında ise; bilindiği üzere Ar-Ge harcamaları ile ekonomik büyüme arasındaki ilişki pozitif yönlü bir ilişkinin varlığı ekonomi literatüründe önemli dikkat çekmektedir. Ülkelerin Ar-Ge harcamaları için ayırdıkları payda ki artış ile bilgi sermayesi, yeni teknolojik gelişmeler, yeni ürün, yeni bir bilgi gibi pek çok önemli kayma değer sayesinde ekonomik bir büyüme elde ederek bunda da önemli olan istikrarlı ve sürdürülebilir güçlü bir ekonomiyi inşa etmekte idiler. Dolayısıyla bakıldığı zaman BRICS-T ülkeleri aslında politik açıdan birbirlerinden farklı olmalarına rağmen iktisadın tanımı olan kıt kaynakları etkin bir biçimde kullanarak beşeri sermayelerini geliştirerek, emek yoğun üretim anlayışından sıyrılıp ayırdıkları AR-GE harcamalarıyla gerek laboratuvar gerek ise araştırmacı ,patent sayısı , nitelikli eğitimleri amaçlayarak ekonomileri için önemli parametreleri enflasyon ,işsizlik ,dış ticaret açığı vd. makro göstergeleri iyileştirmeyi hedeflemektedir.AR-GE sayesinde oluşacak olan üretim sayesinde ülkeler bu sorunlarla mücadele etmektedir .Çünkü AR-GE'ye verilmesi gereken önemin verilmesiyle ülke ekonomileri hızla artmaktadır. Bu önemin ise sürekli aktif olarak sağlanması gerekmektedir.

2. AR-GE - Büyüme İlişkisinin Literatür Taraması

YAZAR(LAR)	ÜLKE -DÖNEM	YÖNTEM	SONUÇ
Suna Korkmaz (2010)	Türkiye 1990-2008	Johansen Eşbütünleşme	AR-GE → EB
Yaylalı, Akan ve Işık (2010)	Türkiye 1990-2009	Johansen Eşbütünleşme	AR-GE →+ EB
Sökmen ve Aşçı (2017)	BRICS-T ülkeleri 1999-2015	Panel Veri Analizi	Eşbütünleşik AR-GE ↔ EB
Duman (2017)	Türkiye 2000-2015	Johansen Eşbütünleşme, Granger Nedensellik	Eşbütünleşik AR-GE ↔ EB
Işık ve Kılınç (2013)	OECD Ülkeleri 1990-2005	Panel Veri Analizi	AR-GE→+EB
Gülmez ve Yardımcıoğlu (2012)	21 OECD ülkesi 1990- 2010	Panel Veri Analizi	AR-GE→+EB
Özer,Çiftci (2009)	OECD Ülkeleri 1990-2005	Panel Veri Analizi	AR-GE Harcamaları ↔ ihracat
Altın ,Kaya (2009)	Türkiye 1990-2005	VEC(Vector Error Correction) Modeli	Kısa Dönem = 0, Uzun Dönem AR-GE-> EB
Göçer (2013)	11 Asya Ülkesi 1996-2012	Panel Veri Analizi	Eşbütünleşik AR-GE ↔ EB
Akıncı,Sevinç (2013)	Türkiye 1990-2011	Johansen-Juselius Eşbütünleşme Testi Granger Nedensellik Analizi	AR-GE →+ EB
Dam,Yıldız (2016)	BRICS-TM Ülkeleri 2000-2012	Panel Veri Analizi	AR-GE →EB

3.Ekonomik Uygulama

rdgdp	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
rdgdp L1.	.7212094	.0598585	12.05	0.000	.6038888 .83853
gdpan	-.0055886	.0018151	-3.08	0.002	-.0091462 -.0020311
resrdml	.000124	.0000331	3.75	0.000	.0000592 .0001888
labfortot	2.85e-09	1.03e-09	2.77	0.006	8.36e-10 4.87e-09
emvergdp	-1.84e-06	1.43e-06	-1.29	0.199	-4.65e-06 9.66e-07
grosfixcapforgdp	.0061167	.0028259	2.16	0.030	.000578 .0116554

Panel veri analizi metodu kullanarak oluşturulan model de yer alan ekonometrik değişkenler şu şekilde yer almaktadır:

rdgdp (Research and development expenditure (% of GDP)), Araştırma ve Geliştirme harcamalarının GSYİH içerisinde ki yüzdelik oranı olarak ifade edilmekte olan parametredir. Modelde yer alan bu bağımlı değişkenimizi Dünya Bankasından alarak, veriler 1990-2021 dönemlerini kapsamaktadır.

gdpan (GDP growth (annual %)) , GSYİH' nın yıllık büyümesinin yüzdelik oranı olarak yer almaktadır. Modelde yer alan bağımsız değişkenimize ait veriler Dünya Bankasından kaynak olarak alarak ,1990-2021 dönemlerini kapsamaktadır.

resrdml (Researchers in R&D (per million people)), AR-GE 'de yer alan araştırmacı sayısı olarak yer almaktadır. Modelde yer alan bağımsız değişkenimize ait veriler Dünya Bankasından kaynak olarak alarak ,1990-2021 dönemlerini kapsamaktadır.

labfortot (Labor force, total), toplam işgücünü ifade etmektedir. Modelde yer alan bağımsız değişkenimize ait veriler Dünya Bankasından kaynak olarak alarak ,1990-2021 dönemlerini kapsamaktadır.

emvergdp , emek verimliliğini ifade eden parametredir. Modelde yer alan bağımsız değişkenimize ait veriler Dünya Bankasından kaynak olarak alarak ,1990-2021 dönemlerini kapsamaktadır.

grosfixcapforgdp (Gross fixed capital formation (% of GDP)), GSYİH içerisinde yer alan sabit sermayeyi simgelemektedir. . Modelde yer alan bağımsız değişkenimize ait veriler Dünya Bankasından kaynak olarak alarak ,1990-2021 dönemlerini kapsamaktadır.

4. SONUÇ

Bu çalışmada panel veri analiz yöntemi kullanılarak BRICS-T ülkelerinin 1990-2021 dönemi için ekonomik büyüme ile AR-GE arasındaki ilişkisi araştırılmıştır. Ülkelerin gelişmişlik seviyesinde önemli rol üstlenen AR-GE, ülke ekonomilerinde istikrarlı ve sürdürülebilir bir kalkınma sağlanması için adeta zorunludur. AR-GE seviyesi düşük olan ülkelerde yüksek maliyet ve ileri teknoloji gerektiren ürünlerin ithal edildiği, AR-GE seviyesi yüksek olan ülkelerde ise yüksek maliyet ve ileri teknoloji gerektiren ürünlerin bilgi sermayesi aracılığıyla üretilerek ihraç edildiği ve dışa bağımlılıklarının düşük olduğu gözlemlenmiştir. BRICS-T ülkeleri için büyümeyi tetikleyen en önemli unsur AR-GE'dir. BRICS-T ülkeleri rekabet edebilmeleri ve dışa bağımlılıkları azaltmaları için AR-GE'yi oluşturacak, güçlendirecek bir bilgi sermayesine, bu bilgi birikimi ile yeni bir ürün veya var olan ürünü geliştirebilmeleri adına gerekli laboratuvar, çalışma ortamlarına böylelikle de ileri teknoloji içeren ürüne dönüştürerek hem bu aşamada istihdam oluşturup, hem de ülke ekonomilerinde istikrarlı bir iktisadi büyüme elde edilebilecektir. Böylelikle de dış ticaretlerinde, AR-GE sayesinde günümüz dünya ekonomisinde söz sahibi olarak, rekabet edebilecek seviye elde ederek küreselleşme adına önemi vurgulanmıştır. Dünya ekonomisinde yer almak ve rekabet edebilmek için AR-GE kaçınılmaz bir gerçektir.

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İşletmelerde Stratejik Marka Yönetimi Uygulamaları ve Güncel Örnekler

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Özet: İşletmelerin, marka algısı, tanınma, akılda kalma, marka değeri ve müşteri sadakati geliştirmeleri için stratejik bir marka yönetim sürecine sahip olmaları ve aynı zamanda bu süreci başarılı bir şekilde yürütebilmeleri gerekmektedir. Stratejik marka yönetimi ise marka bilinirliği kazanmak, marka kimliği sağlamak ve marka başarısını en uygun hale getirerek rakiplerden daha üstün olmak için uygun bir marka stratejisinin seçilmesi ve bu stratejinin uygulanması sürecidir. Stratejik marka yönetimi müşterilere markanın benzersizliğini vurgulayarak bir markanın farklılaşmasında önemli rol oynamakta, pazarlama iletişimini daha etkili kılmakta ve ürünlerin değerini artırmaktadır. Strateji odaklı marka yönetimi sürecini benimseyen işletmelerde güçlü bir bilinirlik sağlanmakta, müşterilerle marka arasında güven oluşmakta ve bu durum marka sadakatine dönüşmektedir. Bu çalışmanın amacı güncel uygulamalar ve örneklerden hareketle işletmeler için stratejik marka yönetiminin önemini ortaya koymaktır. Araştırmada, stratejik marka yönetimin markaları güçlendirdiği, marka bilinirliği ve sadakati sağladığı, olumlu marka tecrübelerine sahip müşterilerin satın alma davranışlarını tekrarladıkları sonucuna ulaşılmıştır.

Anahtar Kelimeler: Marka, Strateji, Stratejik Marka Yönetimi

Abstract: In order for enterprises to develop brand perception, recognition, retention, brand value and customer loyalty, they need to have a strategic brand management process and at the same time be able to carry out this process successfully. Strategic brand management, on the other hand, is the process of choosing an appropriate brand strategy and implementing this strategy in order to gain brand awareness, provide brand identity, and be superior to competitors by optimizing brand success. Strategic brand management plays an important role in the differentiation of a brand by emphasizing the uniqueness of the brand to the customers, making the marketing communication more effective and increasing the value of the products. In enterprises that adopt the strategy-oriented brand management process, a strong awareness is achieved, trust is formed between the customers and the brand, and this turns into brand loyalty. The aim of this study is to reveal the importance of strategic brand management for enterprises based on current practices and examples. In the research, it was concluded that strategic brand management strengthens brands, provides brand awareness and loyalty, and customers who have positive brand experiences repeat their purchasing behaviors.

Key Words: Brand, Strategy, Strategic Brand Management

1. GİRİŞ

Günümüzde her işletme bir markaya sahip olmak istemektedir. İlk zamanlardan beri üreticiler ürünlerini diğerlerinden ayırmak için markaları kullanmışlardır. Marka insanların zihninde işletmenin ve tekliflerinin anlamlı bir resmini oluşturmak için kullanılan bir pazarlama aracıdır. Bir işletme markayı yönetirken ve oluştururken yaptığı her şey müşteri, işletme ve işbirlikçileri için değer oluşturmaktır. Markaları başa baş rekabet eden hızlı tüketim malları üreticileri ve dağıtıcılarının doğal marka dünyasının ötesinde yüksek teknoloji, düşük teknoloji, kamu hizmeti kuruluşları, hizmetler, endüstriyel işletmeler, sivil toplum kuruluşları ve kâr amacı gütmeyen organizasyonlar gibi tüm sektör organizasyonları için markalar stratejik bir konu olmaya başlamıştır. Hatta ülkeler ve şehirler de marka terimi içinde düşünülmüştür. Marka işletmelere rekabet avantajı sağlayan önemli bir varlıktır. Marka yönetimi konusu son yıllarda sayısız bilim insanı tarafından büyük ilgi görmüş olup, bilim insanları markanın ne olduğunu, nasıl geliştirildiğini, nasıl algılandığını ve nasıl yönetildiğini tanımlamak, araştırmak ve yeniden kavramsallaştırmak için sayısız girişimde bulunmuşlardır (Kapferer, 2012: 1; Manoli, 2022: 1). Marka yönetimi, işletmenin marka varlıklarını yönetme ve geliştirme sürecidir. Marka yönetiminin amacı, insanların zihninde farklı bir pazar değeri oluşturan, onları rekabette farklılaştıran, işletmeye tekliflerini tanımlamayı mümkün kılan ayrı bir imaj oluşturma ve onu sürdürme sürecidir. Marka yönetimi, müşterinin davranışları üzerindeki markanın etkisinin değerlendirilmesinden, marka ismi, logo ve slogan tasarımına kadar çeşitli faaliyetleri kapsamaktadır. Stratejik marka yönetimi ise marka yönetimine uzun dönemli bir bakış açısı kazandırmakta olup, markayı rakiplerinden farklılaştırmaya yardımcı olmakta ve pazarlama çabalarını daha etkileyici kılmaktadır. Ayrıca marka bilinirliğini arttırmakta ve uzun dönemli işletme amaçlarına ulaşmaya yardımcı olmaktadır (Indeed Editorial Team, 2022: 1; Chernev, 2020: 22). Bu bağlamda büyük markaların başarısı marka stratejisini başarılı bir şekilde uygulamaları sonucu ortaya çıkmaktadır.

Bu çalışmada, işletmeler için stratejik marka yönetiminin önemi açıklanmaya çalışılmaktadır. Bu amaç doğrultusunda çalışmada stratejik marka yönetimi hakkında bilgi verilmekte, sonrasında ilgili uygulamalar ve güncel örneklerden hareketle stratejik marka yönetimin önemi açıklanmaktadır.

2. STRATEJİK MARKA YÖNETİMİ

Marka, üretici, satıcı ve hizmet işletmelerinin ürünlerinin tanıtımını ve onların diğer işletmelerin ürünlerinden ayrılmasını sağlayan isim, terim, sembol, şekil ya da bunların bir bileşimidir (Mucuk, 2014: 252). Marka yalnızca, bir logo, görsel, kimlik ya da işaret olmayıp müşterilerin zihninde bıraktığı bir etkidir. Bu nedenle marka oluşturma, işletmeler için stratejik bir faktör olmaktadır. Stratejik bir faktör olarak marka oluşturma, rakiplerin pazara girişini engelleyebilmektedir. Örneğin, Volvo güvenli bir aile arabası olarak müşterilerin hafızasında yer edinmiş ve bu nedenle bu alandaki İsveçli markaya meydan okumasına gerek kalmamıştır. Bu yönüyle marka oluşturma, işletmelerin misyonlarının sürekliliğine yardımcı olmaktadır (Gemci vd., 2009: 105, 111). Diğer yandan stratejik bir markanın oluşturulması uzun zamanlar almakta ve oluşturulan markanın müşterilerce değer kazanması uzun vadeli sistematik ve planlı çalışmalar sonucu gerçekleşmektedir (Yıldırım ve Aksu, 2016: 2). Başka bir ifade ile bu durum uygun bir marka yönetimi süreci ile mümkün olmaktadır. Marka yönetimi, mevcut ya da yeni oluşturulacak markaların planlanması, örgütlenmesi, yönlendirilmesi, koordine edilmesi ve kontrol edilmesi sürecidir. İşletmeler marka yönetimi ile sahip oldukları markalarının orijinal özelliklerini ortaya çıkararak farklılaşma oluşturmakta ve rekabet avantajı elde etmektedirler (Öncer Özdemir, 2005: 175). Stratejik marka yönetimi ise marka farkındalığını başarılı bir şekilde sürdüren veya geliştiren, marka çağrışımlarını güçlendiren, marka kalitesini ve kullanımını vurgulayan bir strateji geliştirme sürecidir. Stratejik marka yönetimi süreci, markanın neyi temsil edeceği ve rekabetçi markalara göre nasıl konumlandırılması gerektiği konusunda net bir anlayışla başlamaktadır. Amacı, bir işletmenin maksimize edebileceği faydaları yansıtacak marka konumlandırmasını belirlemek ve kurmaktır (Djukić ve Stanković, 2006: 128). Stratejik marka yönetimi süreci; marka planlarının belirlenmesi ve geliştirilmesi, marka pazarlama programlarının tasarlanması ve uygulanması, marka performansının ölçülmesi ve yorumlanması, marka değerinin büyütülmesi ve sürdürülmesi olmak üzere 4 temel adımdan oluşmaktadır (Keller, 2013: 58-60):

- 1- **Marka planlarının belirlenmesi ve geliştirilmesi:** Bu adımda “marka konumlandırma modeli, marka rezonans modeli ve marka değer zinciri” belirlenmektedir. Marka konumlandırma modeli, rekabet avantajlarını maksimum seviyeye çıkarmak için bütünleşik pazarlamaya nasıl rehberlik edileceğini açıklamaktadır. Marka rezonans modeli, müşterilerle yoğun etkinlik sadakati ilişkilerinin nasıl oluşturulacağını açıklamaktadır. Marka değer zinciri ise markaya yönelik pazarlama harcamalarının ve yatırımlarının finansal yönden etkisini daha iyi anlamak için markalar için değer oluşturma sürecini izlemek aracıdır.
- 2- **Marka pazarlama programlarının tasarlanması ve uygulanması:** Genel olarak bu adım 3 faktöre bağlıdır. Bunlar; “(1) markayı oluşturan marka öğelerinin ilk seçimleri ve bunların nasıl karıştırılıp eşleştirildiği, (2) pazarlama faaliyetleri ve destekleyici pazarlama programları ve markanın bunlara entegre edilme şekli, (3) markayı başka bir varlığa (şirket, ülke, dağıtım kanalı veya başka bir marka gibi) bağlamanın bir sonucu olarak dolaylı olarak markaya devredilen veya marka tarafından kullanılan diğer çağrışımlardır.”
- 3- **Marka performansının ölçülmesi ve yorumlanması:** Bu adım, marka değeri ölçüm sisteminin uygulanması, marka denetimlerinin gerçekleştirilmesi, marka izleme çalışmalarının tasarlanması ve bir marka değeri yönetim sisteminin kurulması gibi aşamalardan oluşmaktadır. Marka değeri ölçüm sistemi, pazarlamacılara kısa vadede mümkün olan en iyi taktiksel kararları ve uzun vadede en iyi stratejik kararları verebilmeleri için zamanında, doğru ve eyleme geçirilebilir bilgiler sağlamak üzere tasarlanmış bir dizi araştırma prosedürüdür.
- 4- **Marka değerinin büyütülmesi ve sürdürülmesi:** Bu adım, marka mimarisinin tanımlanması, zaman içinde marka değeri varlığının yönetilmesi, marka değerinin coğrafi sınırlar, kültürler ve pazar segmentleri üzerinden yönetilmesi aşamalarından oluşmaktadır.

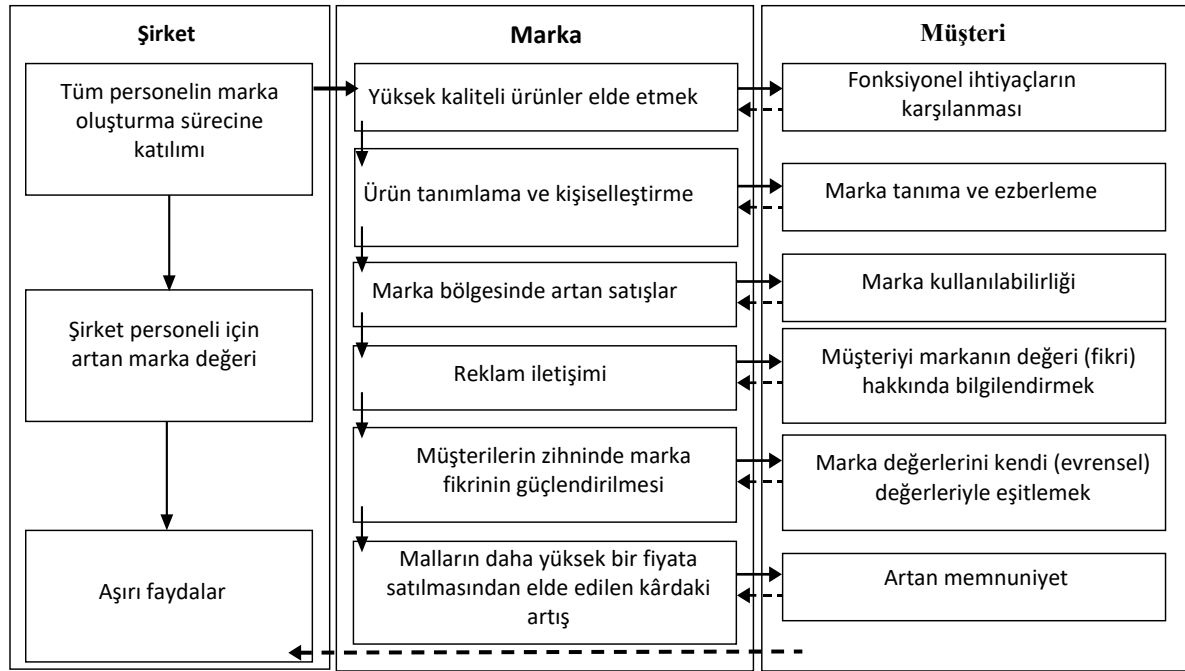
1990'lardan bu yana işletmelerin, markaların birer varlık olduğunun ve dolayısıyla markaların her zaman somut yenilikler ve somut olmayan katma değerlerle güçlendirilmeleri ve beslenmeleri gerektiğinin bilincinde oldukları söylenebilmektedir. Bu bağlamda stratejik marka yönetiminin 10 temel ilkesi bulunmaktadır (Kapferer, 2008: 137):

- 1- Büyük bir fikir, bir vizyon taşıyan ve müşterinin hayatını değiştirme arzusuyla hareket eden birkaç stratejik markadan yararlanmak.

- 2- Onları beslemek için tüm varyantları ve alt markaları bu büyük markaların altına yerleştirmek.
- 3- Lider olarak hareket etmek ve kategorinin standartlarını yükseltme konusunda tutkulu olmak.
- 4- Tüm markaları konumlarına uygun olarak sürekli bir yenilik akışı (mal, hizmet vb.) ile sürdürmek.
- 5- Özellikle ticaretin ticari markaları zorladığı pazarlarda, bağı ve bağlılığı derinleştirmek için nihai müşterilerle doğrudan bağlar kurmak.
- 6- Kişiselleştirilmiş hizmetler sunmak.
- 7- Müşterilerin sadece sadık kişiler değil, markanın aktif destekçileri olmaları için katılımlarını ödüllendirmek.
- 8- Değerleri paylaşan toplulukları teşvik etmek.
- 9- Markayı ve ürünlerini hızla küreselleştirmek.
- 10- Etik olmak.

Stratejik marka yönetimi, kısa bir ifadeyle rakiplere üstünlük sağlamak için uygun bir marka stratejisinin geliştirilmesi ve bu stratejinin uygulanması sürecidir. Şekil 1’de kurumsal bir markanın geliştirilmesi ve yönetimi için uygun stratejinin geliştirilmesine yönelik kapsamlı bir plan sunulmaktadır.

Şekil 1: Marka Stratejisinin Geliştirilmesine Yönelik Planlama Süreci



Kaynak: Mazaraki vd. (2021: 8).

Bir markanın gelişimi ve yönetimi veya bir işletmedeki markalaşma süreci stratejik ve bütünsel olmalıdır. Başka bir ifade ile uygun bir değerlendirme göstergeleri sistemi tarafından onaylanmalıdır. Kurumsal marka geliştirme ve yönetimi, tüm pazarlama çabalarının birleştirilmesi gereken bir marka imajı oluşturmaya odaklanmalıdır. Uzun vadeli bir projede, iyi oluşturulmuş bir marka imajı, marka gücünde bir artış sağlamalı ve bunun da gelecekte ürünler için güvenilir ve sürdürülebilir katma değer sağlayacağı öngörülmektedir (Mazaraki vd., 2021: 8).

3. İŞLETMELERDE STRATEJİK MARKA YÖNETİMİ

Marka, işletmenin pazarda rekabet gücünü arttıran ve onu müşteriler için değerli kılan soyut bir varlıktır. Marka stratejisi ise müşteriler tarafından markanın tercih edilmesi ve özdeşleşmesi ile sonuçlanan bir dizi uzun dönemli amaçları başarmak için gerçekleştirilen uzun dönemli planları kapsamaktadır. İşletme, mükemmel bir strateji oluşturduğunda, satışları arttırabilmekte, pazarda iyi bir itibar ve konum oluşturabilmektedir. Aynı zamanda işletme marka stratejisi geliştirerek daha fazla müşteri sadakati oluşturmakta ve işletme markası

rakiplerden farklılaşmaktadır. Başarılı bir strateji aynı zamanda marka değerine yol açmaktadır. Başka bir ifadeyle, müşteriler teklifler için daha fazla ödemeye istekli olmaktadır. Marka ile ilişkili olarak stratejik pazarlama yönetimi, bir işletmeye markasını oluşturma, geliştirme ve yönetme konusunda yardımcı sürdürülebilir politikaları kapsamaktadır. “Stratejik” terimi sürecin uzun dönemli planlarla ve markanın varlıklarıyla ilgilendiğini belirtmektedir. Bu bağlamda stratejik marka yönetimi, markanın büyümesine yönelik uygun stratejinin seçilmesine ve stratejinin sık sık güncellenmesine dayanmaktadır. Bu uzun vadeli sürdürülebilir politika, bir işletmenin ürünlerine değer katmasını mümkün kılmaktadır. Stratejik marka yönetimi bir markaya daha fazla çekicilik ve farklılaşma sağlamak, elde tutmayı artırmakta, çalışan bağlılığını ve uyumunu artırmakta, ürün performansı ile ilgili algıları geliştirmekte, ticari iş birliğini ve tüketici tepkisini hızlandırmakta ve pazarlama iletişimi etkinliğini artırmaktadır (Choudhary, 2019: 1; Holton, 2022: 1). Markalaşma stratejilerinden bazıları; ürün markalama, farklılaşma ve kişisel markalamadır. Dünyadaki neredeyse her işletme ürün markalama stratejisinden yararlanmaktadır. Ürün markalama stratejisi, tüketicileri derinden etkilemenin ve onlarla güçlü bağlantılar kurmanın mükemmel bir yoludur. İyi ürün markalaması, ürünü tanınır hale getirmekte, rakiplerinden ayırmakta ve müşterilerle duygusal bir bağ kurmaya yardımcı olmaktadır. 'Duyguyu tadın' ifadesi duyulduğunda hemen Coca-Cola düşünülmektedir. Benzer şekilde, “sadece yap” dendiğinde akla “Nike” gelmektedir. Ürün markalama, tek bir ürünü farklı ve tanınabilir hale getirmeye odaklanmaktadır. Semboller veya tasarımlar, müşterilerin ürünü kolayca tanımlamasına yardımcı olmak için ürün markalamanın önemli bir parçasıdır. Örneğin, Monster Enerji içecekleri, Red Bull enerji içeceklerinden kolayca ayırt edilmesini sağlayan farklı ambalajlara ve logolara sahiptir. Markalama stratejilerinden bir diğeri farklılaşma stratejisidir. Marka farklılaşması, bir işletmeyi benzer markalar karşısında daha eşsiz ve arzu edilir kılmaktır. Bu stratejinin en önemli yönü işletmenin rakiplerinden daha eşsiz teklifler geliştirmesidir. Bu da işletmenin benzerlerine göre daha yüksek kaliteyi sağlamasını vurgulamaktadır. Bu strateji işletmenin pazar payını, satış miktarını ve gelir büyüklüğünü arttırmaya yardımcı olabilmektedir. Bazı işletmeler için farklılaşma rakiplerden daha üstün kalitede bir teklif sunmak anlamına gelmektedir. Yüksek kaliteli malzemeler kullanan Chipotle farklılaştırma stratejisi kullanan markalardan biridir. Ayrıca Amazon düşük fiyat ve son derece hızlı hizmeti ile kendini diğer alışveriş sitelerinden farklılaştırmıştır. Apple da ürün tasarımı ve yenilikleri aracılığıyla ürünlerini başarılı bir şekilde farklılaştırmıştır. Markalama stratejilerinden bir diğeri kişisel markalamadır. Bütün bir işletme için markalama yerine bireysel bir kişi için kullanılan markalamayı tanımlamaktadır. Bu tür markalama genellikle bir kişinin karakterini, kişiliğini veya marka olarak çalışmasını tanımlamak için kullanılmaktadır. Ünlüler, politikacılar, düşünce liderleri ve sporcular, kendilerinin en iyi modelini halka sunmak için genellikle bu markalama biçimini kullanmaktadırlar. Örneğin, bir girişimci ve 20'den fazla pazarlama kitabının yazarı olan Seth Godin, kendisini bir iş ve pazarlama uzmanı olarak konumlandırmıştır. Godin'in tanınabilir bir kişisel markası bulunmakta ve bireyler onu her seferinde bir fikri belirleyen kısa blog yazılarıyla ilişkilendirmektedir. Bununla birlikte bir teknoloji öncüsü olan Elon Musk'ın dünya çapında tanınan bir kişisel markası bulunmaktadır (Bit.Ai Editorial Team, 2022: 1; Holton, , 2022: 1; Indeed, 2022:1).

4. SONUÇ VE DEĞERLENDİRME

Marka, işletme tekliflerinin ne olduğunu ortaya koyan, onları benzer tekliflerden farklılaştıran ve ayrı bir pazar değeri oluşturan bir pazarlama aracıdır. Marka, işletmeler tarafından yönetilen ve tasarlanan isim logo, slogan ve pazar davranışını etkileme gücüne sahip çeşitli kavramları içeren bir dizi özellikleri kapsamaktadır. Bu bağlamda pazar değeri markalaşmanın merkezindedir. İşletmelerin markalarını oluştururken ve yönetirken yaptıkları her şey müşteriler ve işbirlikçiler için değer oluşturma amacıyla gerçekleştirilmektedir (Chernev, 2020: 25-26). Marka stratejisi, mevcut markayı geliştirmek, markanın değerini arttırmak için gerçekleştirilen uzun vadeli planlar bütünüdür. Marka stratejisi oluşturmak işletmeler ve tüketiciler için önemlidir. Bir işletmenin marka stratejisi olmadan pazarda başarılı olması mümkün olmamaktadır. Ayrıca marka stratejisi rakiplerden farklılaşmaya ve işletmenin fark edilmesine yardımcı olmaktadır (Akgül, 2021: 1).

Markanın gelişmesi, yürütülen plan ve stratejilere bağlıdır. Markayı oluşturma, etkili ve güçlü stratejileri uygulama süreci marka yönetimi ile sağlanmaktadır. Marka yönetimi, pazarda markanın güçlü bir imaj ve kimliğe sahip olmasını sağlayan stratejilerin yönetilmesidir. Başarılı bir marka yönetiminde stratejinin önemi büyüktür. Bu nedenle marka yönetimi stratejik marka yönetimi olarak adlandırılabilir. Bu doğrultuda markalaşma boyunca kimlik, logo, slogan, tasarım ve marka dili marka yönetimi kavramı içerisinde yönetilmektedir (Kanat, 2020: 1). Stratejik marka yönetimi marka bilinirliğini arttırmakta ve uzun dönemli işletme amaçlarına ulaşmaya yardımcı olmaktadır. Bu çalışma sonucunda bir işletme iyi bir marka stratejisi oluşturduğunda rakiplerinden farklılaşabileceği, müşteri sadakatının artacağı, marka değeri oluşacağı, marka bilinirliğinin artacağı ve güçlü bir konuma sahip olacağı belirlenmiştir. Ayrıca stratejik marka yönetiminin bir

markaya çekicilik ve farklılaşma sağladığı, çalışan bağlılığını ve uyumunu arttırdığı, tüketici tepkisini hızlandırdığı, ürün performansı ile ilgili algıları geliştirdiği ve pazarlama iletişimi etkinliğini arttırdığı sonucuna ulaşılmıştır.

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Fight Against Inflation after Covid-19: The Case of Turkey

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Abstract: This study aims to analyze Turkey's efforts to deal with inflation after the Covid-19 pandemic. The 10 countries with the highest consumer inflation as of July 2022 are Zimbabwe, Lebanon, Venezuela, Sudan, Syria, Turkey, Argentina, Sri Lanka, Suriname and Iran, respectively. While the consumer inflation rate in Zimbabwe, which ranks first, is 257% annually, the consumer inflation rate of Iran, which ranks tenth, is at the level of 54%. Turkey ranks 6th among the 10 countries with the highest inflation in the world. Although protests took place most of the high-inflation countries, there were no wide-spread protests in Turkey.

Presidential and parliamentary elections in Turkey will be held on mid-2023. Thus, the government stay away policies threatening its popularity. That is why, the government has not resorted to tight monetary policy or has sought IMF credit against the rising inflation after the Covid-19 pandemic. Traditional advice against rising inflation is to increase the policy rate of the central bank. However, the government doesn't increase the central bank's policy rate and kept it at the level of 14%. Instead, the government adopted the new economic model of Turkey. The government follows policies that encouraging investment, production, export, current account surplus and employment while supporting all segments of the society against inflation and global shocks by providing citizens with income and wage compensations above inflation. Within this framework, the government aims to stabilize prices and to drop inflation down to single digits in 2023 prior to elections with other fiscal policies rather than increasing the central bank's policy rate

Keywords: Inflation, Covid-19, Central Bank, Turkey

1. INTRODUCTION

The 10 countries with the highest consumer inflation as of July 2022 are Zimbabwe, Lebanon, Venezuela, Sudan, Syria, Turkey, Argentina, Sri Lanka, Suriname and Iran, respectively. While the consumer inflation rate in Zimbabwe, which ranks first, is 257% annually, the consumer inflation rate of Iran, which ranks tenth, is at the level of 54%. Turkey ranks 6th among the 10 countries with the highest inflation in the world. As of June 2022, Turkey's consumer inflation rate is 79.6% (see Table 1).

Table 1: 20 Countries with the Highest Inflation Rates (July 2022)

Rank	Country	Inflation (Consumer Price Index)(%)	Rank	Country	Inflation (Consumer Price Index)(%)
1	Zimbabwe	257	11	Ethiopia	33.5
2	Lebanon	210	12	Moldova	31.8
3	Venezuela	167	13	Ghana	29.8
4	Sudan	149	14	Haiti	27.8
5	Syria	139	15	Cuba	26.1
6	Turkey	79.6	16	Pakistan	24.9
7	Argentina	64	17	Laos	23.6
8	Sri Lanka	60.8	18	Malawi	23.5
9	Suriname	55.6	19	Angola	22.9
10	Iran	54	20	Estonia	22.8

Source: <https://tradingeconomics.com/country-list/inflation-rate?continent=world>

After the epidemic, inflation has emerged as a global problem. At the beginning, it is considered as a temporary problem. However, it is accelerated increased its persistency especially after the Ukraine war. It is seen all over world from industrialized countries to developing and less developed countries.

Inflation protests took place on almost all continents. There has been news of protests from Sri Lanka, Pakistan, Peru, Ecuador, Argentina, Panama, Chile, Colombia, Suriname, Haiti, Guinea, Kenya, Ghana, Zimbabwe, Iraq, Iran, Tunisia, Lebanon, Netherlands, Belgium, Italy, France, England, Ireland, Moldova Albania and China. Protests in many countries turned into clashes between the ruling parties and their opponents, with the support of the opposition parties, who tried to use the inflation and economic difficulties that emerged after the epidemic in their favor. Inflation protests have resulted in the resignation, change or overthrow of governments in power in some countries.

Although protests took place most of the high-inflation countries, there were no wide-spread protests in Turkey. Presidential and parliamentary elections in Turkey will be held on mid-2023. Thus, the government stay away policies threatening its popularity. That is why, the government has not resorted to tight monetary policy or has sought IMF credit against the rising inflation after the Covid-19 pandemic. Traditional advice against rising inflation is to increase the policy rate of the central bank. However, the government doesn't increase the central bank's policy rate and kept it at the level of 14%. Instead, the government adopted the new economic model of Turkey. The government follows policies that encouraging investment, production, export, current account surplus and employment while supporting all segments of the society against inflation and global shocks by providing citizens with income and wage compensations above inflation. Within this framework, the government aims to stabilize prices and to drop inflation down to single digits in 2023 prior to elections with other policies rather than increasing the central bank's policy rate. In order to support the fight against inflation, 241.3 billion lira of tax revenue was given up in 2022, including 50 billion lira due to VAT reductions. This article analyzes Turkey's efforts and policies to curb inflation after the Covid-19 pandemic.

2. TURKEY'S EFFORTS AND POLICIES TO CURB INFLATION AFTER THE COVID-19 PANDEMIC

While the government in Turkey tries to eliminate the negative effects of inflation on the lives of citizens by raising the income level of all segments, it also takes measures to reduce inflation. As such, within the scope of fight against inflation, Turkey introduced the Fx-protected Turkish Lira deposits, provided citizens with electricity and natural gas consumption subsidies, reduced taxes on food and beverage services, basic food supplies, and cleaning and hygiene products, facilitated grain corridor agreement, initiated a new social housing project, limited the increase in house rental prices, introduced supermarkets run by agricultural credit cooperatives, introduced a regulation on the trade of second-hand motor vehicles, initiated efforts to reduce energy cost such as drilling activities to find oil and natural gas and building dams for hydroelectric power.

1) The FX-protected Turkish Lira Deposits

Turkey's lowering interest rates policy in the face of surging inflation initially led to currency depreciation. Although Consumer Price Index and Producer Price Index was 36.8% and 79.8%, respectively in 2011, short-term interest rate of the central bank was decreased from 19% to 14%. This situation resulted in a sharp exchange rate depreciation. During the first 20 days of December 2021, US Dollar to Turkish Lira exchange rate increased from 13.3 TL to 17.5TL. In order to stop currency depreciation further, Turkey introduced FX-protected Turkish lira deposits and gold-protected Turkish lira deposits on 20 December 2021.

After the Fx-protected deposits policy was put in effect, exchange rate started falling. The implementation of Fx-protected deposit policy has resulted in a decrease in dollarization in Turkey and supported liralization process in the Turkish Economy. The deterioration in pricing behavior is also fixed as a result of Fx-protected deposits policy. The confidence in the economy is strengthened and the deterioration in pricing behavior is fixed because of the Fx-protected deposits policy. Thus, a suitable environment for the disinflation process was created. The pressure of the exchange rate on inflation is reduced. Thus, the distorting effect of the depreciation in TL on pricing behavior was also brought under control.

2) Electricity and Natural Gas Consumption Supports/Subsidies

As of August 15, the government have provided citizens with the subsidy of 100 billion liras for electricity and natural gas consumption (Yeni Şafak Gazetesi, 2022).

The government provides natural gas consumption support with citizens twice in a year. The first payment was made in March-April 2022 while the second payment will be made in October-November 2022. The support is between 450 and 1,150 TL per year for the protection of consumers. Within the scope of the support, 330 thousand households were helped in the first payment period. In the second payment, government officials announced that it is aimed to provide support to 4 million households (Yeni Şafak Gazetesi, 2022).

In the first 5 months of 2022, the natural gas used by SMEs was subsidized by 76 percent, the natural gas used in the industry was subsidized by 14 percent, the natural gas used for electricity generation was subsidized by 25 percent and the natural gas used in the residences was subsidized by 81 percent (Anadolu Ajansı, 2022).

VAT was reduced from 18 percent to 8 percent on electricity deliveries in residential and agricultural irrigation (Anadolu Ajansı, 2022).

3) Reduction in Taxes on Food and Beverage Services, Basic Food Supplies, Cleaning and Hygiene Products

In order to combat soaring inflation, the government announced a reduction in taxes on basic food products which have a significant weight in the consumer inflation basket. As of February 14, 2022, the value-added tax (VAT) was lowered to 1% from 8% on dairy products, fruit, vegetables and other basic food items. Prior to this reduction, the value-added tax was reduced to 1% on flour and bread. Thus, the coverage of the tax reduction is extended to all basic food items. The government officials also announced that they expect private sector also lower their prices by 7% in addition to the tax reduction by government. The government also announced that the most severe fines will be imposed on stores that do not reflect the VAT reduction in prices (Daily Sabah, 2022a).

VAT was reduced from 18 percent to 8 percent on the cleaning and hygiene products such as soap, shampoo, detergent, disinfectants, baby diapers, wet wipes, toilet paper, paper towels, tissue paper and napkins (Anadolu Ajansı, 2022a). Besides, VAT on food and beverage services was determined as 8 percent instead of 18 percent (Anadolu Ajansı, 2022a).

4) Grain Corridor

Russia and Ukraine have an important place in world grain production and trade. Russia and Ukraine account for 27-30 percent of barley exports, 30-34 percent of wheat exports and 17-20 percent of corn exports (Anadolu Ajansı, 2022b). Since the Ukraine and Russia are the main exporter of cooking oils, fuels, fertilizer and wheat, the Ukraine war halted exports of these products. As such, countries started food stockpiling, prices of these essential products increased, the global food crisis emerged, and even world food security was threatened (International Chamber of Shipping, 2022).

As a result of Turkey's intense multi-faceted diplomacy, Russian and Ukrainian officials have signed a deal with Turkey and the UN in Istanbul to allow ships to transport grain out of the region via a grain corridor. UN officials stated that this agreement would bring relief for developing countries on the edge of bankruptcy and the most vulnerable people on the edge of famine (International Chamber of Shipping, 2022).

Within the framework of the agreement, a control center in Istanbul was established to oversee the shipments. The control center staff consists of UN, Turkish, Russian and Ukrainian officials. The control center staff operate and coordinate the grain exports as well as check ships transporting the grain for weapons and ensure the safe passage of vessels along the grain corridor (International Chamber of Shipping, 2022).

As a part of grain corridor agreement, a total of 43 vessels have sailed for grain shipments and more than 622,000 tons of grain were shipped from Ukrainian ports between August 1 and August 15 (Anadolu Agency, 2022a). Around 20 million tons of grain and sunflower seeds from Russia and Ukraine are expected to be delivered to global markets (Anadolu Agency, 2022b).

Grain corridor stopped the increase in prices of cooking oils, fertilizer, wheat and barley in Turkey as well as in the world. It is observed that decline in grain prices accelerated with first shipment in grain corridor. Wheat prices decreased from 438 dollars on May 16, 2022 to 315 dollars on August 19, 2022. Wheat prices sharply decreased by 24 dollars within four days from August 12, 2022 and August 19, 2022. It is expected that fertilizer prices will decrease in a similar vein (Anadolu Ajansı, 2022b).

5) Social Housing Project

House construction decreased in Turkey during the Covid-19 pandemic. Moreover, after the pandemic, house construction in Turkey could not flourish due to financial uncertainty due to accelerating inflation rate. These factors led to increase in both house prices and house rental prices, which also resulted in an increase in the inflation rate in a vicious circle way.

In order to curb inflation and inflation expectations in the housing market, on August 2, 2022, the government announced a new social housing project which is the largest social housing project initiative ever in the country. The project aims to decrease both home prices and home rental prices by increasing the supply of residential houses as well as to give a boost to the construction sector. The announcement also aims to curb inflation expectations in the housing market. It is argued that rental prices have decreased with the announcement of the social housing project and will continue to decrease further (Milliyet Gazetesi, 2022a).

The new social housing project will be undertaken by the Housing Development Administration (TOKİ) and will be launched in all 81 provinces. Within the scope of the plan, it is planned to build 450 to 500 thousand residences and workplaces in 81 provinces, especially in metropolitan areas.

Renewable energy systems will be used in the new social houses. The new social houses will be built with zero-waste compatible, energy-saving and climate-friendly materials. The state will provide necessary subsidies in all stages of the construction of social houses. The homes to be developed within the scope of the project will be provided to first-time home buyers at favorable prices and payment instalments up to 20 years. Besides, some of those houses will be allocated to pensioners, relatives of martyrs and veterans as well as newlywed couples (Hürriyet Daily News, 2002b).

The government has another plan to boost house supply and thus help house prices stabilize. This plan involves citizens building their own house under favorable conditions whereby public lands will be sold to people who do not own a house and these people build their own houses on those land plots (Hürriyet Daily News, 2002a).

In addition to social housing project, the government announced another construction project involving building industrial areas for small and medium-sized companies in many parts of the country. This project aims to increase production and employment as well as provide industrial facilities with long term low payment plans (Hürriyet Daily News, 2002b).

It is announced that rent and housing prices started falling with the news of social housing (Milliyet Gazetesi, 2022d).

6) Limitation on the Increase in House Rental Prices

In order to stop increase in house rental prices, the first step was to a limitation brought by the government on the increase in house rental prices. Meanwhile, VAT on land and land purchases and sales was reduced from 18 percent to 8 percent (Anadolu Ajansı, 2022b).

In order to increase house supply and hence reduce house rental prices, a regulation released on the transformation of offices into housing. It is expected that there is oversupply of approximately 1.5 million m² office spaces in Istanbul and 4 million m² office spaces across the country, equaling 50,000 new housing. With the new regulation, these offices can be transformed to houses, resulting in increase in house supply and hence decrease in house rental prices (Milliyet Gazetesi, 2022d).

7) Agricultural Credit Cooperatives Markets

The project of supermarkets run by agricultural credit cooperatives is initiated to provide price balance, to regulate the market, to stop speculations in the market, and to curb inflation. The first market was opened in 2017. The number of markets reached 1,400 as of August, 2022. Agricultural credit cooperatives purchase and process members' products at their facilities and sell the end products to consumers through their cooperative supermarkets at affordable prices (Agricultural Credit Cooperatives of Turkey, 2022).

Agricultural credit cooperatives markets have launched a wide discount campaign in basic consumption and meat products within the framework of the fight against inflation. As of August 15, 2022, within the scope of combating food inflation, discount prices are applied to more than 30 basic consumer products in agricultural credit cooperatives markets. Agricultural credit cooperatives markets also started selling sheep and lamb meat with a 25 percent discount to curb the high prices in the market. Discounts aims to bring those who disrupt the balance of the markets into line and to regulate the market (Milliyet Gazetesi, 2022b).

Upon the discount extended by agricultural credit cooperatives markets, other market chains also started decreasing their prices of basic goods. Discount rate is determined as 15% (Milliyet Gazetesi, 2002c).

It is also announced that 1,000 new markets will be opened soon, as such the number of agricultural credit cooperatives markets will increase to 2,500. In this way, it is aimed to break the monopoly created by the chain markets, each of which having around ten thousand markets. Extension of agricultural credit cooperatives will be achieved through franchising system. Priority will be given to 30 thousand family markets and grocery stores in the system (Sabah Gazetesi, 2022a).

8) Regulation on the Trade of Second-Hand Motor Vehicles

Prices of vehicles in Turkey have been increasing. In addition to the depreciation in the Turkish lira making imports more expensive and supply chain bottlenecks and supply shortfall due to ongoing chip shortage, government officials claimed that there is an artificial price increase in the vehicle sector due to behavior of those who disrupt the supply-demand balance. Accordingly, the government unveiled a new regulation aimed at handling the price bubble in the second-hand car market (Daily Sabah, 2022b).

As of August 16, 2022, the Regulation Amending the Regulation on the Trade of Second-Hand Motor Vehicles, prepared by the Ministry of Commerce, entered into force after being published in the Official Gazette. The new regulation imposes a 6-month and 6-thousand-kilometer requirement for the sale of second-hand cars and land vehicles by car rental companies and dealers. According to the regulation, those engaged in the trade of second-hand land vehicles will not be able to directly or indirectly market or sell automobiles and off-road vehicles unless 6 months and 6 thousand kilometers have passed from the first registration date (TRT Haber, 2022).

Also, it is announced that 100,000 taxpayers who bought and sold more than a certain number of vehicles without having a tax record, causing exorbitant price increases, speculation and the formation of an informal economy in the second-hand vehicle market have been put under scrutiny by the authorities (Daily Sabah, 2022b).

It is reported that the sale of second-hand cars on online trading platforms has increased significantly after the announcement plans on August 10 to impose a cap on car sales. As such, the number of advertisements placed for 2022-model cars rose by 30 percent between August 10 and August 13 (Hürriyet Daily News, 2022c). Upon the regulation is implemented, it is observed that both the car prices have decreased as well as availability of cars in the market have increased (Sabah Gazetesi, 2022b).

9) Efforts to Reduce Energy Cost of the Country

Increase in the energy costs one of the sources of inflation in Turkey. Turkey's dependency on foreign energy sources makes Turkey vulnerable to supply shocks. Turkey's average annual energy cost is about 45 billion USD. However, Turkey's energy cost for 2022 is expected to reach 100 billion USD. Turkey's annual gas import is about 50 bmc (Hürriyet Daily News, 2022d).

In order to solve this problem, Turkey increased its efforts to find oil and natural gas in its territories. Turkey has recently invested in drilling vessels and seismic research vessels. Turkey has bought four drilling vessels and two seismic research vessels, which makes Turkey one of the leading countries in the drilling of oil and natural gas. As a result of drilling activities in the Black Sea, Turkey has discovered total 540 billion cubic metres of natural gas. Turkey has also started drilling activities in the Eastern Mediterranean Sea with its new advanced drilling ship on August 9, 2022 (Hürriyet Daily News, 2022d). Natural gas discoveries are expected to allow Turkey to import cheaper gas, lower its annual energy cost, and reduce foreign currency dependency (Cohen, 2022).

Turkey has also increased its efforts on enhancing its renewable energy sources. Turkey has 930 dams. 730 of them are hydropower facilities. These investments raised Turkey to the 9th place in the world in terms of hydroelectric power (Milliyet Gazetesi, 2022e).

3. CONCLUSION

This study analyzes Turkey's efforts to deal with inflation after the Covid-19 pandemic. The 10 countries with the highest consumer inflation as of July 2022 are Zimbabwe, Lebanon, Venezuela, Sudan, Syria, Turkey, Argentina, Sri Lanka, Suriname and Iran, respectively. While the consumer inflation rate in Zimbabwe, which ranks first, is 257% annually, the consumer inflation rate of Iran, which ranks tenth, is at the level of 54%. Turkey ranks 6th among the 10 countries with the highest inflation in the world. Although protests took place most of the high-inflation countries, there were no wide-spread protests in Turkey.

Presidential and parliamentary elections in Turkey will be held on mid-2023. Thus, the government stay away policies threatening its popularity. That is why, the government has not resorted to tight monetary policy or has sought IMF credit against the rising inflation after the Covid-19 pandemic. Traditional advice against rising inflation is to increase the policy rate of the central bank. However, the government doesn't increase the central bank's policy rate and kept it at the level of 14%. Instead, the government adopted the new economic model of Turkey. Within this framework, the government aims to stabilize prices and to drop inflation down to single digits in 2023 prior to elections with other fiscal policies rather than increasing the central bank's policy rate.

Against the inflation vs. employment dilemma, Turkish government chose employment. The government follows policies that encouraging investment, production, export, current account surplus and employment while supporting all segments of the society against inflation and global shocks by providing citizens with income and wage compensations above inflation.

While the government in Turkey tries to eliminate the negative effects of inflation on the lives of citizens by raising the income level of all segments, it also takes measures to reduce inflation. As such, within the scope of fight against inflation, Turkey introduced the Fx-protected Turkish Lira deposits, provided citizens with electricity and natural gas consumption subsidies, reduced taxes on food and beverage services, basic food supplies, and cleaning and hygiene products, facilitated grain corridor agreement, initiated a new social housing project, limited the increase in house rental prices, introduced supermarkets run by agricultural credit cooperatives, introduced a regulation on the trade of second-hand motor vehicles, initiated efforts to reduce energy cost such as drilling activities to find oil and natural gas and building dams for hydroelectric power.

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The Effect of Fed's Policy Interest Rate on the Price of Cryptocurrencies

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Abstract: Cryptocurrencies were introduced as a means of exchange to circumvent traditional banking infrastructure after the 2008 financial crises. In time, they are also used as a way to store value, generate wealth, and hedge against inflation and market uncertainty. Hence, cryptocurrency started being considered as an asset and an investment tool by investors and market participants. Thus, the price of cryptocurrencies depends on supply and demand and expectations. Bitcoins are accepted as risky assets by investors. As the investors' risk perception about markets surges up, they stay away from risky assets. Since the cryptocurrencies are considered as risky assets, the price of cryptocurrencies declined as the investors attempt removing risky assets from their portfolios.

When the price movements of cryptocurrencies are analyzed, it can be noticed that there is a high negative correlation between the Fed's policy interest rate and the price of cryptocurrencies. This study analyzes the relationship between the Fed's policy interest rate and the price of cryptocurrencies. It also attempts to explain a high positive correlation between the stock markets index and the price of cryptocurrencies.

Keywords: Cryptocurrencies, The Fed, Policy Interest Rate, Stock Markets Index

1. INTRODUCTION

Cryptocurrency is a form of digital currency. A cryptocurrency is a digital currency which is not backed by fiat currencies. It is different from an electronic money (e-money) which is electrically stored means of payment and is issued against fiat currency. As opposed to fiat currency system, there is no central issuing or regulating authority such as a government or a bank to maintain transactions and issue new units in the cryptocurrency system. This decentralized system moves the cryptocurrency system out of the control of central authorities (Frankenfield, 2022).

Cryptocurrencies were introduced as a means of exchange to circumvent traditional banking infrastructure after the 2008 financial crises. In time, they are also used as a way to store value, generate wealth, and hedge against inflation and market uncertainty (Edwards, 2022). In parallel to growth of the global cryptocurrency market, the price of cryptocurrencies also has surged in sharply.

The most popular and valuable cryptocurrency is Bitcoin. Upon Bitcoin's success in the market, other cryptocurrencies are also released. These other cryptocurrencies are known as altcoins. Cryptocurrency payment system is a peer-to-peer system without the third-party intermediaries. Cryptocurrencies can either be produced (called mining) or purchased from other owners in return for fiat currencies. Cryptocurrencies is based on blockchain technology which is a distributed ledger enforced by a disparate network of computers. Cryptocurrency transactions are recorded in a public ledger and cryptocurrencies are stored in digital wallets (Frankenfield, 2022; Kaspersky, 2022).

Bitcoin had a price of zero when it was introduced in 2009. Its price reached to 0.09 dollar in 2010. The price of bitcoin is increased from 13 dollar in 2013 to 997 dollar in 2017 and reached to 13,412 dollars in 2018. Global economic crisis in 2018 and 2019 negatively affected the price of Bitcoin. After decreasing to 3,869 dollars in 2019, the price of Bitcoin started rising again and it reached its all-time high price of 68,789 dollars on November 10, 2021. During the year 2022, the price of Bitcoin has kept falling and tested the level of 20,000 dollars (see Table 1 and Figure 1).

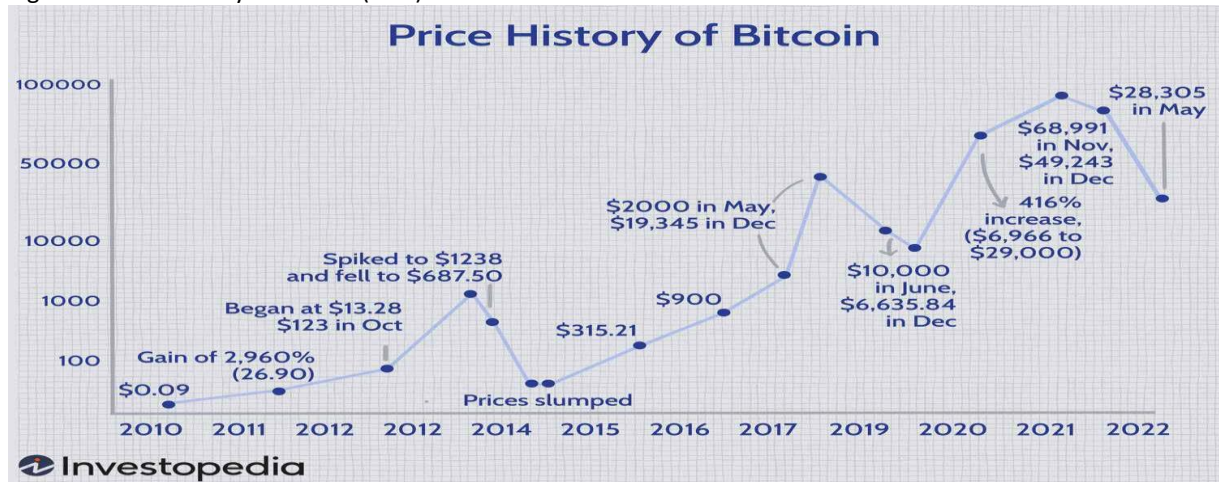
Table 1: Bitcoin Price and Annual Percentage Change in Bitcoin Price

Year	Bitcoin Price (\$)	% Change
2010	0.09	
2013	13.30	
2014	770.44	5,690.96
2015	313.92	-59.25
2016	434.46	38.40
2017	997.69	129.64
2018	13,412.44	1,244.35

2019	3,869.47	-71.15
2020	7,188.46	85.77
2021	29,391.78	308.87
2022	22,980.86	

Source: <https://www.in2013dollars.com/bitcoin-price>

Figure 1: Price History of Bitcoin (USD)



Source: Edwards (2022)

2. THE FED'S POLICY INTEREST RATE AND THE PRICE OF CRYPTOCURRENCIES

In time, cryptocurrency started being considered as an asset and an investment tool by investors and market participants. Thus, the price of cryptocurrencies depends on supply and demand and expectations. The historical price movement of cryptocurrencies can be explained by the movements of the Fed's policy interest rate. This also explains a high positive correlation between the price of cryptocurrencies and the stock markets index.

Bitcoin was introduced in January 2009 after the 2008 financial crises. The Fed follows quantitative easing policy and/or decrease its policy interest rate to stimulate markets as it happened after the 2008 financial crises. Officially, the 2008 financial crises started in December 2007 and continued until June 2009. The Fed responded to this financial crisis initially by reducing its policy interest rate. The Fed reduced its policy interest rate from 4.75% on September 18, 2007 to range of 0% to 0.25% on December 16, 2008.

In order to keep stimulating the economy, the Fed implemented quantitative easing policy after it lowers its policy rate to zero as such the Fed began buying assets. This policy continued until December 17, 2015. It can be noticed that the cryptocurrencies including bitcoin has benefited from the Fed's quantitative easing policy and low interest rates. The price of bitcoin increased from 0.09 USD in 2010 to 770.44 USD in 2014.

The Fed's policy rate began increasing again in December 2015. The price of bitcoin responded to this increase by dropping to 313.92 USD in 2015.

Between December 17, 2015 and December 20, 2018, the Fed increased its policy rate moderately to range of 2.25% to 2.50%. The price of bitcoin started to increase and rose sharply in 2017, and reached over USD 20,000. However, it started falling during the year 2018 and declined to 13,412.44 USD at the end of 2018.

During the financial crises in 2019, the Fed decreased its policy rate three times in 2019 by a total of 75 basis points. Fed's policy rate decreased from range of 2.0% to 2.25% to range of 1.50% to 1.75% as of October 31, 2019. During the financial crises, the price of bitcoin also decreased. The price of bitcoin fell to 3,869.47 USD at the end of 2019.

The Fed responded to the Covid-19 pandemic by lowering its policy rate sharply. The Fed decreased its policy rate to range of 0% to 0.25% again on March 16, 2020. During the pandemic, the price of Bitcoin kept increasing and reached all-time high price of 68,789 dollars on November 10, 2021. Many investors bought stocks and digital currencies and made money during the pandemic.

The Fed have continuously warned the market about quantitative tightening and tight monetary policy since the tapering announcement on 03 November 2022. The fed follows quantitative tightening policy and/or increase its policy interest rate to cool down the economy for curbing inflation or inflation expectations. Starting from March 17, 2022, the Fed started increasing its policy rate to tackle inflation. The Fed increased its policy rate, by 0,50% on 16.03.2022, by 50% on 04.05.2022, by 0,75% on 15.06.2022, and by 75% on 26.07.2022. Thus, the Fed's policy rate surged from range of 0.25% to 0.50% to 2.25% to 2.5% during the year 2022.

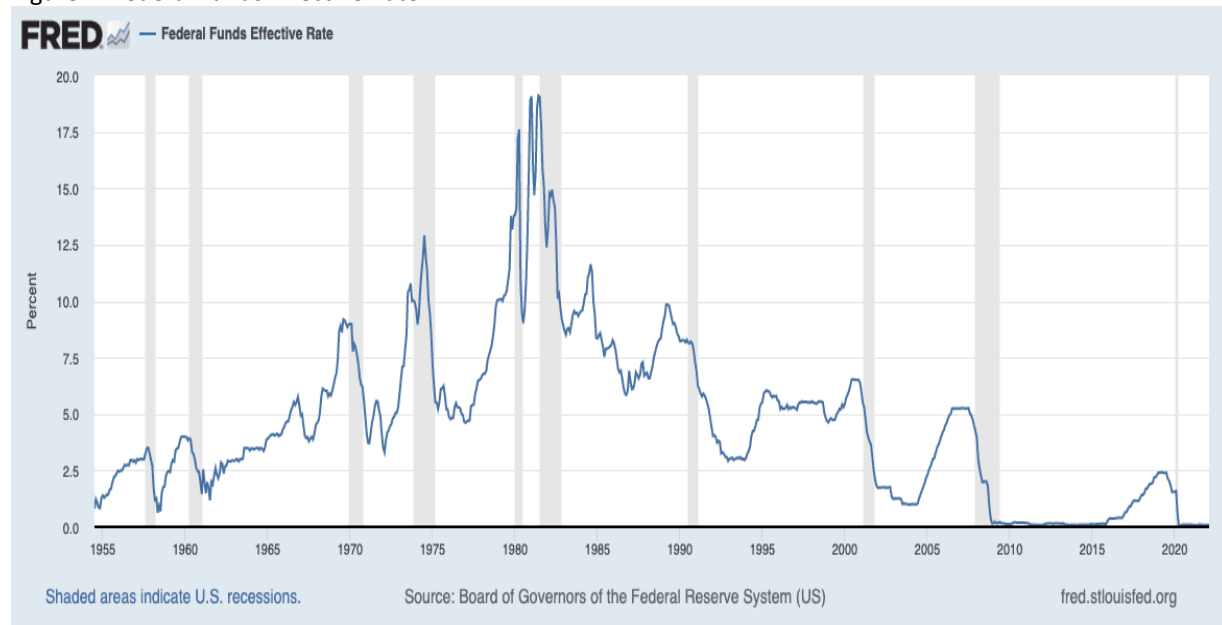
Low interest rates, aiming to boost economies during the pandemic, have prompted investors to buy risky assets such as cryptocurrencies with higher yields. However, the increase in the interest rate had the opposite effect and led the price of Bitcoin fall. During the year 2022, the price of Bitcoin has kept falling and tested the level of USD 20,000. The Fed also announced that it may continue to increase its policy interest rate during the year 2022. Upon this announcement the price of bitcoin decreased to about USD 20,000 (see Table 2 and Figure 2).

Table 2: FOMC Meetings, Rate Change and Federal Funds Rate

FOMC Meeting Date	Rate Change (bps)	Federal Funds Rate
September 18, 2007	-50	4.75%
October 31, 2007	-25	4.50%
December 11, 2007	-25	4.25%
January 22, 2008	-75	3.50%
January 30, 2008	-50	3.00%
March 18, 2008	-75	2.25%
April 30, 2008	-25	2.00%
October 8, 2008	-50	1.50%
October 29, 2008	-50	1.00%
December 16, 2008	-100	0% to 0.25%
December 17, 2015	+25	0.25% to 0.50%
December 15, 2016	+25	0.5% to 0.75%
March 16, 2017	+25	0.75% to 1.00%
June 15, 2017	+25	1.00% to 1.25%
December 14, 2017	+25	1.25% to 1.50%
March 22, 2018	+25	1.50% to 1.75%
June 14, 2018	+25	1.75% to 2.0%
September 27, 2018	+25	2.0% to 2.25%
December 20, 2018	+25	2.25% to 2.50%
August 1, 2019	-25	2.0% to 2.25%
September 19, 2019	-25	1.75% to 2.0%
October 31, 2019	-25	1.50% to 1.75%
March 3, 2020	-150	1.0% to 1.25%
March 16, 2020	-100	0% to 0.25%
March 17, 2022	+25	0.25% to 0.50%
May 5, 2022	+50	0.75% to 1.00%
June 16, 2022	+75	1.5% to 1.75%
July 27, 2022	+75	2.25% to 2.5%

Source: Tepper (2022)

Figure 2: Federal Funds Effective Rate



Source: Day (2002)

3. THE RELATIONSHIP BETWEEN STOCK MARKET INDEX AND THE PRICE OF CRYPTOCURRENCIES

Bitcoin (BTC) and cryptocurrencies, which have been melting for a while, experienced a “Great collapse” with the crisis in the stable coin TerraUSD (UST) and LUNA Coin in 2022. The price of Terra LUNA Coin decreased by 99.99 percent while the price of other cryptocurrencies fell by around 30 percent. Moreover, the decline in the TerraUSD stable coin, which should be indexed to USD 1, could not be stopped. Many crypto exchanges have stopped their transactions and left the related coins out of the list. The most popular crypto exchange platform, Coinbase, warned that users could lose all their money if the company went bankrupt, after which the share price of the company dropped 27 percent (Ergin, 2022).

Bitcoin and the crypto money market have become popular, especially during the pandemic period, with the effect of increasing liquidity in the world. Whether there is a bubble in the cryptocurrency market is always questioned. High returns and price spikes signaled a bubble occurring in the cryptocurrency markets. However, the huge returns and price increases in the cryptocurrency market have shaded this question.

The recent decline in the price of cryptocurrencies is also explained by the decline in the stock market, especially in the USA and technology stocks. There is a high positive correlation between the price of cryptocurrencies and the stock markets index. Especially, the positive correlation between the Nasdaq 100 index and Bitcoin and other cryptocurrencies attracts the attention of investors since the price of cryptocurrencies follows the news in the stock markets.

The price of the cryptocurrencies fell after the drop in the S&P500, the Nasdaq 100 index and Dow Jones Industrial Average (Di Salvo, 2022). With the increase in the Fed’s policy rate by 50 basis point in May 2022, the S&P 500 index, which includes the largest 500 companies in the USA, decreased by 3.56 percent, the Nasdaq 100 index, which includes the largest 100 technology companies, decreased by 5 percent and the Dow Jones index decreased by 3.12 percent. Nasdaq 100 index exhibited its worst performance since June 2020. With the sharp decline of the US stock markets, the decline in cryptocurrencies accelerated. Decline in the US stock market triggered the sharp decline in cryptocurrencies (Milliyet Gazetesi, 2022). Thus, it seems that the correlation between stock market index and the price of cryptocurrencies stems from the fact that Fed’s policy interest rate affects these two assets in a similar way.

There was an overvalued situation or bubble both in the crypto money market and the US stock markets with the stimulus of increasing liquidity in the world during the pandemic period. After the Fed’s policy rate decisions, there has been a correction in both of these markets as happened in the case of dot-com burst in 2000s.

There are similarities between dot.com crisis in 2000s and cryptocurrency crisis in 2022. Between 1995 and March 2000, the Nasdaq increased 400%. This increase was mainly driven by the speculated value of dot-com investments, internet and technology companies. The bubble burst in 2001 with the policy rate increases of the Fed starting in increasing the policy rate in June 1999. The Fed raised the policy rate from 5% in June 1999 to 6.50% in May 2000 (Tepper, 2022) (see Table 3). Investors, who invested in dot-com and technology companies and unable to receive return on their investments, took away their investments from these areas with the policy rate increases of the Fed. As a result of the rapid decline in funds going into the system, stocks suffered a great loss between March and November 2001.

Table 3: FOMC Meetings, Rate Change and Federal Funds Rate (1999-2000)

FOMC Meeting Date	Rate Change (bps)	Federal Funds Rate
June 30, 1999	+25	5.00%
August 24, 1999	+25	5.25%
November 16, 1999	+25	5.50%
February 2, 2000	+25	5.75%
March 21, 2000	+25	6.00%
May 16, 2000	+50	6.50%

Source: Tepper (2022)

Bitcoins are accepted as risky assets by investors. As the investors' risk perception about markets surges up, they stay away from risky assets. Since the cryptocurrencies are considered as risky assets, the price of cryptocurrencies declined as the investors attempt removing risky assets from their portfolios (Ergin, 2022).

The Fed's increase in policy interest rates lead to surge in the yields of the US 10-year bonds. This initiated investors to shift their portfolio towards high yield-lower risk investments such as the US 10-year bonds. This also gives investors not only an opportunity to secure more attractive returns in a lower-risk way but also an opportunity to cash their profit from cryptocurrency markets. This herding behavior of the investors accelerates the decrease in the price of cryptocurrencies.

3. CONCLUSION

Cryptocurrencies were introduced as a means of exchange to circumvent traditional banking infrastructure after the 2008 financial crises. In time, they are also used as a way to store value, generate wealth, and hedge against inflation and market uncertainty. Hence, cryptocurrency started being considered as an asset and an investment tool by investors and market participants. Thus, the price of cryptocurrencies depends on supply and demand and expectations. Bitcoins are accepted as risky assets by investors. As the investors' risk perception about markets surges up, they stay away from risky assets. Since the cryptocurrencies are considered as risky assets, the price of cryptocurrencies declined as the investors attempt removing risky assets from their portfolios.

When the price movements of cryptocurrencies are analyzed, it can be noticed that there is a high negative correlation between the Fed's policy interest rate and the price of cryptocurrencies. This relationship also explains a high positive correlation between the stock markets index and the price of cryptocurrencies since the stock market index is also affected negatively by the Fed's policy interest rate. Thus, it seems that the correlation between stock market index and the price of cryptocurrencies stems from the fact that Fed's policy interest rate affects these two assets in a similar way.

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Cryptocurrencies and Countries Under Economic Sanctions Policy

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Abstract: Economic sanctions are defined as commercial and financial penalties applied by one or more countries against a targeted self-governing state, group, or individual. Effectiveness of sanctions' enforcement rely on the global financial system and its players. In the traditional global financial system, all transactions can be identified and tracked easily. Thus, when governments prepared the list of members and entities under sanction, it could be easily enforced by the financial system via blocking suspicious transactions.

However, cryptocurrencies posed an increasingly serious threat to the USA's sanctions program since the buying and selling of cryptocurrencies and digital assets are not easily tracked and cryptocurrency payment system doesn't rely on banks to verify transactions. As opposed to fiat currency system, there is no central issuing or regulating authority such as a government or a bank to maintain transactions and issue new units in the cryptocurrency system. This decentralized system moves the cryptocurrency system out of the control of central authorities.

Recently, sanctioned countries have attempted to evade economic sanctions by using cryptocurrencies. This article analyzes the use of cryptocurrencies by countries under economic sanctions.

Keywords: Cryptocurrencies, Digital Currencies, Economic Sanctions

1. INTRODUCTION

Cryptocurrency is a form of digital currency. A cryptocurrency is a digital currency which is not backed by fiat currencies. It is different from an electronic money (e-money) which is electrically stored means of payment and is issued against fiat currency. As opposed to fiat currency system, there is no central issuing or regulating authority such as a government or a bank to maintain transactions and issue new units in the cryptocurrency system. This decentralized system moves the cryptocurrency system out of the control of central authorities (Frankenfield, 2022).

The most popular and valuable cryptocurrency is Bitcoin. Upon Bitcoin's success in the market, other cryptocurrencies are also released. These other cryptocurrencies are known as altcoins. Cryptocurrency payment system is a peer-to-peer system without the third-party intermediaries. Cryptocurrencies can either be produced (called mining) or purchased from other owners in return for fiat currencies. Cryptocurrencies is based on blockchain technology which is a distributed ledger enforced by a disparate network of computers. Cryptocurrency transactions are recorded in a public ledger and cryptocurrencies are stored in digital wallets (Frankenfield, 2022; Kaspersky, 2022).

2. ADVANTAGES AND DISADVANTAGES OF CRYPTOCURRENCIES

Advantages

Cheaper and faster money transfer and decentralized system is counted as the main advantages of cryptocurrencies (Frankenfield, 2022).

Cheaper and Faster Money Transfer: Cryptocurrency system allows peer-to-peer transfer of funds without a third party such as a bank, a credit card company, or a payment institution. Since cryptocurrencies can be converted into fiat currencies, cryptocurrency system allows cheaper and faster money transfers.

Decentralized System: Banking system is prone to systemic failure. However, cryptocurrency system is a decentralized system which removes the possibility of a single point of failure.

Disadvantages

Price volatility, high energy consumption in production, use in criminal activities, and prone to hacking are counted as the main disadvantages of cryptocurrencies (Frankenfield, 2022).

Price Volatility: One of the drawbacks of cryptocurrencies is the volatility of their price. For example, the price of Bitcoin increased from 13 dollars in 2013 to 770 dollars in 2014 and dropped to 313 dollars in 2015. Similarly,

it surged in 13,412 dollars in 2018 from 997 dollar in 2017 and fell sharply to 3,869 dollars in 2019. The price of Bitcoin sometimes displays high volatility even monthly.

High Energy Consumption for Mining Activities: Cryptocurrencies can be produced by anyone. This activity is called mining. For mining cryptocurrency, miners need computers and internet connection. However, cryptocurrency mining involves high energy consumption and thus energy cost. In some countries, mining cost of a cryptocurrency exceeds the energy cost to produce a cryptocurrency.

Use in Criminal Activities: Cryptocurrencies have become favorite among hackers and criminals. Hackers are accused of using cryptocurrencies for their ransomware activities. Similarly, cryptocurrencies are also popular among criminal for money laundering and illicit purchases in a dark web marketplace called Hydra.

Prone to hacking: Although cryptocurrency blockchains are highly secure, cryptocurrency depositories such as digital wallets can be hacked.

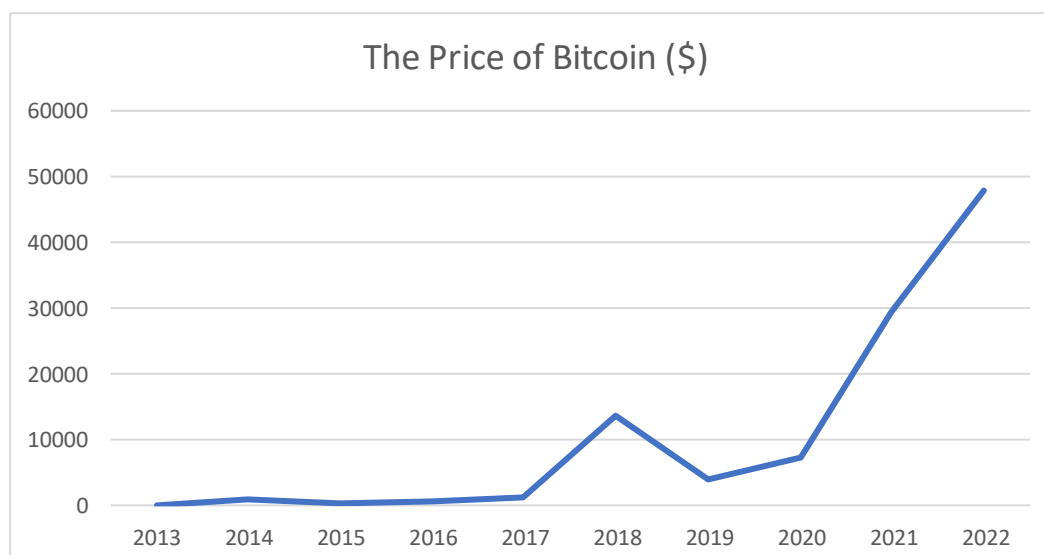
The global market for cryptocurrencies has blown up after sanctions imposed against Russia when Russia invade Crimea in 2014 (Flitter and Yaffe-Bellany, 2022). In parallel to growth of the global cryptocurrency market, the price of cryptocurrencies also has surged in sharply. For example, the price of bitcoin is increased from 13 dollar in 2013 to 997 dollar in 2017 and jumped to 29,391 dollars in 2021 and 47,743 dollars in 2022 (see Table 1 and Figure 1).

Table 1: Bitcoin Price and Annual Percentage Change in Bitcoin Price

Year	Bitcoin Price (\$)	% Change
2013	13.30	
2014	770.44	5,690.96
2015	313.92	-59.25
2016	434.46	38.40
2017	997.69	129.64
2018	13,412.44	1,244.35
2019	3,869.47	-71.15
2020	7,188.46	85.77
2021	29,391.78	308.87
2022	47,743.00	62.44

Source: <https://www.in2013dollars.com/bitcoin-price>

Figure 1: The Price of Bitcoin (\$)



3. ECONOMIC SANCTIONS AND CRYPTOCURRENCIES

Economic sanctions are defined as commercial and financial penalties applied by one or more countries against a targeted self-governing state, group, or individual. Economic sanctions are imposed to reach political, military, and social goals (Wikipedia, 2022). In general, the purpose of economic sanctions is to divert the

behavior of the sanctioned country towards the desired way without using military tools. In order for economic sanctions to be successful and effective, the economies of the countries that impose economic sanctions must be strong and effective. That is why, the method of economic sanctions is usually used by the USA and the EU since the dollar and euro are used as the world's reserve currency and they are widely used and accepted in payments and transactions worldwide. However, Cryptocurrencies can weaken the impact of sanctions on sanctioned countries (Flitter and Yaffe-Bellany, 2022).

Effectiveness of sanctions' enforcement rely on the global financial system and its players. In the traditional global financial system, all transactions can be identified and tracked easily. Thus, when governments prepared the list of members and entities under sanction, it could be easily enforced by the financial system via blocking suspicious transactions (Flitter and Yaffe-Bellany, 2022).

Sanctions and anti-money laundering laws enhanced the popularity of the cryptocurrency worldwide. It is reported that the U.S. Treasury Department warned that cryptocurrencies posed an increasingly serious threat to the American sanctions program in October 2021 since the buying and selling of cryptocurrencies and digital assets are not easily tracked, cryptocurrency payment system doesn't rely on banks to verify transactions, and there is no central authority to stop cryptocurrency transactions in case (Flitter and Yaffe-Bellany, 2022) (Kaspersky, 2022).

The economic sanctions have imposed by the USA on countries such as Cuba, Iran, Venezuela, and Russia for a long time. These sanctions have seriously damaged the economies of these countries. Covid-19 pandemic has also exaggerated the effects of economic sanctions. Recently, sanctioned countries have attempted to evade economic sanctions by using cryptocurrencies. The rest of the article evaluates the use of cryptocurrencies in the countries under economic sanctions.

Afghanistan

The use of crypto currencies in Afghanistan increased swiftly after the Taliban takeover in August 2021. Accordingly, Afghanistan's rank surged in 20 among 154 countries when evaluated regarding cryptocurrency adoption (Silic, 2022).

As a part of the USA sanctions against the Taliban, assets of the Central Bank of Afghanistan amounting 7.1 billion dollars were frozen by the USA, the Swift (the Society for Worldwide Interbank Financial Telecommunication system) suspended all services in Afghanistan, companies in Poland and France contracted to print the Afghan currency ended shipments to Afghanistan, and foreign aid and cash transfers were ceased. This led to a liquidity crisis in Afghanistan which resulted in a failure of the Afghan Banking System. When the Afghan Banking System lost its function, people couldn't get their deposits from banks and no lending happened (Silic, 2022).

Upon the failure of the traditional centralized fiat system in Afghanistan, cryptocurrencies help Afghan people to make transactions without banks and governmental institutions. Thanks to cryptocurrencies, Afghan people received funds from their relatives abroad and transferred funds without the need for a bank account (Silic, 2022).

Cryptocurrencies also help aid organizations to carry on their activities without disrupting. For instance, Digital Citizen Fund send money to Afghan families through cryptocurrencies during the turmoil mentioned above (Silic, 2022).

Russia

During the war between Russia and Ukraine, cryptocurrency usage in both countries increased sharply.

The Biden Administration of the USA imposed new sanctions on Russia upon the war in Ukraine in 2022. Upon sanctions, it is asserted that Russia is considering accepting Bitcoin as payment for its oil and gas exports (Liang, 2022).

Besides, Russia plans to evade sanctions by using digital money. Underlying blockchain technology makes cryptocurrency transactions transparent and thus tractable. However, Russia has developed new tools to disguise the origins of cryptocurrency transactions so that trade with Russia becomes possible without detecting by the sanction authorities (Flitter and Yaffe-Bellany, 2022). It is argued that Russia becomes a center of illegal facilities involving cryptocurrencies such as ransomware attacks and dark web purchases (Flitter and Yaffe-Bellany, 2022).

Besides cryptocurrencies, Russia has attempted to develop its own central bank digital currency which is called digital ruble. China and Iran are also developing their central bank digital currencies. Digital currencies let sanctioned countries to realize transactions without the SWIFT system (Flitter and Yaffe-Bellany, 2022).

Both government and citizens in Ukraine also headed to cryptocurrencies during the war. Ukrainian government has accepted donations via cryptocurrencies since it is costly and takes a long time to receive fiat money for Ukraine. Cryptocurrency transaction volume of citizens also increased due to dysfunctionality of ATMs and cash shortage in the country (Kharpal, 2022).

Iran

Iran's economy is under the sanctions of the USA for a long time. Recently, Iran have started using cryptocurrencies not only for evading sanctions but also for generating income for the country with cryptocurrency mining.

Iran has officially recognized crypto mining as an industry as such cryptocurrency miners have to receive crypto mining license and sell their cryptocurrencies to the central bank of Iran. Iran is becoming the center of cryptocurrency mining in the world since the country offers cheap energy for energy-intensive cryptocurrency mining activities. Studies on Iran's bitcoin mining indicates that around 4.5% of bitcoin mining in the world occur in Iran in 2020 and hence Iran generates about 1 billion dollars in a year from bitcoin production. In return, cryptocurrencies are used to pay for imports and lessen the impact of sanctions (Reuters, 2022).

North Korea

North Korea is another country under economic sanctions. North Korea also used cryptocurrencies to circumvent the burden of economic sanctions.

According to a United Nations report, North Korean cyber-attacks have stolen millions of dollars worth of cryptocurrency to fund its nuclear and missile programmes. It is estimated that North Korea generates about 400 million dollars from cryptocurrency robbery. Although the country is under the United Nations sanctions, North Korea has been able to continue developing its nuclear and ballistic missile infrastructure via stolen cryptocurrencies worldwide (BBC News, 2022).

Cuba

Cuba have been under sanctions of the USA since Kennedy Administration in 1962. Due to sanctions, sending and receiving money between the USA and Cuba is not only difficult but also expensive. This situation got worse with Trump Administration. For example, Western Union ceased operations of more than 400 branches in Cuba in 2020 after operating for more than 20 years. Although transfer cost was high, there were still some transfer systems called mullas where agencies would carry cash to Cuba and distribute it to people on the island. After the break of Covid-19 pandemic, even semi-formalized courier services called mulas were lost their function (Sigalos, 2021).

Under these conditions, cryptocurrencies help Cubans to transfer money with low transaction costs. Cryptocurrencies also help people in Cuba access to the world economy as such they can transfer their labor in return for cryptocurrencies (Sigalos, 2021).

In 2021, Cuban government recognized and regulated cryptocurrencies. The central bank of Cuba was assigned to set new regulations for digital currencies. Under new regulations, commercial providers of digital currency services need to have a license from the central bank (Sigalos, 2021).

Venezuela

Venezuela is another country under the USA's sanctions. Venezuelan economy is disturbed by both hyperinflation and sanctions. Cryptocurrencies have become a tool to send remittances, protect wages from inflation and help businesses manage cash flow in a quickly depreciating currency. Venezuela was ranked third on Global Crypto Adoption Index due to the high volume of bolivar transactions (Ellsworth, 2021).

Although energy prices are low in Venezuela, mining activities are low among ordinary people due to high equipment prices to produce cryptocurrencies (Ellsworth, 2021).

4. CONCLUSION

Economic sanctions are defined as commercial and financial penalties applied by one or more countries against a targeted self-governing state, group, or individual. Effectiveness of sanctions' enforcement rely on the global financial system and its players. In the traditional global financial system, all transactions can be identified and tracked easily. Thus, when governments prepared the list of members and entities under sanction, it could be easily enforced by the financial system via blocking suspicious transactions.

However, cryptocurrencies posed an increasingly serious threat to the USA's sanctions program since the buying and selling of cryptocurrencies and digital assets are not easily tracked and cryptocurrency payment system doesn't rely on banks to verify transactions. As opposed to fiat currency system, there is no central issuing or regulating authority such as a government or a bank to maintain transactions and issue new units in the cryptocurrency system. This decentralized system moves the cryptocurrency system out of the control of central authorities.

Cryptocurrencies are used in countries under economic sanction

- to evade sanctions
- to transfer money with low transaction costs
- to generate income from crypto mining activity
- To hedge against inflation
- To manage cash flow
- To overcome liquidity problems

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Covid-19 ve Enflasyon

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Özet: Bu makale Covid-19 sonrası ortaya çıkan enflasyon problemini analiz etmektedir. Analiz sonuçlarımız salgın sonrası enflasyonun bölgesel değil küresel bir sorun olduğuna işaret etmektedir. Enflasyon sadece gelişmekte olan ülkelerde veya yükselen piyasa ülkelerinde değil sanayileşmiş ülkelerde de rekor seviyelerde artışlar göstermiştir. ABD, İngiltere ve Avrupa Birliğinde enflasyon rekor seviyelere ulaşmıştır. Rusya'nın Ukrayna'yı işgali küresel enflasyonun üzerinde adeta benzin dökülmüş etkisi yaratmış ve işgal sonrası, gıda, gübre ve akaryakıt fiyatları artış göstermiştir. Son dönemdeki küreselleşmenin etkisiyle iyice birbirine geçmiş olan tedarik zincirleri bozulmuş ve tedarik zincirinde aksamalar ve gecikmeler yaşanmaya başlanmıştır. Bu ise ithal malların fiyatlarını artırmış ve nihayetinde küresel enflasyonun daha da artmasına katkıda bulunmuştur. Enflasyonun hem talep hem de arz cephesinden beslenmesi merkez bankalarının enflasyon ile mücadelelerini güçleştirmiştir.

Salgın sonrası yaşam maliyetlerini ve zorluklarını artıran enflasyon birçok ülkede grevlere, protestolara ve isyanlara neden olmuştur. Salgın sonrası ülkelerin gelişmişlik seviyesine bakılmaksızın dünyanın her yerinde enflasyon protestoları ve grevleri meydana gelmiştir. Ekonomik sıkıntılardan kurtulmak isteyen birçok ülke IMF ile kurtarma paketi müzakerelerine girmiştir. Fakat bu durum IMF kurtarma paketlerinin sıkıntılarını daha da artıracağına inanan kitleleri protestolara itmiştir. Salgın sonrası ortaya çıkan enflasyon dünya çapında bir sorun olduğundan dolayı küresel çapta bir işbirliği ile çözülebilir.

Anahtar Kelimeler: Covid-19, Enflasyon, Enflasyon Protestosu, IMF

Covid-19 and Inflation

Abstract: This article analyzes the inflation problem after Covid-19. Our analysis results indicate that post-epidemic inflation is not a regional but a global problem. Inflation has increased at record levels not only in developing or emerging market countries, but also in industrialized countries. Inflation reached record levels in the USA, the UK and the European Union. Global inflation accelerated after Russia's invasion of Ukraine and consequently food, fertilizer and fuel prices increased. With the effect of the recent globalization, the supply chains, which have been thoroughly intertwined, have deteriorated and disruptions and delays have begun to be experienced in the supply chain. This, in turn, increased the prices of imported goods and ultimately contributed to a further increase in global inflation. The fact that inflation is fed from both the demand and supply side has made it difficult for central banks to fight against inflation.

Inflation, which increased living costs and hardships after the epidemic, caused strikes, protests and riots in many countries. After the epidemic, inflation protests and strikes have occurred all over the world regardless of the development level of the countries. Many countries that want to get rid of economic problems have entered into negotiations with the IMF for a bailout package. However, this situation pushed the masses to protests, who believed that the IMF bailout packages would further increase their troubles. Since inflation after the epidemic is a worldwide problem, it can be solved with a global cooperation.

Keywords: Cryptocurrencies, Digital Currencies, Economic Sanctions

1. GİRİŞ

Koronavirüs salgını 2019'un sonunda Çin'de başladı ve hızla küresel olarak yayıldı. Dünya çapında milyonlarca insan enfekte oldu ve yüz binlerce insan öldü. Dünyada milyonlarca insan işini kaybetti. Dünya çapında hükümetler salgınla mücadele için genişletici para politikaları izledi. Koronavirüs aşılarının geliştirilmesi ile birlikte salgının etkilerinin hafiflemesinden sonra oluşan olumlu ekonomik gelişmeler ve artan taleple birlikte dünya çapında enflasyon oranlarında da artış gözlenmeye başladı. Başlarda enflasyon oranlarındaki artışın geçici olduğu düşünülüyordu.

Rusya'nın Ukrayna'yı işgali küresel enflasyonun üzerinde adeta benzin dökülmüş etkisi yaratmıştır. İşgal sonrası, gıda, gübre ve akaryakıt fiyatları artış gösterirken, son dönemdeki küreselleşmenin etkisiyle iyice birbirine geçmiş olan tedarik zincirleri bozulmuş ve tedarik zincirinde aksamalar ve gecikmeler yaşanmaya başlanmıştır. Bu ise ithal malların fiyatlarını artırmış ve nihayetinde küresel enflasyonun daha da artmasına katkıda bulunmuştur.

Salgın sonrası talep ile birlikte artan akaryakıt fiyatları Ukrayna Savaşı'nın etkisiyle daha da yükseliş göstermiştir. Suudi Arabistan ve Amerika Birleşik Devletleri'nden sonra üçüncü en büyük akaryakıt üreticisi olan Rusya'nın etkisi ile birlikte akaryakıt fiyatlarındaki yükselme dünya çapında mal ve hizmet maliyet artışlarını beslemeye

devam etmiştir. Rusya'ya karşı uygulanan ekonomik yaptırımlar küresel arz ile ilgili endişeleri ve petrol maliyetlerini artırmıştır. Ukrayna ve Rusya'nın dünyanın tahıl deposu olması ve Ukrayna savaşı ile birlikte tahıl ihracatında yaşanan durma ve aksamalar küresel gıda fiyatlarındaki artışı tetiklemiştir. Diğer yandan Rusya'nın dünyanın en büyük gübre ihracatçısı olduğu gerçeği, Ukrayna savaşının küresel gübre piyasasını da olumsuz etkilemesiyle sonuçlanmıştır. Rusya'nın gübre arzındaki aksamaları gıda fiyatlarını artırmaya devam etmiştir (Kumar, 2022).

Salgın sonrası ortaya çıkan enflasyon küresel bir sorun olarak ortaya çıkmıştır. Uluslararası fiyatlar 2010 ve 2020 yılları arasında ortalama %2,9'luk artış göstermişken, 2022 yılında ortalama fiyat artışının %6,7 olması beklenmektedir. Diğer bir deyişle, 2022 yılında uluslararası fiyatlar 2010 ile 2020 yılları arasında kaydedilen fiyat artışının iki katından fazla artış göstermiştir (Kumar, 2022). Enflasyon sadece gelişmekte olan ülkelerde veya yükselen piyasa ülkelerinde değil sanayileşmiş ülkelerde de rekor seviyelerde artışlar göstermiştir. ABD, İngiltere ve Avrupa Birliğinde enflasyon rekor seviyelere ulaşmıştır. ABD, İngiltere ve Avrupa Birliğinde enflasyon son 40 yılın zirvesine ulaşmıştır. 1980'li yılların başlarındaki enflasyon rakamları yeniden gözükmeye başlamıştır.

2. AMERİKA BİRLEŞİK DEVLETLERİ'NDE ENFLASYON İLE MÜCADELE

Covid-19 salgınına karşı ABD Merkez Bankası (Fed), ekonomik canlılığı sürdürmek için genişletici para politikası ve parasal genişleme politikası uygulamıştır. Öncelikle, Fed Covid-19 salgınına politika faizini sert bir şekilde indirerek yanıt vermiştir. 31 Temmuz 2019 tarihinden itibaren politika faizini 25 baz puan azalışla 2,0%-2,25% aralığında indiren Fed, 18 Eylül 2019'da 25 baz puan ve 31 Ekim 2019 tarihinde politika faizini 25 baz puan indirdikten sonra 2020 yılında da politika faiz indirimlerine daha radikal bir şekilde devam etmiştir. 3 Mart 2020'de politika faizini 150 baz puan indirdikten sonra 15 Mart 2020 tarihinde ilave 100 baz puanı indirerek politika faiz oranını %0-%0,25 aralığına indirmiştir (Bkz. Tablo 1). Bu noktadan sonra Fed, varlık alım politikası yoluyla piyasalara likidite aktarmaya ve piyasaları desteklemeye devam etmiştir.

Salgının hafiflemesi ile birlikte 3 Kasım 2022 tarihinde Fed, piyasaları parasal sıkılaştırma ve sıkı para politikası uygulamaya başlayacağı konusunda uyarıda bulundu. Aynı zamanda, Fed parasal sıkılaştırma ve sıkı para politikasını enflasyonu veya enflasyon beklentilerini frenlemek için uygulamaya koyacağı konusunda piyasaları aydınlattı. Fed enflasyonu kontrol altına alabilmek için 16 Mart 2022 tarihinden itibaren politika faiz oranlarını artırmaya başlamıştır. Fed politika faiz oranını 16 Mart 2022 tarihinde 25 baz puan, 4 Mayıs 2022 tarihinde 50 baz puan, 15 Haziran 2022 tarihinde 75 baz puan ve 27 Temmuz tarihinde 75 baz puan artırarak politika faiz oranını %2,25-%2,5 bandına yükseltmiştir (Bkz. Tablo 1).

Tablo 1: Federal Açık Piyasa Komitesi (FOMC) Toplantı Tarihi, Faiz Oranındaki Değişim, Politika Faiz Oranı

Federal Açık Piyasa Komitesi (FOMC) Toplantı Tarihi	Faiz Oranındaki Değişim (Baz Puan)	Politika Faiz Oranı (%)
21 Mart 22 2018	+25	1,50 - 1,75
13 Haziran 2018	+25	1,75 - 2,0
26 Eylül 2018	+25	2,0 - 2,25
19 Aralık 2018	+25	2,25 - 2,50
31 Temmuz 2019	-25	2,0 - 2,25
18 Eylül 2019	-25	1,75 - 2,0
30 Ekim 2019	-25	1,50 - 1,75
3 Mart 2020	-150	1,0 - 1,25
15 Mart 2020	-100	0 - 0,25
16 Mart 2022	+25	0,25 - 0,50
4 Mayıs 2022	+50	0,75 - 1,00
15 Haziran 2022	+75	1,5 - 1,75
27 Temmuz 2022	+75	2,25 - 2,5

Source: <https://www.federalreserve.gov/monetarypolicy/fomccalendars.htm>

ABD'de enflasyon son 40 yılın zirvesine ulaştı. ABD'de tüketici fiyat endeksi Kasım 1981'den beri en yüksek artışını Haziran 2022'de gerçekleştirdi. ABD'de haziran ayında tüketici fiyat endeksi bir önceki yılın aynı dönemine göre %9,1 artarak 12 ayın en büyük rekorunu kırdı. Aylık bazda bakıldığında ABD'de enflasyon ocak ayında %0,6, Şubat ayında %0,8, Mart ayında %1,2, Nisan ayında %0,3, Mayıs ayında %1,0 ve Haziran ayında %1,3 artış göstermiştir. Alt kalemlere bakıldığında, enerji endeksinin yıllık %41,6 artış göstererek Nisan

1980’den bu yana en yüksek yıllık artış kaydettiği gözlenmiştir. Diğer yandan, gıda endeksinin yıllık %10,4 artış göstererek Şubat 1981’den bu yana en yüksek yıllık artış gösterdiği gözlenmiştir. Bu durum Rusya-Ukrayna savaşının gıda ve akaryakıt fiyatları üzerindeki olumsuz etkisine işaret etmektedir (US Bureau of Labor Statistics, 2022).

ABD hükümeti enflasyon ile mücadele de maliye politikalarını da devreye almıştır. 16 Ağustos 2022 tarihinde ABD Başkanı Enflasyonu Düşürme Yasası’nı onaylamıştır. Bu kapsamda, enflasyonla mücadele için bütçe açıkların azaltılması ve gelecek 10 yıl içinde bütçe açığının 300 milyar doların üzerinde azaltılması, büyük şirketlerin minimum yüzde 15 kurumlar vergisi ödemesi, ilaç fiyatlarının düşürülmesi amaçlanmaktadır (Dünya Gazetesi, 2022).

3. ENFLASYON PROTESTOLARI VE ENFLASYON AYAKLANMALARI

Tarihsel veriler, Covid-19 benzeri salgınlar genel olarak toplumsal karmaşa, protesto, isyan gibi huzursuzluk oranlarında bir düşüşe neden olduğuna işaret etmektedir. Salgın ile düşüş gösteren Bildirilen Sosyal Huzursuzluk Endeksi, salgın sonrası yeniden yükselişe geçmiş ve tarihsel en yüksek seviyesine yaklaşmıştır (Barrett, 2022). Salgın sonrası yaşam maliyetlerini ve zorluklarını artıran enflasyon birçok ülkede grevlere, protestolara ve isyanlara neden olmuştur. Salgın sonrası ülkelerin gelişmişlik seviyesine bakılmaksızın dünyanın her yerinde enflasyon protestoları ve grevleri meydana gelmiştir.

Güney Kore’de yükselen akaryakıt fiyatları nedeniyle asgari ücret garantisi talep eden binlerce kamyoncu ülkede önemli bir derecede sevkiyat gecikmelerine yol açan sekiz günlük greve giderken, dünyanın diğer ucunda İspanya’da kamyoncular akaryakıt fiyatlarını protesto için greve gitmiştir. Benzer şekilde Peru ve Arjantin’de kamyoncular ve diğer nakliye işçileri greve gittiler ve önemli otoyolları trafiğe kapattılar. Zimbabve’de grevci hemşireler ve doktorlar devlet hastanelerini neredeyse bir hafta boyunca durma noktasına getirdi. İngiltere’de demiryolu işçileri, Belçika’da sendikali işçiler, Avrupa’da havayolu çalışanları ve pilotlar greve gitmiştir (Batrawy, 2022).

Enflasyon protestoları neredeyse tüm kıtalarda gerçekleşmiştir. Sri Lanka, Pakistan, Peru, Ekvator, Arjantin, Panama, Şili, Kolombiya, Surinam, Haiti, Gine, Kenya, Gana, Zimbabve, Irak, İran, Tunus, Lübnan Hollanda, Belçika, İtalya, Fransa, İngiltere, İrlanda, Moldova, Arnavutluk ve Çin’den protesto haberleri gelmiştir. Salgın sonrası ortaya çıkan enflasyonu ve ekonomik olumsuzlukları kendi lehlerine kullanmaya çabalayan muhalefet partilerinin de desteği ile birçok ülkede protestolar iktidar partileri ve karşıtları arasında çatışmalara dönüşmüştür. Enflasyon protestoları bazı ülkelere iktidardaki hükümetlerin istifası, değişimi veya devrilmesi ile sonuçlanmıştır.

Temmuz 2022 itibarıyla en yüksek tüketici enflasyonuna sahip 10 ülke sırasıyla Zimbabve, Lübnan, Venezüella, Sudan, Suriye, Türkiye, Arjantin, Sri Lanka, Surinam ve İran’dır. Birinci sırada yer alan Zimbabve’de tüketici enflasyon oranı yıllık %257 seviyesindeyken onuncu sırada yer alan İran’ın tüketici enflasyon oranı %54 seviyesindedir (Bkz. Tablo 2).

Tablo 2: En Yüksek Enflasyon Oranına Sahip 20 Ülke (Temmuz 2022)

Sıra	Ülke	Enflasyon (Tüketici Fiyat Endeksi)(%)	Sıra	Ülke	Enflasyon (Tüketici Fiyat Endeksi)(%)
1	Zimbabve	257	11	Etiyopya	33,5
2	Lübnan	210	12	Moldova	31,8
3	Venezüella	167	13	Gana	29,8
4	Sudan	149	14	Haiti	27,8
5	Suriye	139	15	Küba	26,1
6	Türkiye	79,6	16	Pakistan	24,9
7	Arjantin	64	17	Laos	23,6
8	Sri Lanka	60,8	18	Malavi	23,5
9	Surinam	55,6	19	Angola	22,9
10	İran	54	20	Estonya	22,8

Kaynak: <https://tradingeconomics.com/country-list/inflation-rate?continent=world>

Dünya’da en yüksek enflasyon oranına sahip ilk 10 ülke sıralamasında 8. Sırada yer alan Sri Lanka’da enflasyon Temmuz 2022 itibarıyla yıllık %60’8’e ulaşmıştır. Sri Lanka Merkez Bankası faiz oranlarını %15,5’e yükseltmiş ve enflasyon beklentilerini önlemek için daha da yükseltebileceği duyurusunda bulunmuştur. Ülke parası devalüe

olmuş ve ABD doları karşısında hızla değer kaybına uğramıştır. Ukrayna savaşı ülkenin içinde bulunduğu olumsuz durumu daha da ağırlaştırmıştır. Dış borcunu ödeyemeyeceğini ve iflas ettiğini açıklayan hükümet IMF ile kredi anlaşması üzerine konuşma yapmaktadır. IMF kredi karşılığında sunulması gereken kurtarma planında vergilerin artırılması ve yolsuzlukla mücadele edilmesi maddelerinin yer almasını talep etmiştir (Kamau, 2022).

Ülkede gıda fiyatlarının artmasıyla başlayan protestoların şiddetlenmesiyle birlikte ülke genelinde sokağa çıkma yasağı ve iki kez OHAL ilan edilmiştir. Protestolar ve hükümet yanlıları ve karşıtları arasında yaşanan şiddetli çatışmalar Mayıs ayında Başbakan Mahinda Rajapaksa'nın ve hükümet kabinesinin istifa etmesiyle sonuçlanmıştır (Kumar, 2022).

Pakistan'da Temmuz 2022 tarihinde enflasyon yıllık %24,9 olarak gerçekleşmiştir. Pakistan Merkez Bankası yükselen enflasyona karşı Temmuz ayında politika faiz oranını 125 baz puan artışla %15 seviyesine yükseltmiştir. Sri Lanka gibi yakıt ve yakıt ve yemeklik yağ da dahil olmak üzere birçok temel ihtiyacın ithalata bağlı olduğu Pakistan'da ihtiyaçları karşılayacak yeterli döviz rezervi çok azalmıştır. Akaryakıt fiyatları, hükümetin artan bütçe açığını azaltmak ve IMF'in kurtarma programını sürdürmek amacıyla bütçeye yüksek maliyet getiren sübvansiyonları kaldırmasının ardından Mayıs-Temmuz arası yaklaşık %90 artış göstermiştir (Bhalla, 2022). Son 15 yılın en yüksek enflasyonuna karşı muhalefet partileri ülkenin çeşitli şehirlerinde protesto gösterileri düzenlemişlerdir.

Peru'da enflasyon Temmuz 2022 itibarıyla son 25 yılın en yüksek seviyesi olan yıllık %8,74 olarak gerçekleşmiştir. Yükselen enflasyon ile birlikte Peru Merkez bankası faiz oranlarını %6 seviyesine yükseltmiştir. Ukrayna savaşı ülkenin içinde bulunduğu durumu daha da kötüleştirmiştir. Peru, özellikle gübre kullanımında Rusya'ya bağımlı olan ülkede kullanılan gübrelerin %70'i Rusya'dan ithal edilmektedir. Gübrede yaşanan tedarik sıkıntıları ülkenin tarım üretimini ve tarım ürünü ihracatını olumsuz etkilemiş ve enflasyonu körüklemiştir. Ülkede enflasyon ve hayat pahalılığı grevlere yol açmış kamyoncular ve diğer nakliye işçileri de greve gitmiş ve önemli otoyolları trafiğe kapatmıştır. Ülkede Mart ayının sonunda başlayan hükümet karşıtı protestolarda 6 kişi ölmüş, onlarca kişi yaralanmıştır (Batrawy, 2022).

Salgın sonrası enflasyon ve kötü ekonomik koşullar Kolombiya'da radikal bir siyasi değişime yol açmıştır. Kolombiya'da 2021 yılındaki enflasyon protestolarının ardından 2022 yılında yapılan seçimlerde ülkenin Cumhurbaşkanlığına ülke tarihinde ilk defa bir solcu lider seçildi. Yeni hükümetin yapılacaklar listesindeki en önemli gündem maddesi enflasyon ile mücadele olmuştur. Kolombiya'da Merkez Bankasının hedef enflasyon oranı %3 olmasına rağmen Temmuz 2022 tarihinde enflasyon yıllık olarak %10,21 olarak gerçekleşmiştir. Buna karşın, Kolombiya Merkez Bankası politika faiz oranını 150 baz puan artırarak %9 seviyesine yükseltmiştir (Kumar, 2022).

Dünyadaki en yüksek enflasyona sahip ülkeler sıralamasında 7. Sırada bulunan Arjantin'de enflasyon Haziran 2022 itibarıyla %64 seviyesine ulaşmıştır. Arjantin Merkez Bankası yükselen enflasyona karşı politika faiz oranını 300 baz puan artırarak %52 seviyesine yükseltmiştir. Buenos Aires'te düzenlenen gösteri ve protestolarda artan yaşam maliyetlerini protesto etmek için yürüyen protestocular zorlayıcı tedbirler talep eden 45 milyar dolarlık IMF kredisini istemediklerini ifade etmişler ve hükümeti istifaya çağırmışlardır. Ayrıca kamyoncular greve gitmiştir (Kamau, 2022; Bhalla, 2022).

2022 Temmuz itibarıyla yıllık %8,2 enflasyon oranına sahip Tunus küresel yaşam maliyetleri krizinden en çok etkilenen ülkelerden birisi olarak göze çarpmaktadır. Enflasyonun hızlanması ve enflasyonist baskıları azaltmak isteyen Tunus Merkez Bankası politika faiz oranını 75 baz puanlık artışla %7'ye ve tasarruf mevduatlarına uygulanacak minimum faiz oranını da %6'ya yükseltmiştir. Diğer birçok Orta Doğu ülkesi gibi büyük ölçüde Rusya ve Ukrayna'dan tahıl ithalatına bağımlı olan Tunus'ta Ukrayna savaşı ülkedeki yoksulluk ve yaşam maliyetlerini daha da artırmış, zaten kırılgan olan kamu maliyesini daha da bozmuştur. Hükümetin süt ve yumurta da dahil olmak üzere bazı temel gıda maddelerinin fiyatlarını yükseltmek zorunda kalmasıyla insanlar sokaklara dökülmüş ve protesto gösterileri düzenlemişlerdir. Ülkeyi kararnamelerle yönetmek için ülke parlamentosu cumhurbaşkanı tarafından askıya alınmıştır. Ekonomisi ve kamu maliyesi krizde olan hükümetin IMF'den 4 milyar dolarlık krediyi güvence altına almak için yapılan anlaşmanın bir parçası olarak ücretleri dondurma ve sübvansiyonları kesme planlarına karşı çıkan ülkenin en büyük sendikası Haziran ayında ülke çapında grevler ve protestolar düzenlemiştir (Bhalla, 2022; Kumar, 2022).

Temmuz 2022 itibarıyla yıllık enflasyonu buğday unu, yemeklik yağ ve benzin gibi temel gıda maddelerinin fiyatlarındaki sıçramaların etkisiyle %8,3'e yükselen Kenya'da Kenya Merkez Bankası temmuz ayı toplantısında politika faiz oranını %7,5'da tutmaya devam etmiştir. Aynı zamanda son 40 yılın en kötü kuraklığıyla karşı karşıya kalan ülkede açlık daha yaygın hale gelmiş ve ülke ithalatlara daha da bağımlı hale gelmiştir. Bu durum

karşısında, yüzlerce kişi başkent Nairobi'de yaşam maliyetlerinin ve gıda fiyatlarının artmasını protesto etmiş ve bu durumun nedeninin devletin aşırı borçlanması ve ülke çapında yaygın olan yolsuzluk olduğunu iddia etmiştir. 9 Ağustos'ta yapılan cumhurbaşkanlığı ve genel seçimlerin seçim kampanyasının ana maddesini yaşam maliyetleri, işsizlik ve yolsuzluk oluşturmuştur (Bhalla, 2022; Kamau, 2022).

Haziran 2022 tarihinde ülkedeki hayat pahalılığını protesto etmek için Ganalıların sokaklara döküldüğü görülmüştür. En yüksek enflasyon sıralamasında 13. sırada yer alan ülkede yıllık enflasyonun haziran ayında %29,8'e ulaşması ile birlikte Gana Merkez Bankası politika faiz oranını %19 seviyesinde tutma kararı almıştır. Aşırı borçlanma nedeniyle bir borç krizinin eşikinde olan ve faiz silahının işe yaramadığı kanaatine ulaşan hükümet IMF ile bir kurtarma paketi üzerine istişare etmeye başlamıştır.

Dünya'daki en yüksek enflasyon sıralamasında 14. sırada yer alan Haiti'de Mayıs 2022 itibariyle yıllık enflasyon oranı %27,8 seviyesindeyken politika faiz oranı %17 seviyesindedir. Tahıl konusunda dışa bağımlı olan ve toplam tahıl tüketiminin %70'ini ithal eden ada ülkesi küresel gıda ve yakıt piyasalarındaki arz şoklarına karşı kırılgan durumdadır. Artan fiyatlar ülke çapında açlığın ve şiddet olaylarının artmasına yol açmıştır. Bu durum karşısında protestocular yakıt kıtlığını, açlığı ve artan çete şiddetini protesto etmek için başkent Port-au-Prince'in sokaklarını kapatmıştır (Bhalla, 2022).

Haziran 2022 itibariyle %5,2 enflasyon seviyesine sahip Panama'da Merkez Bankası politika faiz oranı %1,36 seviyesindedir. Küresel tedarik zinciri sorunları devletin Panama Kanalı gelirlerini azalttığı Panama'da hükümete karşı protestolar Temmuz ayında başlamıştır. Hükümetin ülkenin yüksek yaşam maliyetini ele almasını talep eden protestocular ayrıca daha yüksek ücretler, daha düşük emtia fiyatları ve tedarik zinciri darboğazlarının kaldırılmasını talep etmiştir (Kamau, 2022).

Arnavutluk'un başkenti Tiran'da binlerce Arnavut yürüyüş yaparak hükümetin yolsuzluk iddiaları ve tüketici fiyatlarındaki büyük artış nedeniyle istifa etmesini talep etmiştir (Kamau, 2022). Arnavutluk'ta Haziran 2022 itibariyle yıllık enflasyon %7,4'e ulaşmıştır. Ağustos ayında Arnavutluk Merkez Bankası politika faiz oranını 50 baz puan artışla %1,75'e çekmiştir.

Ülke analizlerinde de görüldüğü gibi enflasyon ile mücadelede merkez bankaları geleneksel mücadele aracı politika faiz enstrümanını kullanmalarına rağmen enflasyonu önlemekte başarılı olamamışlardır. Başarısızlığın nedeni Covid-19 salgını sonrası ortaya çıkan yükselen enflasyon oranları olgusunun küresel bir olgu olması ve talebin yanında arz cephesinden de beslenmesidir. Enflasyon ile mücadelede hükümetler faiz artırımlarının yanında diğer bazı önlemler de almışlardır. Örneğin, Macaristan'da bazı benzin istasyonları, sürücülerin satın alabileceği yakıt miktarına sınırlamalar getirmiştir. Mısır, sübvansiyonsuz ekmek fiyatına tavan getirmiştir. Meksika gıda fiyatlarına sınırlamalar getirmiştir. Bazı hükümetler akaryakıt üzerindeki vergileri indirmiş, bazıları ise enerji faturalarına sübvansiyonlar temin etmiştir. Çek hükümeti, vatandaşların gelirlerinin en fazla %30'unu konut, su ve enerji harcamalarına ayıracakları şekilde devlet yardımları başlatmıştır. Birçok ülke içinde bulundukları olumsuz durumdan kurtulmak için IMF ile kredi anlaşması müzakerelerini başlatmıştır. Salgın sonrası ortaya çıkan enflasyon dünya çapında bir sorun olduğundan dolayı küresel çapta bir işbirliği ile çözülebilir.

4. SONUÇ

Bu makale Covid-19 sonrası ortaya çıkan enflasyon problemini analiz etmektedir. Analiz sonuçlarımız salgın sonrası enflasyonun bölgesel değil küresel bir sorun olduğuna işaret etmektedir. Enflasyon sadece gelişmekte olan ülkelerde veya yükselen piyasa ülkelerinde değil sanayileşmiş ülkelerde de rekor seviyelerde artışlar göstermiştir. ABD, İngiltere ve Avrupa Birliğinde enflasyon rekor seviyelere ulaşmıştır. Rusya'nın Ukrayna'yı işgali küresel enflasyonun üzerinde adeta benzin dökülmüş etkisi yaratmış ve işgal sonrası, gıda, gübre ve akaryakıt fiyatları artış göstermiştir. Son dönemdeki küreselleşmenin etkisiyle iyice birbirine geçmiş olan tedarik zincirleri bozulmuş ve tedarik zincirinde aksamalar ve gecikmeler yaşanmaya başlanmıştır. Bu ise ithal malların fiyatlarını artırmış ve nihayetinde küresel enflasyonun daha da artmasına katkıda bulunmuştur. Enflasyonun hem talep hem de arz cephesinden beslenmesi merkez bankalarının enflasyon ile mücadelelerini güçleştirmiştir.

Salgın sonrası yaşam maliyetlerini ve zorluklarını artıran enflasyon birçok ülkede grevlere, protestolara ve isyanlara neden olmuştur. Salgın sonrası ülkelerin gelişmişlik seviyesine bakılmaksızın dünyanın her yerinde enflasyon protestoları ve grevleri meydana gelmiştir. Ekonomik sıkıntılardan kurtulmak isteyen birçok ülke IMF ile kurtarma paketi müzakerelerine girmiştir. Fakat bu durum IMF kurtarma paketlerinin sıkıntılarını daha da artıracığına inanan kitleleri protestolara itmiştir.

Ülkelerin enflasyonla mücadeleleri incelendiğinde, Amerika Birleşik Devletleri Merkez Bankası'nın enflasyon ile mücadelede en kararlı ve istekli duruşu sergilediği göze çarpmaktadır. Ülke analizleri enflasyon ile mücadelede geleneksel mücadele aracı politika faiz enstrümanını kullanmalarına rağmen gelişmekte olan veya az gelişmiş ülkelerin merkez bankalarının enflasyonu önlemekte başarılı olamadıklarına işaret etmektedir. Başarısızlığın nedeni Kovid-19 salgını sonrası ortaya çıkan yükselen enflasyon oranları olgusunun küresel bir olgu olması ve talebin yanında arz cephesinden de beslenmesidir. Salgın sonrası ortaya çıkan enflasyon dünya çapında bir sorun olduğundan dolayı küresel çapta bir işbirliği ile çözülebilir.

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Bankaların Döngüsel Ekonomiye Geçiş Sürecinde İşletmelerin Kurumsallaşma Kapasitesinin Artırılmasında Rolü

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Özet: Yerkürenin ekolojik sınırlarının zorlandığı ve sürdürülemez hale gelmesiyle küresel ölçekte yaşanan ve gittikçe artan iklim krizinin temelinde, üretim yöntemi olarak işletme faaliyetlerinin yürütülmesinde kullanılan doğrusal ekonomi modeli yatmaktadır. Modelin, sanayi devriminden günümüze olan süreçte sadece işletmelerin karını maksimize etmeye hizmet etmesiyle dünyayı etkileyen çevre kirliliği, doğal afetler, küresel ısınma gibi sorunlar kaçınılmaz olarak yaşanmaktadır. Yaşanan sorunların en göze çarpan göstergesi olan iklim değişikliğinin önlenmesi için ekonomik kalkınma çabalarının olmazsa olmazı işletme faaliyetlerinin geleneksel yürütülme şekli olan doğrusal ekonomi modelinin, döngüsel ekonomi şeklinde değişmesi gerekmektedir. Böylece ülkelerin kalkınmasında niteliksel ve niceliksel boyutların aynı anda dikkate alınmasına hizmet eden sürdürülebilir kalkınma gittikçe önemli olmaya başlamıştır. En basit şekliyle sürdürülebilir kalkınma veya güncel ifadesiyle yeşil ekonomi, çevresel tehditleri ve üretim faktörlerindeki kıtlıkları azaltırken aynı zamanda toplum refahını da artıran; kısacası üretimden tüketime kadar olan tüm süreçlerdeki operasyonların çevre ile uyumlu bir şekilde yürütülmesini sağlayan ekonomik bir model olarak tanımlanmaktadır. Böylelikle insani güvenliğe yönelik başta çevreyi merkeze alan tehditler ile ekonomi politikalarının, sürdürülebilir kalkınma hedefleriyle uyumlu bir şekilde tasarlanmasını amaçlayan yeşil ekonomi; mevcut sistemin sürdürülebilirliği yerine döngüsel ekonomiye geçişin başarılabilmesini hedef almaktadır. Bu bağlamda işletmeler tarafından, çevre dâhil tüm paydaşların haklarının korunmasını, muhasebeleştirilmesini yani hakların maddi ve maddi olmayan şekilde ödenebilmesini, kayıt dışı faaliyetlerin önlenilmesini sağlayacak döngüsel üretim modelinin temel koşullarının ulusal ölçekte düzenlenebilmesini ve uygulamaya aktarılmasını sağlayacak kurumsal yapıların kurulabilmesi ve işletilebilmesi için nelerin gerekebileceği bu niteliksel çalışmanın konusunu oluşturmaktadır.

Anahtar Kelimeler: Bankacılık, Döngüsel Ekonomi, Yeşil Ekonomi, Kurumsallaşma, Sürdürülebilir Finans

1. GİRİŞ

Gezegenin ekolojik sınırlarının zorlanmasıyla sağlıklı yaşam döngüsünün sürdürülemez hale gelmiştir. Bu durumun somut göstergesi iklim krizinin temel nedeni, doğrusal ekonomi modelinin sanayi devriminden bugünlere özellikle gelişmiş ekonomilerde paydaşların haklarını göz ardı ederek, acımasızca uygulanmasıdır. Soruna çare olarak görülen döngüsel ekonomiye geçişin başarılabilmesinin maliyeti, küresel ticarette her geçen gün artan rekabet ve karşı karşıya kalınan risk ve fırsatlar nedeniyle gittikçe artmaktadır. Bu yüzden işletmelerin süreçten zarar görmemeleri ve/veya maliyetlerini azaltmaları adına dönüşümü gerektiren değişikliklere gitmeleri kaçınılmazdır.

Küreselleşmenin avantajlarının yok olmaması veya devamının sağlanabilmesi için geleneksel üretim modeli doğrusal ekonomiden döngüsel ekonomiye geçilmesi gerekmektedir. Bunun başarılabilmesi iş yapılan küresel pazarların özelliğine bağlı olarak var olan rekabet gücünün sürdürülememesine yol açabilecektir. Aynı şekilde yaşanan küresel sorunların sadece ulusal ölçekteki reçeteler ile giderilememesi, politikaların belirlenmesinde özerkliğin azalması yani uluslararası bağımlılığın artması, sahip olunan varlıkların taşıdıkları risklerin yönetilebilmesini, sorunların çözümlenebilmesini, piyasaların düzenlenebilmesini zorlaştırmaktadır. Gelişmekte olan ekonomilerdeki işletmelerin karşı karşıya kaldığı diğer zorluk, çeşitli nedenlerle özellikle kurumsallaşamama sonucunda; küreselleşmenin bir avantajı olarak görülen finansallaşma hareketlerinin kolaylaşmasının reel sektöre kalıcı yansımaları görülememektedir. Hatta işletmeler, çok uluslu şirketlerin sahip olduğu ölçek ekonomisi üstünlüğüyle rekabet edememesi yanında üretim sistemlerinin, uluslararası standartlara sahip olmasını sağlayacak döngüsel ekonomiye yönelik süreçlerin oluşturulmamasının dezavantajlarıyla da karşı karşıya kalacaklardır.

İşletmelerin bu süreçteki olası riskleri fırsatlara çevirebilmeleri; dönüşüme ayak uydurabilmeleri için temel kurumsallaşma alt yapılarını inşa etmeleri gerekmektedir. Yönetimsel olduğu kadar üretim süreçlerinin gerektirdiği bu yapıların oluşumunda ana ölçüt, işletmelerin kendi sürekliliğini sağlamak kadar iktisadi sürdürülebilirlik koşullarına göre faaliyetlerini yürütebilmelerine olanak tanıyacak kapasitelerin yaratılması olmalıdır. Çevre dâhil üretim ve tüketim süreçlerindeki tüm paydaşların menfaatlerini gözeterek üretim şekli olarak döngüsel ekonomiye dönüşüme işaret eden bu yaklaşımın her seviyede içselleştirilmesi gerekmektedir.

Dönüşümün başarılabilmesi için uluslararası ölçekteki ilgili yapı ve standartları referans alan ulusal düzenleyici ve denetleyici kurumların yol göstericiliği sayesinde işletmelerin kurumsallaşma kapasitelerinin artırılmasına ihtiyaç vardır. Bunun için küresel ölçekteki Avrupa Yeşil Mutabakatı (AYM); Birleşmiş Milletler Sürdürülebilir Kalkınma Amaçları; Paris Anlaşması; finans piyasaları için Basel Düzenlemeleri; işletmelerin kuruluş ve faaliyet süreçlerinin düzenlenmesini ve denetlenmesini sağlayacak ISO (International Organization for Standardization) gibi standartlar kritik önem taşımaktadır. Bu çerçevede düzenlemeler ışığında, iş yapma modellerinin geliştirilebilmesi, uygulanmasının teşvik ve takibi öncesinde gerekli yatırımların yapılabilmesi için sürdürülebilir finansman imkânlarının sağlanabilmesi gerekmektedir. Öz sermayesi ve/veya kurumsallaşma kapasitesi olmayan işletmelerin döngüsel ekonomiye geçebilmesi, mevcut dönüşümü gerçekleştirebilmeleri için ihtiyaç duyacakları finansmanın sağlanması ve sonrasındaki sürdürülebilirlik performans göstergelerinin standardize edilebilmesi için bankacılık sektörünün finansal ve beşeri sermaye kapasitesine ihtiyaç vardır. Kısacası çevresel, sosyal ve yönetim (Environmental, Social and Governance-ESG) kriterlerini gözeterek yeşil ekonomiye yönelik yatırımların finansmanının sağlanabilmesinde, işletmelerin kurumsal kapasitesinin artırılmasında bankacılık sektörüne önemli görevler düşmektedir. Bu bağlamda çalışmada bankaların, döngüsel ekonomiye geçiş sürecinde işletmelerin kurumsallaşma kapasitesinin artırılmasındaki rolüne değinilecektir. İlk ana başlıkta döngüsel ekonomi kavramının ve kurumsallaşmanın önemine değinilecektir. Sonrasında döngüsel ekonomiye geçiş sürecinde işletmelerin kurumsallaşma kapasitesinin artırılmasında bankaların rolü ana başlığında, iklim risklerinden finansal risklere geçişin yönetiminde genel olarak finans sektörünün önemine ve daha spesifik olarak da döngüsel ekonomiye geçiş sürecinde bankacılık sektörünün önemi verilecektir.

2. İŞLETMELERDE DÖNGÜSEL EKONOMİYE GEÇİŞİN VE KURUMSALLAŞMANIN ÖNEMİ

Günümüzün moda kavramı iklim krizine karşı sürdürülebilirlik, sadece yerel değil dünya ölçeğinde bir sorun ve çözümlerinin de bu ölçekte olması gerekmektedir. Bu yüzden döngüsel ekonomiye geçilebilmesindeki önerilerin temel çerçevesinde; evrensel standartlar kapsamında düzenleyici ve denetleyici kurumların kapsayıcı regülasyon yaklaşımları, dünya genelindeki iyi uygulamalar, sürdürülebilir ölçek ekonomisinin gerektirdiği parametrelerden faydalanılarak yürütülmesi gereken ve sabır gerektiren öneriler yer almaktadır. Katlanılan maliyetlerin ve sabrın sonuçları ise sosyal, ekonomik, ekolojik, yönetsel ve davranışsal olarak her alana yansımaktır veya yansıtılması gerekir. Aksi durumda ekonomideki dengesizlik, piyasa aktörlerinin olanı korumak yarışı tüm değerleri ve sistemi bozarak, sürdürülebilirliğini zorlaştırmaktadır.

Piyasalardaki sürdürülebilirliği zorlaştıran dengesizliklerin önlenmesinde; piyasaların düzenlenebilmesinde ve iş yaşamında adil sistem kurulmasında geleneksel üretim şekli hissedarlar kapitalizmi yerine paydaşlar kapitalizmi yaklaşımı gündeme gelmiştir. Bu yaklaşım uygulamalarının amacı, üretim sürecinde yer alan tüm paydaşların haklarının ödenmesi; doğal kaynakların hızla tüketilmesiyle çevrenin kirlenmesinin kısacası doğal dengenin bozulmasının önlenmesidir. Zira hissedarlar kapitalizminde odaklanılan temel hedef şirketlerin karını maksimize etmektir. Yani üretimde katlanılan maliyetlerin minimize edilebilmesi için her yolun kullanımının uygun görülmesidir ki, özellikle çevreyi koruma önlemlerinin gerektirdiği harcamalar yapılmadığı için onun büyük ölçüde tahrip edilmesi kaçınılmaz olmuştur. Bu yüzden sürdürülebilir kalkınma veya paydaşlar kapitalizmi yaklaşımlarının temelinde, paydaşların haklarının sömürülmeden teslimi yani üretim sürecinde yer alan tüm üretim faktörlerinin, direkt veya dolaylı katkılarının açık ve örtük maliyetleri, kâr/zarar hesaplarına aktarması sağlanmalıdır.

İşletmelerin büyümesi ve faaliyetlerini döngüsel ekonomi gereklerine göre yürüterek sürdürülebilirliği sağlayabilmeleri için geçerli tek yol kurumsallaşmadır. Kurumsallaşma, en yalın anlatımla konu ne olursa olsun, her türlü etkileşim ve iletişimde belirli kuralların olması zorunluluğudur. Büyük işletmeler kurumsallaşmasını tamamlarken, küçük işletmeler de kurumsallaşmayı iş hayatlarına katmak zorundadırlar. İşletmelerin ömrünün uzun süreli olması için atılması gereken en önemli adımın kurumsallaşma olduğu, birçok bilim insanı tarafından ifade edilmiştir. Günümüzde işletme kurabilmek için yasalarla belirlenmiş birçok prosedür vardır. Bu prosedürler aslında kurumsallaşmanın ilk adımıdır (Kardeş Selimoğlu ve Özbek, 2018: 3-4). Dolayısıyla kurumsallaşmanın temeli olan uluslararası kabul görmüş standartların tavsiye ettiği prosedürlere göre işletmelerin kuruluş süreçlerini tamamlamaları ve faaliyetlerini bu normlara göre yürütebilmesinde işin başındaki doğru tanımlamalar, referanslar önemlidir. Aynı şekilde bir işletmede sistemlerin kurulması kadar onların sertifikalandırılması ve sürekliliğinin sağlanması gerekir. Eğer “işletmelerde sürdürülebilir ekonomiye geçişi sağlayacak organizasyon kültürü, kurumsallaşma mümkün değil ise veya geçişin sürekliliğini sağlamak, başarısını artırmak isteniyorsa Sosyal Uygunluk Kriterleri bu ihtiyacı karşılayabilmektedir.” (Yazıcı, 2022: 29).

3. DÖNGÜSEL EKONOMİYE GEÇİŞ SÜRECİNDE İŞLETMELERİN KURUMSALLAŞMA KAPASİTESİNİN ARTIRILMASINDA BANKALARIN ROLÜ

Bankaların, Basel gibi uluslararası standartlara göre işlem yapmaları onların kurumsallaşma kapasitelerinin işletmelere göre yüksekliğine, risk yönetiminde daha başarılı olmalarına olanak sağlamaktadır. Fakat küresel yapıdaki sorunlar hem onları hem de işletmeleri olumsuz etkilemektedir. Özellikle iklim krizi, Covid 19 ve Ukrayna-Rusya Savaşı sonrasında piyasaların düzenlenmesinde kullanılan klasik araçların etkinliğinin azalmasıyla karşılaşılan risklerin, sorunların yönetilemez hale gelmesi, işletmelerin rekabet güçlerinin azalması veya haksız rekabet ile karşı karşıya kalmaları kaçınılmaz olmaktadır. Dolayısıyla devletlerin etkisizleşen düzenleyici rolünü telafi veya ikame edebilmek kadar işletmelerin faaliyetlerinin sürdürülebilirliğini sağlamak için küresel ölçekte standardizasyona dayalı kalite yönetim sistemleri gibi yeni yaklaşımlar geliştirilmiştir. Bu yaklaşımlar hem mikro hem de makro ölçekte kurumsallaşma ve sürdürülebilirliğe hizmet edebilmektedir. Fakat kurumsallaşma ve/veya döngüsel ekonomiye geçmeyi düşünmeyenler, sürdürülebilir kalkınma ilkelerine yönelik faaliyet gösteren, potansiyeli yüksek kurumsallaşmış işletmelere yönelik haksız rekabet oluşturabileceklerdir. Dolayısıyla haksız rekabetin oluşmaması, bankaların finansman olanaklarının hak edenlere tahsisinin sağlanmasında seçici olunması; kıt kaynaklar heba edilmeden uzun vadeli hedeflere hizmet edilebilmesi için bankaların kurumsallaşmış kapasiteleri, beşeri sermayesi önemli olacaktır.

3.1. İklim Risklerinden Finansal Risklere Geçişin Yönetiminde Finans Sektörünün Önemi

Hayatın her anında, gerçek ve tüzel kişilerin sahip olduğu varlıklar ve yürüttükleri faaliyetlerde maruz kalacağı risk basitçe kaybetme olasılığıdır. Risk “iki ana faktörden oluşmaktadır. Bunlardan ilki olan sistem riski (politika, ekonomi vs. faktörlerden kaynaklanmaktadır) kişilerin ve kurumların hatta ülkelerin (ülkeler kısmen piyasa riskini etkileyebilirler) kontrolü dışındadır. Geriye kalan şahsi risk (unique risk) ise esas olarak kişi, kurum ya da ülkelerin mali durumlarına göre belirlenmektedir” (Eken, 2019: 141).

Küresel bir köy haline gelen dünyada ortaya çıkan risklerin bulaşıcılık etkisi arttığı için yönetilmesi gittikçe zorlaşmaktadır. Bu süreci Allianz (2022) raporu şöyle özetlemektedir: Gelişmiş ekonomilerdeki hafif durgunluk, gelişmekte olan ülkelerdeki düşük büyüme ile yüksek enflasyon ve yüksek faiz oranları üçlüsüne geçiş kurumsal riskleri artırdı. Bu risk özellikle inşaat, ulaştırma, telekom, makine ve teçhizat, perakende, hanehalkı ekipmanı, elektronik, otomotiv ve tekstil sektörlerinde görülüyor. Talepte beklenen zayıflama, enerji ve girdi fiyatları, işgücü sıkıntıları ve henüz normalleşmemiş tedarik zincirleri gibi uzayan üretim kısıtlamaları ile erişim ve maliyet gibi daha büyük finansman sorunlarının, finans dışı sektörlerden şirketlerin hem kârlılığı hem de likiditesi üzerinde baskı yaratmasını bekliyoruz. Daha önceki dayanıklılık belirtileri çoktan zayıflamaya başladı ve düzensiz kırılmalıklara işaret ediyor. Bu kırılmalıklar şu şekilde sıralanabilir:

- Döngüsel faaliyet gösteren ülke ve sektörler küresel yavaşlamanın etkisinde kalacak.
- Düşük derecelendirmeye ve yüksek borca sahip ülke ve sektörler yükselen faiz oranlarından olumsuz etkilenecek.
- Emtia ithal eden ve ithalatı için ABD’ye bağımlı olan ülke ve sektörler, doların güçlenmesi karşısında zorluk yaşayacak.
- Enerji yoğun sektör ve ülkeler ise enerji krizinin etkisini daha fazla hissedecek.

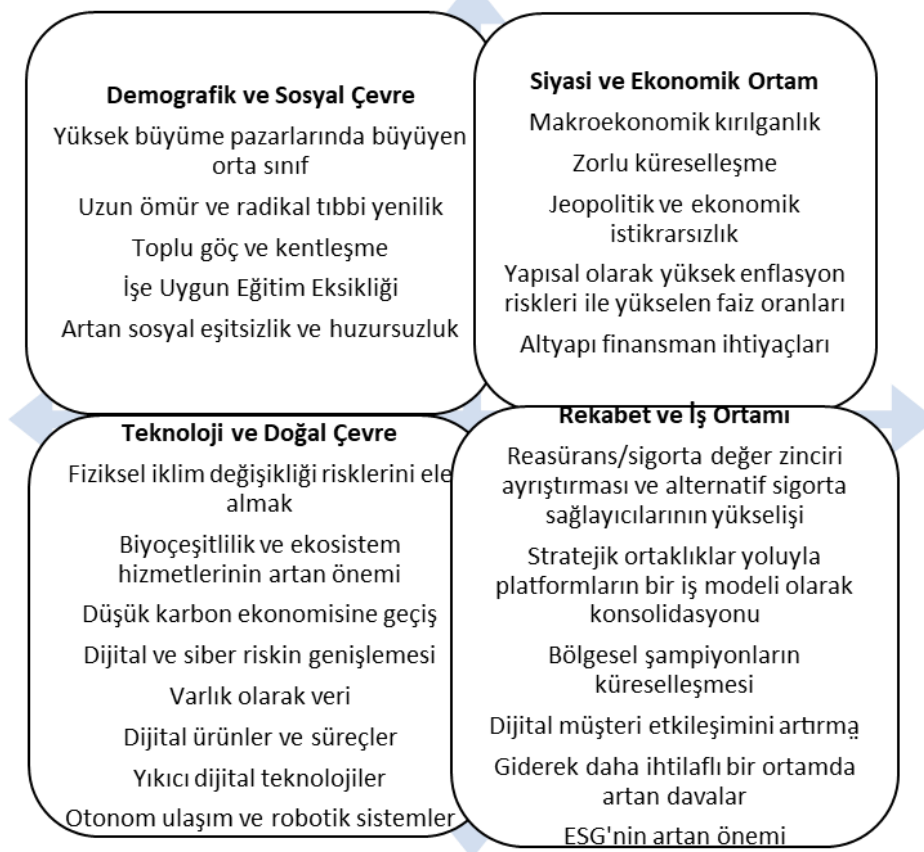
Dünya piyasalarında görülen petrol varil fiyatlarında veya döviz kuru fiyatlarındaki artışlar enerji maliyetlerini de yükseltmekte ve tüm üretim kesimlerine maliyet olarak yansımakta ve enflasyonist hedeflerin sapmasına neden olmaktadır (Tezer, 2017: 1067). Enerji başta olmak üzere ulusal ve uluslararası ölçekte etkileri artarak hissedilen bu kırılmalıkların yönetiminde finans sektörünün icraatları da önemlidir. “Finansal krizlerin ortaya çıkmasını engellemek mikro düzeyde ilgili ülkelerin, makro düzeyde de küresel ekonominin sağlıklı bir büyümeyi yakalayabilmesi için bankacılık sektörünün performans ve kârlılığı çok önemlidir. Bunun yanında güçlü ve etkin bir bankacılık sektörü, finansal piyasaları derinleştirerek jeopolitik ve stratejik yatırımların artmasını da sağlamaktadır. Bu noktada bankacılık sektörü ayrıca ülkelerin politik güçlerini de besleyen en önemli sektörlerden biridir” (Ersoy ve Uçkun, 2022).

Dolayısıyla çeşit ve etkileri gittikçe artan bu risklerin yönetimi, işlevsel bir yetkinlik olmaktan çıkarılıp tüm şirkete nüfuz eden kurumsal bir gereksinim haline gelmelidir. Zira kurumsal risk yönetiminde yer alan süreçlerin uygulanamaması, uygulansa bile özellikle maruz kalınacak sistemik risklerin yönetilmesinin zorlaşması ve karşılaşılabilecek tazminat ödemelerinin işletmelerin altından kalkamayacağı boyutlara erişecek olması sigorta

sektöründen destek satın alınmasını zorunlu kılmaktadır. Tüm taraflar için zorunluluğu, fırsat ve tehditleri içeren; iklim kriziyle gelinen durumları; bugünün ve yarının risklerini SONAR (2022), yirmi dört başlıkta özetledi. Şekil 1’de özetlenen bu eğilimleri, birbirine bağlı ve etkileşim halinde olan şu dört ana kategoride sınıfladı:

- Demografik ve Sosyal Çevre
- Siyasi ve Ekonomik Ortam
- Teknoloji ve Doğal Çevre
- Rekabet ve İş Ortamı.

Şekil 1: Yerel ve Küresel Ölçekte Yönetilmesi Gereken Riskler



Kaynak: SONAR (2022:11-12)'den yararlanmıştır.

3.2. Döngüsel Ekonomiye Geçiş Sürecinde Bankacılık Sektörünün Önemi

İklim krizinin çevresel etkileri sebebiyle ekolojik dengede meydana gelen bozulmalar, iktisadi ve sosyoekonomik sorunlara yol açmaya başlamıştır. Şekil 2’de iklim riskinin nedenlerinden finansal sistemdeki risklere geçişin aktarım kanalları şematik olarak resmedilmiştir. Şekilde, iklimle ilgili risklerin ekonomideki aktarım kanalları arasındaki etkileşim süreçleri; finansal sisteme yansımaları ve geri bildirim etkileri gösterilmektedir. Sürecin başındaki iklim risklerini ve bir dizi farklı aktarım kanalı yoluyla ekonomiye ve finansal sistem risklerine yansımalarını NGFS (2020: 9) şöyle özetlemektedir:

- Geçiş riskleri, işletmelerin kârlılığını ve hanehalklarının servetini etkileyeceği için borç verenlerin ve yatırımcıların finansal risklerine sebep olacaktır. Ayrıca, özellikle geçiş atıl varlıklara yol açarsa, yatırım, üretkenlik ve göreceli fiyat kanalları yoluyla makroekonomiyi de etkileyecektir.
- Fiziksel riskler, ekonomiyi iki şekilde etkiler.
- Aşırı hava olaylarından kaynaklanan akut (hızla ilerleyen) etkiler, iş kesintilerine ve mülkün zarar görmesine neden olabilir. Tarihsel olarak bu etkiler, geçici olarak kabul edilir, ancak bu artan küresel ısınma ile değişecektir. Bu olaylar, sigortacılar için yüklenim risklerini artırabilir ve varlık değerlerini bozabilir.

- Özellikle artan sıcaklıklar, deniz seviyelerinin yükselmesi ve yağıştan kaynaklanan kronik (devamlılık kazanan) etkiler, işgücü, sermaye ve tarım verimliliğini etkileyebilir. Bu değişiklikler, işletmelerden, hanehalklarından ve hükümetlerden önemli düzeyde yatırım ve uyum maliyetlerine katlanmayı gerektirecektir.

Şekil 2. İklim Risklerinden Finansal Risklere Geçişin Aktarım Kanalları



Kaynak: NGFS (2020:9)'den uyarlanmıştır.

Şekil 2'de, ekonomideki etkileşim süreçlerindeki fonksiyonları nedeniyle finansal sistemin ve ilgili otoritelerin, aktarım kanallarında ne kadar önemli olduğu görülmektedir. Şöyle ki: Geri bildirim etkilerinin okunabilmesinde ve gerekenlerin zamanında yapılabilmesi konusunda bankacılık sektörünün, işletmeler ve hanehalkları üzerindeki etkisi önemlidir. Çünkü risk yönetme kapasitesinin üstünlüğü sayesinde hem alacağı riskleri hem de müşterilerini yakından takip edebileceği için geri bildirim sürecinde önemli görevleri yerine getirebilecektir. Fakat az gelişmiş ve gelişmekte olan ekonomilerdeki yapısal sorunlar, finansal sistemlerdeki yetersizlikler nedeniyle sistemden beklenen faydalar tam olarak görülemediği için iklim krizinin yönetilebilmesinde işleri daha da zorlaşabilecektir. Ancak gelişmiş bir finansal sisteme sahip ekonomilerde, gerek iklim krizinin yönetilebilmesinde gerekse de döngüsel ekonomiye geçilebilmesinde verebileceği sürdürülebilir finansman imkânlarıyla önemli görevleri yerine getirebilecektir.

Yukarıdaki ana başlıklarda da ifade edildiği gibi hem işlemlerin kurumsallaşma kapasitelerinin artırılması hem de ulusal düzeyde, uluslararası düzenlemeler referans alınarak; sürdürülebilir finans stratejisinin belirlenmesi ve bu stratejinin lider kuruluşlar, düzenleyici ve denetleyici yapılar koordinasyonunda yürütülebilmesi gerekmektedir. Koordinasyon ve işbirliklerinin önemini Özenç (2021) şöyle özetlemektedir: "İklim değişikliğiyle hızlı ve etkili mücadele edilmesi gerekmektedir. Çünkü bu yönde atılacak adımların maliyeti, iklim değişikliğiyle karşılaşılabilecek zararların maliyetinden daha düşük olacaktır. Özellikle Covid-19 salgınının ekonomik etkileri ve sonrası toparlanma politikaları göz önünde bulundurulduğunda konunun önemi görülmektedir. Dolayısıyla iklim değişikliğini önlemeye yönelik küresel ölçekteki koordinasyon yapısında alınması gereken önlemlere, toparlanma politikalarına daha fazla zaman kaybetmeden uyum göstermek gerekmektedir."

5. SONUÇ

Küresel ısınmanın sebep olduğu iklim krizi sonucunda biyolojik çeşitliliğin azalması gibi gezegeni tamamıyla etkisi altına alan felaketler, tek bir devlet veya kurumun altından kalkamayacağı boyutlara ulaşmıştır. Dolayısıyla çözümler üretilebilmesi için devletlerin düzenleyici ve denetleyici yapıları ve sivil toplum kuruluşlarının yönlendiriciliğinde işletmelerde doğrusal ekonomiden, döngüsel ekonomiye geçişe acil ihtiyaç vardır. Yani ekonominin temel kurumları olan işletmelerde sadece hissedarların karını maksimize etmeyi esas

alan anlayış yerini, çevreyi korumayı merkeze alan; üretimden tüketime ve geri dönüşüme hizmet eden üretim modeli olan döngüsel ekonomiye bırakmalıdır. Böylece tüm paydaşların üretime katkıları oranındaki haklarının eşit işleme tabi olmasını esas alan paydaşlar kapitalizmi kavramı kapsayıcı bir şekilde uygulanmış olacaktır. 20. yüzyılın son çeyreğinde gündeme gelmeye başlayan bu yaklaşımın temel amacı, artan sorunların sebebi olan işletmelerden ve/veya sermayedarlarından çözüm için daha fazlasını yapmalarını sağlamayı başarmaktır. Bunun için de uzun soluklu, sabırlı olmayı gerektiren iklim krizinin önlenmesinde döngüsel ekonomiye geçişi mümkün kılacak maddi desteklerin elde edilebilmesi başarılmalıdır. Zira öz sermayesi olmayan işletmelerin ihtiyaç duyacağı finansal sermayenin ve kurumsallaşma kapasitesinin artırılmasında bankaların sahip olduğu potansiyel önemlidir. Sonuç olarak, işletmelerin döngüsel ekonomiyi esas alan fiziksel sermaye stokundaki yenileştirme yatırımlarının gerçekleştirilebilmesi sayesinde, faaliyetlerinin sürekliliği sağlanırken sürdürülebilir kalkınmanın başarılabilmesi mümkün olabilecektir.

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Turizm Seyahat Pazarında Tüketici Davranışlarının Kuşaklar Bağlamında İncelenmesi

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Özet: Tüketicilerin yaş dönemleri ve ait oldukları kuşaklar, kendilerini etkileyen önemli olayları ve teknolojik gelişmeleri içerdiği için kişiliklerini de belirleyen önemli sınıflandırıcılar olarak kabul edilmektedir. Aynı kuşak içindeki tüketiciler arasında farklılıklar olsa da, dönemin genel eğilimlerini ve modaya uygun uygulamalarını yansıtmaları açısından tüketicilerin içinde yer aldığı kuşakların ekonomik, sosyolojik ve psikolojik davranışlarını etkilediği bilinmektedir. Farklılaşan istek ve gereksinimler sonucunda tüm sektörlerde olduğu gibi turizm sektöründe de bir değişim zorunlu bir duruma gelmiştir. Yaşanan bu değişim sonucunda günümüz turist profili içerisinde aktif tüketici grubunu oluşturan X, Y ve Z kuşaklarının seçim ve isteklerinin doğru bir biçimde saptanması, bu istek ve gereksinimlerin karşılanmasında uygun ürün ve hizmetin oluşturulup sunulması bakımından büyük bir önem arz etmektedir. Bu çalışmada turizm seyahat pazarında tüketici davranışlarının kuşakların özelliklerinden hareketle kavramsal olarak incelenmesi amaçlanmıştır.

Anahtar Kelimeler: Kuşak, X, Y ve Z Kuşağı, Tüketici Davranışları, Turizm Seyahat Pazarı

Examination of Consumer Behavior in the Tourism Travel Market in the Context of Generations

Abstract: The age periods of consumers and the generations they belong to are considered as important classifiers that also determine their personalities, as they include important events and technological developments that affect them. Although there are differences between consumers within the same generation, it is known that the generations in which consumers are involved affect their economic, sociological and psychological behaviors in terms of reflecting the general trends and fashionable practices of the period. As a result of the differing requests and requirements, a change has become mandatory in the tourism sector as in all sectors. This shift as a result of today's active consumer group which are tourist profile in X, Y and Z generations and requests to accurately determine the selection of these wishes and created a great presentation and appropriate products and services to meet the requirements in terms of importance. In this study, it is aimed to conceptually examine consumer behaviors in the tourism travel market based on the characteristics of generations.

Keywords: Generation, Generation X, Y and Z, Consumer Behavior, Tourism Travel Market.

1.GİRİŞ

Tüketici davranışları, bireylerin ihtiyaç ve isteklerini karşılamak için; ürünlerin, hizmetlerin, fikirlerin veya deneyimlerin seçilmesi, satın alınması, kullanılması veya elden çıkarılması gibi faaliyetlerin incelenmesi olarak tanımlanmaktadır.

Her kuşağın satın alma davranışlarını etkileyen beklentileri, deneyimleri, geçmişleri, yaşam tarzları, değerleri ve demografik özellikleri bulunmaktadır.

Her dönemin etkileri, o döneme ait olan toplumu etkilemekle beraber bireylerin bakış açıları, seçimleri ve yaşam stilleri üzerinde bir takım ortak özellikler oluşmaktadır (Aymankuy, 2016).

Bugün batı toplumlarında beş tür; sessiz, baby boomers, X, Y ve Z kuşakları tanınmaktadır. Buna bağlı olarak birçok firma, çok kuşaklı tüketicilere ulaşmaya çalışmakta ve bu farklı alıcıları anlamaya ve onların dikkatini çekmeye çalışmaktadır.

Kuşak kavramı, tüketici davranışlarında kuşakların anlam ve önemi, seyahat pazarında kuşaklar ve tüketici davranışları ile seyahat pazarında tüketici davranışlarının kuşaklar bağlamında bir değerlendirme bu çalışmada sunulacaktır.

Çalışmanın amacı, seyahat pazarında tüketici davranışının kuşaklar bağlamında bir değerlendirmesi yapılırken; öncelikle kuşaklar bağlamında tüketici davranışlarının nasıl farklılaştığı ve nelerden etkilendiğini tespit etmekle birlikte bunu seyahat pazarında nasıl gerçekleştiğini yapılan literatür araştırma sonuçlarına yer vererek desteklemektir.

Modernleşme süreci ile beraber insan yaşamında farklı bir mana kazanan tatil olgusunun kişi için nasıl bir anlam ifade ettiği ve zamanın üretmeden geçirilmesi olarak yorumlanabilecek tatil kavramını kuşaklar bakımından nasıl ele alındığını bilmek gerek sektör uygulayıcıları gerekse de araştırmacılar açısından önem arz etmektedir.

2.KAVRAMSAL ÇERÇEVE

2.1. Kuşaklar ve Tüketici Davranışları

2.1.1. Kuşak Kavramı

Türk Dil Kurumu sözlüğündeki ifadede kuşak kavramı; yaklaşık olarak aynı dönemlerde doğmuş, aynı çağın koşullarını, dolayısıyla benzer sorunları ve kaderleri paylaşan ve benzer görevlerden sorumlu olan bir grup insan olarak tanımlanır. Chen (2010: 131) ise kuşağı, belirli bir zaman diliminde doğan, belli bir yaşla şekillenen, benzer değer, tutum ve yaşam tarzlarını paylaşan bir grup insan olarak tanımlamaktadır. Kuşak çatışmaları, farklı düşünme, davranma, hissetme veya isteme biçimleri nedeniyle ortaya çıkabilir. Bu tür çatışmaları azaltmak veya önlemek için bu kuşak farklılıklarını anlamak önemlidir (Wulff, 2015: 12).

2.1.2. Kuşakların Sınıflandırılması

Politik, ekonomik, kültürel vb. yapılarda meydana gelen değişimler, sosyal hayata yansır iken, kişilerin davranışlar ile değerlerini de etkilemektedir. Bu etkilenmeyle ilişkili olarak benzer yıllarda doğan kişilik yapıları şekillenir ve kuşaklar oluşur. Kuşak dönemleri, aynı dönemde doğan ve aynı yaş aralığına sahip kişilerden oluşur (Smola ve Sutton, 2002: 346).

2.1.2.1 X Kuşağı (1965-1980)

X kuşağı, ekonomik zorluklar ile dolu bir döneme denk geldiği için “Kayıp Kuşak” olarak da tanımlanmaktadır (Bayraktaroğlu ve Özbek, 2018). X kuşağının özelliklerinden biri başkalarının görüşlerine önem vermekle birlikte kendilerinden emin olamazlar ve sıklıkla seçimlerinin sağlam olduğuna dair güvenceye ihtiyaç duyarlar (Lissitsa ve Kol, 2016: 306). Hoşgörülüdürler, farklılıklara çabuk uyum sağlarlar. Her iki ebeveynin de çalışması nedeniyle yalnız büyüyen veya artan boşanma oranları nedeniyle tek ebeveynle büyüyen Boomers'ın çocukları, ailevi, finansal ve sosyal güvensizlik ortamında bireysellik duygusunu öğrenmişlerdir (Smola ve Sutton, 2002: 366).

Günümüzde kullanılan teknolojik ürünlerin birçoğu X kuşağı tarafından geliştirilmiş olsa da bu teknolojinin kullanımında Y kuşağının gerisinde kalmıştır (Tekin, 2015: 55).

2.1.2.2. Y Kuşağı (1981–1995)

Bu kuşaktaki insanlar, fevri, kıvrak zekâlı, tekil, meraklı, cana yakın, her şeyi hemen isteyip tüketen, bedelini ödemeye yanaşmayan, bürokrasi ve ciddiyetten hoşlanmayan, hız tutkunculardır (Yüzbaşıoğlu, 2012).

GSM ve bilgisayar teknolojilerine hâkim olmaları, bilgiye kolay ulaşımı sağlamaya yardımcı olurken kendilerine olan güvenlerini artırmıştır. Diğer kuşaklara göre daha meraklıdırlar (Bekmezci, 2017: 105). Globalleşmenin ve kültürlerarası etkileşimin artmaya başladığı bu dönemde yaşayan Y kuşağı mensupları, kendinden emin ve adalet savunucuları olarak bilinirler (Acıloğlu, 2015: 7).

Williams ve Page'e (2011) göre Y kuşağı için sekiz anahtar değer; seçim, özelleştirme, inceleme, bütünlük, işbirliği, hız, eğlence ve yenilikten oluşmaktadır. (Williams ve Page, 2011: 6–8).

2.1.2.3. Z Kuşağı (1996–2012)

Z kuşağı üyeleri, sosyal medya ağlarını ve teknolojilerini yoğun şekilde kullanmaktadır. Z kuşağı her şeyin dijitalleştiği bir zamanda doğmuştur. Verileri diğer kuşaklara göre daha hızlı tarayabilen ve tartışabilen, daha inatçı ve materyalist bir zihniyetle hareket edebilen kuşaktır (Mishra vd., 2012). Teknolojiye aşina, hızlı iletişim kurabilen, kendini beğenmişlikten hoşlanan, eğlenceye önem veren bireylerden oluşmaktadır. Bu kuşağının tarih boyunca eğitim düzeyi en yüksek kuşak olması beklenmektedir. Kolay pes eden, çabuk sıkılan bireyler oldukları için markalara ve işletmelere sadık olmayabilirler (Taş vd., 2017).

Ünal'a (2017) göre Z kuşağı gençlerinin temel nitelikleri şu şekildedir: Her alanda özgüvenleri yüksektir. Psikolojik ve zihinsel faaliyetler açısından hızlı gelişim ve değişim gösterirler. Statüye önem vermekle birlikte ne istediklerini iyi bilir ve istemediklerini kolayca ifade ederler. Önceki kuşakların uzun uğraşlar sonucunda edinecekleri lüks hayat ve teknoloji gibi ayrıcalıklı kavramlar Z kuşağının günlük ihtiyaçlarıdır (Ünal, 2017: 26-30).

2.1.3. Kuşaklararası Farklılıklar

Kuşaklar arasındaki farklılaşmanın en önemli nedeninin, dönemde yaşanan dış etkenler olduğu düşünülmektedir. Her kuşağın kendine has özellikleri bulunmaktadır. Bunlar, olayların kendi yaşamlarındaki etkileriyle ve kendilerinden önceki nesillere aktarılmalarıyla şekillenir (Askeroğlu ve Karakulakoğlu, 2019: 523).

Her kuşağın kendi kültürünü yaratan benzersiz ortak deneyimleri vardır. Buna göre; hayat koşullarındaki hızlı değişimler, sosyal-kültürel-tarihsel şartların birey üzerindeki etkileri kuşaklar arası farklılaşmanın temelini meydana getirmektedir. Kuşaklar arasındaki anlayış ve tutum farklılıkları birbirlerine karşı eleştiri ve beklentilere neden olur iken, kuşaklar arası çatışmalara neden olmaktadır. Eski kuşaklar yeni kuşakların davranışlarını eleştirir iken, yeni kuşaklar ise eskilerin onları anlamadığını düşünmektedir. İkinci Dünya Savaşı'na kadar tarihsel dönemlerde olayların sonuçlarıyla tanımlanan nesiller, savaş dönemi sonrasında teknolojik gelişmelerin etkisiyle tanımlanmıştır. Bu nedenle nesiller 1965 sonrası sosyolojik gelişmelerin bir sonucu olarak tanımlanmıştır. Yetiştirilme tarzları ve yaşadıkları ortamlar nedeniyle kuşaklar arasında kişisel özellikler, sosyal yaşam ve çalışma hayatı gibi konularda önemli farklılıklar gözlenebilmektedir (Adıgüzel vd, 2014: 171).

2.1.4. Kuşaklar Bağlamında Tüketici Davranışları

Tüketicilerin yaş grupları ve buna bağlı olarak içinde yaşadıkları kuşaklar değiştikçe satın alma biçimleri ve karar verme mekanizmaları da değişmektedir. Yaş, tüketicilerin fiziksel, psikolojik, sosyolojik ve kültürel özelliklerini etkilemektedir. pazarlama stratejisinde de yaş önemli bir faktördür. Chaney vd. (2017) göre, pazar bölümlendirmede; yaş, cinsiyet, gelir, etnik köken, eğitim, meslek gibi psikografik boyutlara ilişkin bilgiler, birçok işletme tarafından yaygın olarak kullanılmaktadır. Bu bilgiler genellikle tüketicilerin satın alma ve tüketim davranışları ile ilgilidir. Pazarları kronolojik yaşlarına göre bölümlere ayırmaya kuşaklar arası pazarlama denilmektedir.

Günümüzde kuşaklar arası tüketim farklılıklarına bakıldığında; X Kuşağı, kuralcı ebeveynleriyle büyümenin etkisiyle daha uzun vadeli borçlara girme eğilimindeyken, Y Kuşağı'nda bu durum tam tersidir. X Kuşağı, uzun vadeli borçlara girmek yerine anlık deneyimler yaşamayı tercih etmektedir. Z kuşağı ise internet çağının içine doğdukları için küresel bir dünyada sınırsız yaşadıklarını ve istediklerini internet üzerinden daha hızlı ve ücretsiz olarak elde etme eğiliminde olduklarını düşünmektedirler (Gökmen, 2019).

2.1.4.1. X Kuşağı Tüketici ve Davranışları

X kuşağının tüketim alışkanlıkları, mamul seçiminde dikkat ettikleri noktalar dönemin koşulları ve toplumsal yapısından etkilenmiştir (Altuntuğ, 2012: 208). X kuşağının satın alma eğilimlerine bakıldığında büyük bir çoğunluğunun ürünü fiziksel olarak görmeden, hatta mağazadan bile geleneksel şekilde satın almamayı tercih ettiği görülmektedir. Her ne kadar uyum sağlamaya çalışsalar da teknolojiye pek aşina olmayan bu kuşağın büyük bir bölümünün internet üzerinden satın alma konusunda güvensiz olduğu görülmektedir (Ekşi, 2017: 25). Tüketici özelliği olarak şüpheli bir kuşak olan X kuşağı, ürünleri satın almadan önce araştırma ve nicelikten çok kaliteyi tercih etme eğilimindedir (Kotler vd. 2012: 70).

X kuşağı insanları geleneklerine bağlı olarak diğer kuşaklara göre daha muhafazakâr alışveriş yapma eğilimindedir. Alışverişlerinde çarşığı alışveriş merkezlerine tercih ederler ve almak istedikleri ürünlerle dokunma, koklama, görme, tatma ve pazarlık yapma eğilimindedirler. X kuşağının çevrimiçi alışverişe sıcak bakmadığı ve güvensiz bulunduğu gözlemlenmektedir. Bu kuşağın karakter özellikleri şu şekilde sıralanabilir; bireyci, şüpheli, iş odaklı, rekabetçi, duyarlı, otoriteye saygılı, meydan okuyan, halinden memnun ve sabırsız (Bayraktaroğlu ve Özbek, 2018). Dunne ve Lusch, X Kuşağının satın alma davranışlarında oldukça karmaşık olduğunu ve promosyonlara karşı tepki vermediğini bildirmektedir. Heaney'e göre, X kuşağı, geleneksel karar vererek satın almalar yapmaktadır. Himmel'e göre, bu kuşağın üyeleri, alacakları ürünün özelliklerine dair bir açıklama duymak istemektedir. Reisenwitz ve Iyer'e göre riskten kaçınma tutumu ve düşük risk kapasitesi vardır. Williams'a göre, markalara ve şirketlere sadakat göstermemektedirler (Roberts ve Manolis, 2000: 481).

X kuşağının satın alma davranışları incelendiğinde birçoğunun ürünü görmeden almamakla birlikte ve fiziksel mağazaları tercih ettiği ve geleneksel tutumunu sürdürdüğü görülmektedir. Satın alırken ürünün özel, nadir ve statü sembolü olmasına özen gösterirler. Geleneksel tutumu sürdürmelerinin nedeni, teknolojiden uzak büyümüş olmaları ve uyum sağlamaya çalışsalar da birçoğunun hala çevrimiçi alışverişten uzak olmaları ve internetten ürün satın alma konusunda güvensiz olmalarıdır (Çetintürk, 2020).

2.1.4.2. Y Kuşağı Tüketici ve Davranışları

Y kuşağı, tüketim alışkanlıkları da kişisel özellikleri gibi önceki kuşaklardan farklılaşmaktadır. Bu kuşak, şatafatlı ve pahalı mamullere ilgi duyarlar (Tükel, 2014: 16). Y kuşağı, internet kullanmalarından ötürü birçok kültürden insana ulaşabilen ve etkileşim kurabilen kuşak olmuştur. Reklamlarla büyümüş olmaları, ebeveynlerine göre daha bilinçli bir marka algısına sahiptirler (Toruntay, 2011: 77). Teknoloji kullanımı ile birlikte Y kuşağı hızlı tüketime yönelmiştir (Adıgüzel vd., 2014). Y kuşağının her şeyi elde edip dönüştürebileceğini düşünmesinin nedeni, tüketim toplumunda büyümüş modern teknoloji insanları olmalarıdır (Aminul vd., 2011: 1803).

Y kuşağı bireyler, internet alışverişinde aktif olan, alışveriş öncesi sosyal medyadan yararlanan ve bu özellikleriyle diğer kuşaklardan ayrılan bireyler grubu olarak karşımıza çıkmaktadır (Yener, 2017). Y kuşağının diğer kuşaklara göre daha az televizyon izlediği, müzik, alışveriş ve spor faaliyetlerine daha az ilgi gösterdiği belirlenmiştir (Ekşi, 2017; Çalkaya, 2019). Seyahat etmeyi seven Y kuşağı tüketicileri deneyim kazanmak için para harcamayı tercih etmektedir (Bilgihan, 2016: 103). Online alışverişini riskli bulmalarına rağmen Y kuşağı tüketiciler alışverişten vazgeçmemektedirler (Bakırtaş vd., 2016: 68).

Y kuşağının satın alma davranışları incelendiğinde, bu kuşak ürünü ya da hizmeti pek sevmezken seçeneklerin çokluğu nedeniyle çabuk sıkılmaktadırlar. Bu nedenle markaların yenilikçi olması ve bu nesli sürekli olarak tatmin etmesi gerekmektedir. Ürünün değerinden memnun kaldıktan sonra yeni bir ürün satın alma eğilimindedirler. Ayrıca gerekli tecrübe ve bilgi birikimini kazandıktan sonra reklamlardan etkilenmeden satın almayı tercih etmektedirler. Mobil teknolojiyi ve sosyal medyayı çok aktif kullandıkları için genellikle çevrimiçi alışverişini tercih etmektedirler. Bu kuşak için geliştirilen modern pazarlama ve satış stratejileri önem kazanmaktadır.

2.1.4.3. Z Kuşağı Tüketici ve Davranışları

Z kuşağı, dijital teknolojinin içine doğduğu için dijital kuşak olarak da bilinmektedir. Bu kuşağın üyeleri, bir ürünü satın almadan önce sürekli internette araştırma yaptıkları için ürünler hakkında bilgi sahibidir. Erken yaşlardan itibaren teknolojiye erişiminin olması sonucunda internet bu tüketiciler için her zaman var olmuştur. Gelişimleri sırasında hızla gelişen teknolojiye ve teknolojik cihazlarda yaşanan hızlı gelişim ve değişime tanık olmuşlardır. Tüm bu süreç, bu kuşağının hızlı değişime açıklığının, eskime duygusuna inanmamasının ve tüketici olarak yüksek beklentilerin temelini oluşturmuştur (Wood, 2013).

Z kuşağı bireyler satın aldıkları ürünle ilgili olumlu ya da olumsuz deneyimlerini tüketici olarak sosyal medya üzerinden ifade ettikleri için tüketim sadece bir satın alma eylemi olarak değil, aynı zamanda bir sorgulama ve alternatif oluşturma alanı olarak da görülmektedir. Bu geri bildirimlerle satın aldıkları ürünleri benzersiz bir şekilde yeniden şekillendirirler (Duygulu, 2018, 642). Sosyal medyayı aktif olarak kullanan bireylerin sosyal medyaya markaları dâhil etmesi ve çevrimiçi alışveriş fırsatları sunması önemlidir (Baldwin, 2018). Marka bağlılığı düşük olan Z kuşağı bireyleri kampanya ve reklamlara karşı kayıtsız kalabilirken, sosyal medya aracılığıyla arkadaşlarının önerdiği bir ürünü satın alma olasılıkları daha yüksektir (Perlstein, 2017). İstedikleri her ürüne anında sahip olma, hızlı tüketme ve yeni tüketim deneyimleri yaşama isteği pazarlamacıların gözünde Z kuşağını değerli kılmaktadır (Altuntuğ, 2012: 209).

Z kuşağı üyeleri sosyal medyayı aktif olarak kullandıkları için modayı çok yakından takip etmekte ve tüketim kararlarında imaja dayalı tüketime yönelmektedirler. Ayrıca bu kuşağın üyeleri istedikleri ürüne anında ulaşmak ve tüketmek ve yeni bir tüketimi hemen gerçekleştirmek istemektedir (Ünal, 2019: 66).

2.3. Kuşak Değişimi ile Seyahat Pazarlamasındaki Değişimler

2.3.1.1. Seyahatte X Kuşağı

X kuşağı genellikle değer için alışveriş yapar çünkü buna ihtiyaçları vardır ve finansal kısıtlamaları vardır. Kendilerinden emin olmasalar bile, genellikle seçimlerinin sağlam olduğuna dair güvenceye ihtiyaç duyarlar. X Kuşağı alışveriş konusunda bilinçli, düşük fiyat duyarlılığına önem veriyor ve yaşam tarzlarına uygun hizmetlere ihtiyaç duymaktadır. X kuşağı kadınlar ürün satın alırken samimiyet ve danışmanlık istemektedirler (Williams ve Page, 2011: 5-6).

X Kuşağı, turizm ürünlerini satın alırken seyahat danışmanlarına, paketlere, fiyat indirimlerine/promosyonlarına ve eğlence parklarına önem vermektedir (Beckendroff vd., 2010: 34). Seyahat etmeyi çok merak etmekle beraber farklı kültürleri keşfetmek isteyen X kuşağı, teknolojiyle birlikte bilgiye kolayca ulaşarak meraklarını gidermektedir (Özkoç ve Bayrakdaroğlu, 2017: 11). Bu kuşak çoğunlukla doğa temalı tatilleri tercih etmekle birlikte tatillerinde eğlenceli faaliyetlere yer vermek istemektedir. Aynı zamanda bu kuşak daha çok paket turlar

ile seyahat etmektedir (Li vd., 2013: 161). X kuşağı, aileleri ve çocukları ile beraber bir şeyler yapmaktan keyif almaktadır (Peltomaki, 2015: 28). Elliot ve Choi (2011: 45) çalışmalarında yolcu gemileriyle seyahat eden turistlerin beklentileri saptanmaya çalışılmıştır. Sonuç olarak X kuşağı yaş aralığındaki turistlerin aile ve sosyal bağlarını güçlendirmek için tatile çıktıkları belirlenmiştir. Dolayısıyla X kuşağı üyelerinin aile bağlarına önem veren ve satın alma kararlarında etkisi olan bireylerden oluştuğu söylenebilir. Marka bağlılığı yüksek X kuşağının belirli markalarla turistik mamullere yönelik daha fazla satın alma davranışı gösterdiği gözlenmektedir (Özkoç ve Bayrakdaroğlu, 2017: 11).

2.3.2. Seyahatte Y Kuşağı

Y kuşağı, kişiliklerinin bir yönünü veya kim olduklarına, kendileri için neyin önemli olduğuna ve hayatta neye değer verdiklerine dair imajlarını ifade etmelerine yardımcı olacak mamulleri seçmekte ve tüketmektedir. Ürünlerin ve markaların en son trendleri ve marka itibarları hakkında uzmanlardan veya liderlerden önemli bilgiler alır. Satın alma kararı verirken etkinlik tarihlerine önem vermektedirler (Beckendroff vd., 2010: 34).

Y kuşağı, deneyim için tüketmek istedikleri için otellerde büyük bir müşteri segmenti haline gelmektedir. Mobil cihazlar/uygulamalar, fiyat karşılaştırma kararları vermelerini ve böylece satın almalarını tamamlamalarını kolaylaştırmaktadır. Satın alma süreci keyifli bir zaman olarak görmektedirler (Moreno vd., 2017: 141).

Y kuşağı, sosyal medyada ilgili reklam, bilgi ve yorumlardan etkilenmektedirler. Bu bilgiyi doğrulayabilecek bir çalışma Kim, Xiang ve Fesenmaier (2015) tarafından yapılan araştırmada gelenekçiler, baby boomers, X ve Y kuşağı turistlerin seyahat planlamalarında hangi yollara başvurdıkları karşılaştırılmıştır. Sonuçlar, internetin tüm kuşaklar tarafından seyahat planlaması için kullanıldığını göstermektedir. Özellikle Y kuşağı turistler seyahat planlaması ile daha meşguller, tatil satın alma davranışlarında internet, televizyon ve sosyal medyayı daha fazla kullanırken, diğer kuşaklar daha geleneksel yollarla bilgi aramakta ve rezervasyon yaptırmaktadır. Görüldüğü gibi Y kuşağı interneti verimli kullanan, yorum ve değerlendirme sitelerinden seyahatleri hakkında bilgi alan, yakın çevrelerinin görüşlerine önem veren ve satın alma davranışlarını buna göre gerçekleştiren bir kuşaktır (Private, 2017: 14).

Bu kuşak, seyahat etmeye motive olan, seyahati bir yaşam tarzı olarak kabul eden ve diğer birçok kuşaktan daha fazla uluslararası seyahat eden kişilerden oluşmaktadır (Leask, Fyall ve Barron, 2014: 465). Anı yaşayan ve macera arayan, fiyatlara duyarlı ve eğitim odaklı turizmle ilgilenen tüketicileri de kapsamaktadır (Özel, 2017: 15).

2.3.3. Seyahatte Z kuşağı

Z kuşağı satın alma kararlarında diğer kuşaklara göre sosyal medyadan daha fazla etkilenmektedirler. Gerçek arkadaşlarından çok sanal arkadaşlarının fikirlerine güvenebilmektedirler (Ordun, 2015: 44). Çevrimiçi alışveriş sürecinde bilgi sağlama ve bilgiye erişme, işlem kolaylığı ve hız aramaktadırlar. Bu özellikler, Z kuşağının satın alma deneyimlerinin şekillenmesinde önemli bir rol oynamaktadır (Priporas vd., 2017: 6).

Z Kuşağı, interneti deneyimleyen ilk kuşaktır ve internete olan bağımlılıkları diğer kuşaklara göre daha fazladır. İnternet hayatın önemli bir parçası olmakla birlikte interneti kullanma biçimleri yaşam tarzlarını büyük ölçüde etkilemektedir. İnternetin önemi konusunda diğer kuşaklara göre daha olumlu algılara sahiptirler. Turizm hakkında bilgi arama oranı diğer kuşaklara göre daha yüksektir (Beckendroff vd., 2010: 93). Seyahat deneyimlerini paylaşmak için internet ve sosyal medyayı kullanıyorlar. Bloglar, seyahat toplulukları ve web siteleri, bu kuşağın seyahat deneyimlerini başkalarıyla paylaşmada önemli bir rol oynamaktadır (Beckendroff ve diğerleri, 2010: 94).

Seyahat hizmetlerinin soyutluğu, internet iletişiminin karmaşıklığı ve Z kuşağının çevrimiçi alışveriş merkezini yoğun olarak kullanma eğilimi göz önüne alındığında, ağızdan ağıza iletişimin seyahat ürünlerinin satın alma kararı üzerindeki etkisi giderek daha önemli hale geliyor (Beckendroff ve diğerleri, 2010:95). Online özellikler, bu kuşağın alışveriş deneyimlerini şekillendirmede ve verme süreçleri üzerinde olumlu etkileri olabilir (Priporas vd., 2017: 3).

İnterneti yalnızca satın alma kararları ve rezervasyon yapmak için ihtiyaç duydukları bilgileri bulmak için kullanırlar. Çevrimiçi arkadaşlarıyla iletişim kurarlar veya sosyal ağlarda sahip oldukları kişilerin görüşlerini alırlar (Monaco, 2018: 4).

3.SONUÇ VE ÖNERİLER

Değişen ve gelişen toplumsal yapılar ve sosyokültürel çevre ile birlikte bireyler yaşadıkları değişimlere ilişkin ortak bakış açıları geliştirmekte ve benzer olaylara benzer tepkiler vermeye başlamaktadır. Belirli tarihler

arasında doğan insanların ayırt edici özelliklerini ifade etmek için kullanılan kuşak kavramı, sosyal bir varlık olarak insan ve kültür etkileşiminin doğal bir sonucu olarak da değerlendirilebilir.

X kuşağının satın alma davranışına bakıldığında tatil satın alma davranışı sergilemeden önce bir seyahat acentesinden veya tur operatöründen online rezervasyon yapacakları söylenebilir. Yine tatil satın alırken X kuşağı üyeleri aynı tatili satın almış kişilerin görüşleri ve deneyimleri önemsemeleri beklenebilir. Otel ve acentelerin fiyatları ile karşılaştırılabilir. Bu kuşağın markalara olan bağlılığı, onları daha önce tatil yaptıkları acente veya otelde tekrar alışveriş yapmaya sevk edebilir. Y kuşağı ise tatil satın alırken sıklıkla sosyal medya kanallarını kullandıkları için yorum ve değerlendirme sitelerinden olumlu ya da olumsuz etkilenebilmektedir. Aynı zamanda Y kuşağı bireyler teknoloji ile büyüdüğü için sosyal medya ya da diğer platformlardaki tatil reklamlarından etkilenebilirler ilgili literatürdeki örneklerle bakarak bir varsayımında bulunmak gerekirse X ve Y kuşağı tüketiciler hem sosyal medyadan hem de içinde bulundukları sosyal ortamdan etkilenmekte ve tatil satın alma davranışlarını gerçekleştirmektedir. Bu durumda bu kuşaklar, seyahat acentelerinin uyguladığı satış geliştirme faaliyetlerinden etkileneceklerini ve daha uygun ve avantajlı tatil satın alma davranışı göstereceklerini düşünebilirler. Bu da tatil satın alma davranışlarını etkileyebilir. Dolayısıyla X ve Y kuşağı tüketiciler tatil satın alacakları zaman yorum siteleri, sosyal çevreler ve sosyal medyanın yanı sıra seyahat acentelerini araştırarak fırsatlardan yararlanmak isteyebilir ve bu sayede daha uygun bir tatil geçirebilirler.

Seyahat ve turizm pazarında yer alan sektör temsilcileri için, tüketicilerin ait olduğu kuşaklar ve bu kuşaklara ait tüketicilerin kişisel özellikleri ile davranış modellerini tanımak önem taşımaktadır. Tüketicinin ait olduğu kuşağa ait iletişim tercihinin ve satın alma tercihinin etkileyen faktörler farklılık göstermektedir. Bu doğrultuda işletmelerin hedef pazarlarında yer alan tüketici profillerini çözümleyerek ve dikkate alarak hareket ederek, tüm işletme ve pazarlama stratejilerini bu veriler ışığında hazırlamaları önem taşıyacaktır.

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Bilişim Hukuku ve E-Devlet

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Özet: Dünyanın her yerinde devletler, vatandaş merkezli, daha şeffaf ve hesap verebilir bir devlet mekanizması oluşturmak için bilgi ve iletişim teknolojileri (BİT)'ni kamu hizmetlerine entegre etmeye çalışmaktadır. Fakat, gelişmekte olan ülkelerde e-Devlet hedeflerine ulaşmak için üstesinden gelinmesi gereken birtakım engeller mevcuttur. Bunlar, BİT kaynaklarının ve altyapısının eksikliği ifade eden; yüksek hızlı geniş bant ağ bağlantıları, teknolojiye eşit olmayan erişim, düşük okuryazarlık oranı, yolsuzluk ve hükümet politikası girişimlerinin eksikliği gibi engellerdir. Bu engellerle mücadelenin ve başarıya ulaşmanın merkezinde ise hukuk ve hükümet politikaları yer almaktadır. Öyle ki ülkedeki diğer yasalarla birlikte, iyi düzenlenmiş bir Bilgi Teknolojileri Yasasının varlığı, e-Devlet başta olmak üzere kamu yönetiminde teknoloji ve yenilik yönetimi ile ilgili gerekli temeli sağlamakta ve kamu yönetiminde kamu hizmet sunumu için BİT entegrasyonu ve kullanımını kolaylaştırmaktadır. Bu çalışma kapsamında; bilişim hukuku ve e-Devlet kavramları tanımlanarak, hükümetlerin e-Devlet gelişiminde bilişim hukukunun öneminin incelenmesi planlanmaktadır.

Anahtar Kelimeler: E-Devlet, Bilişim Hukuku, Kamu Yönetimi,

Abstract: Governments around the world are trying to integrate information and communication technologies (ICT) into public services to create a citizen-centred, more transparent and accountable government mechanism. However, there are some obstacles to be overcome in order to achieve e-Government goals in developing countries. These include the lack of ICT resources and infrastructure; high-speed broadband network connections, unequal access to technology, low literacy rate, corruption and lack of government policy initiatives. Law and government policies are at the centre of tackling these obstacles and achieving success. So much so that, together with other laws in the country, the existence of a well-regulated Information Technologies Law provides the necessary basis for technology and innovation management in public administration, especially e-Government, and facilitates the integration and use of ICT for public service delivery in public administration. This study is planned to examine the importance of informatics law in the development of e-Government by defining the concepts of informatics law and e-Government.

Keywords: E-Government, IT Law, Public Administration,

1. GİRİŞ

Bilgi ve iletişim teknolojisi (BİT), bireyler, topluluklar, ülkeler ve bölgeler için yaşam standartlarını yükseltmek ve fırsatları genişletmek için muazzam bir potansiyel sunmaktadır. BİT, gelişmiş ve gelişmekte olan ülkelerin küresel ekonomiye entegrasyonuna katkıda bulunmakta, bilgi akışını sağlamaktadır. Bilgi toplumunun ortaya çıkışı, bu işlevlerin yerine getirilmesi için eşi görülmemiş koşullar yaratmaktadır. BİT ve e-Devlet uygulamaları aracılığıyla, yönetim ve kamu sektörü yönetimini iyileştirmek, ekonomik ve sosyal fırsatlara erişim sağlamak ve toplum ve ülkeler arasındaki bölünmeyi azaltmak için idareler, vatandaşlar ve işletmeler arasındaki iletişim güçlendirilmektedir. Devletler, BİT'in dünya çapında ve uluslar içinde yayılmasının bir sonucu olarak yeni bir gerçeklik ve değişen zorunluluklarla karşı karşıyadır. BİT ve e-devlet uygulamaları aracılığıyla, kamu sektörü yönetimini iyileştirmek, ekonomik ve sosyal fırsatlara erişim sağlamak ve toplum ve ülkeler arasındaki bölünmeyi azaltmak için idareler, vatandaşlar ve işletmeler arasındaki iletişim güçlendirilmektedir. E-devlet, dijital araçlar aracılığıyla mevcut hükümet sistemini dönüştürmekte, yetkilerini ve işlevlerini etkin bir şekilde uygulayabilen kapsayıcı bir yönetim sisteminin kurulmasını pekiştirmektedir. E-Devlet hem kamu idarelerinde hem de vatandaşlar ve özel sektörle etkileşimlerinde yenilikçi ve sürdürülebilir BİT uygulamalarının kurulması yoluyla büyük kamu sektörü reformlarını ve iyi yönetimi desteklemektedir (Touitou vd.,2017:311).

E-Devlet ile kamu hizmetlerinin kullanımı hem özel hem profesyonel olarak yaygınlaşmaktadır. Fakat veri gizliliği her zaman garanti edilememektedir. Burada bahsedilen veriler sadece kişilerin kendilerine ait olan veriler değildir. Kişinin hukuka uygun olarak ele almakla yükümlü olduğu üçüncü şahısların verilerine erişimde söz konusudur (Métille,2019: 609). Bunların yanı sıra siber suçlar ve diğer BİT ile ilgili usulsüzlüklerle mücadele etmek son derece önemlidir. Mahremiyet, güvenlik vb. kavramların öneminin artmasının bir diğer nedeni ise e-posta yoluyla can ve mal tehdidi, bilgisayar virüsleri yoluyla haksız kayıp ve hasar vb. durumların ortaya çıkmasıdır. Tüm bunların karşılığında ceza kanunları yetersiz kalmakta ve özel bir düzenlemeye ihtiyaç duyulmaktadır (As-Saber,2006:84).

2. E-DEVLET BİLİŞİM HUKUKU İLİŞKİSİ

Devletler vatandaşlara ve işletmelere çevrimiçi hizmet ve bilgi sağlamayı amaçlaya e-Devlet projelerini 1990'larda başlatmışlardır. Temel fikir ve teknikler ilk olarak teknolojik olarak gelişmiş Batı ülkelerinde ortaya çıkmış ancak ilgi görmemiştir. Fakat, İnternetin gelişmesiyle birlikte e-Devlet, yolsuzluk ve bürokrasi ile mücadele etmek, şeffaflık ve yönetim kurmak isteyen ülkeler için bir seçenek olmaktan çıkıp bir zorunluluk haline gelmiştir. Teknolojik gelişmeler, gelişmiş ve gelişmekte olan ülkelerde e-Devletin benimsenmesini hızlandırmaya yardımcı olarak kamu yönetiminin yapısını, süreçlerini ve operasyonlarını kökten değiştirerek dönüştürmeye başlamıştır. E-Devlet, yönetim, verimlilik veya vatandaşlara sunulan hizmetlerin kalitesi açısından kamu yönetiminin işleyişini dönüştürmenin bir aracı olarak kabul edilmektedir (Moksit,2020:7-8).

E-Devlette anahtar kelime elektronik değil, devlettir. E-Devlet, devlet idaresi ve hizmet sunumuna alternatif ve tamamlayıcı bir yaklaşımın yanı sıra vatandaşlar ve özel sektörle nasıl etkileşime girdiğini yeniden tanımlamanın bir yoludur (Touitou vd.,2017:312):

- E-Devlet verimlilik demektir: Devletler, işlem maliyetlerini azaltmak ve bürokratik prosedürlerini düzene sokmak, operasyonlarını daha verimli hale getirmek, hizmetleri daha iyi organize ve ekonomik bir şekilde sunmalarını sağlayan kaynakları serbest bırakmak için BİT'i kullanmaktadır. Hizmetlerin kapsamı ve kalitesinde devletler, e-Devlet ile artan katılım yoluyla politika oluşturma sürecinin uygunluğunu artırmakta, tahsis süreci kaynaklarını iyileştirmekte, vatandaşların ihtiyaçlarına zamanında yanıt vermekte ve artan katılım yoluyla BİT'i kullanarak daha iyi sonuçlar elde etmekte kalkınma hedeflerine ulaşmaktadırlar.
- E-Devlet, yetkilendirmedir: BİT'ler, vatandaşların hem karar alma süreçlerine katılmaları hem de kişisel ve toplumsal gelişmelerinin daha fazla farkında olmaları için vatandaşlar ve hükümetleri arasında artan etkileşimi teşvik etmektedir.
- E-Devlet, ekonomik ve sosyal kalkınmadır: Verimlilik ve etkinlik kazanımları nedeniyle yalnızca devlete ekonomik faydaların dışında, BİT'in devlette ve orta ölçekli işletmeler ve vatandaşlarla etkileşimde kullanılması yeni işler yaratmakta, yatırımları çekmekte ve istihdam yaratmaktadır.

E-Devlet kavramı, aşağıdakilerin başarılmasıyla ilgilidir. Devlet, bilgisayar ağlarının sunduğu olanakları kullanarak çalışmaktadır. "E-Devlet" ifadesi, devlet tarafından çevrimiçi olarak sunulan tüm hizmetleri ifade etmektedir (Trudel,2009:376).

- Hiyerarşik seviyelerin azaltılması,
- Hizmetleri bilgi akışını bölümlere ayırma,
- Vatandaşlara karşı şeffaflık ve açık diyalog,
- Yeni ekonominin şirketleri modelinde "vatandaş müşterinin" hizmetinde seferberlik.

E-devlet, devlet süreçlerini iyileştirmek için bilgi ve iletişim teknolojilerinin (BİT) kullanılması olarak tanımlanmaktadır. E-Devlet ile ilgili pek çok tanım önerilmektedir bu tanımlar üç ana kategoride gruplandırılabilirler (El Attar ve Mazouz,2021:84):

İlki; e-Devletin gelişiminin ana eksenini oluşturan vatandaşların memnuniyetidir.

İkincisi; e-Devlet bir etkileşim sürecidir.

Üçüncüsünde; e-Devlet teknolojik araçlar ile kullanıcılara fayda sağlama sürecidir.

E-Devlet, kamu yönetiminde bilgi ve iletişim teknolojilerinin (BİT) kullanımı artık devlet reformunu desteklemek için bir zorunluluktur. Çünkü, e-Devletin rolü, doğrudan veya dolaylı olarak üzerinde etkide bulunduğu ortamdan ve özellikle devletin politikası, idaresi ve yönetimi açısından bağımsız olarak düşünülememektedir. E-Devletin kamusal alana girmesi, diğer faktörlerin yanı sıra sonuçta ortaya çıkan değişikliklere katılırken, aynı zamanda geleneksel yönetim ve temsil süreçlerin de zorunlu olarak etkilemektedir (Megder,2005:1-2).

Bilişim hukuku, sayısallaştırılmış bilgilerin toplanması, saklanması ve yayılması için yasal çerçeve oluşturmaktadır. Gizlilik, ifade özgürlüğü vb. kavramları ve İnternet hukukunu kapsayan bilişim hukuku gelişim aşamasında olan BİT kullanımının hayatımızdaki öneminin artması ile ortaya çıkan bir hukuk dalıdır. Bilişim hukuku "bilgi ve iletişim teknolojileri hukuku", "bilgi teknolojisi hukuku", "İnternet hukuku" ile ifade edilmekle beraber. İkiye ayrılarak (bilgi teknolojisi hukuku ve İnternet hukuku) incelenen bir hukuk dalıdır. Bilişim

teknolojisi hukukunun e-Devlet ile ilişkisi bu ikili ayırmda ortaya çıkmaktadır. “Bilgi teknolojisi hukuku” bilginin sayısallaşmasını ve dağıtılmasını, “İnternet hukuku” ise İnternet kullanımı sırasında ortaya çıkabilecek olumsuz durumlara karşı güvenliği vb. ifade etmektedir. E-Devlet ya da İnternet kullanımı sırasında ortaya çıkabilecek olan tehditlere karşı kişisel verilerin hukuki güvenceye alınması gereken bir zorunluluktur.

3. SONUÇ

Gelişmekte olan ülkelerde e-Devlet bir geçiş sürecinden geçmektedir. Hükümetlerden, e-Devlete yapılan yatırımları gerekçelendirmeleri, etkilerini değerlendirmeleri ve e-Devletin ilerlemesini izlemeleri giderek daha fazla talep edilmektedir. Bu durum mevcut kamu hizmetlerinin dijitalleşmesine neden olmaktadır. Bu dijitalleşme ile ortaya çıkan sorunların çözümünde mevcut hukuk kuralları yetersiz kaldığından ihtiyaçlar doğrultusunda sorunları çözebilecek ve olası tehditleri engelleyebilecek bir hukuki düzenlemeye ihtiyaç vardır. Bilişim hukuku geliştirmekte olan bir hukuk dalı olarak önem kazanmaktadır. Kamu idarelerinin yapması gereken dijital çap ile birlikte önem kazanan bu hukuk dalının gelişimine katkı sağlamaktır.

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Konaklama İşletmelerinde Müşteri Şikayetlerine Yönelik Bir İçerik Analizi: Orta Karadeniz Bölgesi Konaklama İşletmeleri¹

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Özet: İşletmeler ürettikleri mal ve hizmetleri kusursuz bir şekilde müşterilerine ulaştırarak müşteri memnuniyeti ve müşteri sadakatini sağlamaya çalışırlar; ancak bu her zaman mümkün olmayabilir. Hatalı mal ve hizmetler, müşterilerde tatminsizlik yaratan sonuçlara yol açabilmektedir. Hizmet hatalarına bağlı olarak ortaya çıkan tatminsizliğin sonuçlarından birisi de müşteri şikayetleridir. Bu araştırmanın amacı, Orta Karadeniz’de faaliyet gösteren 5 yıldızlı konaklama işletmelerine yapılan müşteri yorumlarını değerlendirmektir. Bu kapsamda, çalışmanın amacına ulaşmak adına www.tripadvisor.com tavsiye sitesine müşterilerin ilettikleri yorumlar incelemeye alınmıştır. Veri toplama safhasında çalışmaya konu olan 6 konaklama işletmesine ait son 100 yorum değerlendirmeye alınmış ve toplam 681 adet şikâyet verisine ulaşılmıştır. Elde edilen verilerin analizinde MAXQDA programı kullanılmıştır. Veriler, veri setine dayanarak oluşturulan 9 tema ve 57 alt kod kapsamında analiz edilmiştir. Araştırma sonucunda, müşterilerin şikâyet yoğunluğunun; tamamlayıcı hizmetler, personel, oda ve restoran ve yiyecek-içecek temalarında yoğunlaştığı gözlemlenmektedir. Alt kodlar özelinde ise havuz sorunları, personel ilgisizliği, personel nezaketsizliği ve estetik olmayan mobilya ve dekorasyon alt kodları yüksek şikâyet oranı ile ön plana çıkmaktadır.

Anahtar Kelimeler: Müşteri Şikâyeti, E-Şikâyet, Konaklama İşletmeleri, İçerik Analizi

A Content Analysis of Customer Complaints in Hospitality Businesses: The Middle Black Sea Region Hospitality Businesses

Abstract: Businesses try to ensure customer satisfaction and loyalty by delivering the goods and services they produce to their customers perfectly; however, this may not always be possible. The failure of goods and services leads to customer dissatisfaction. One of the results of dissatisfaction due to service errors is customer complaints. The study aims to examine five-star hospitality business' customer reviews in the Middle Black Sea Region. In this context, to achieve the study's aim, the comments submitted by the customers to the recommendation site www.tripadvisor.com were examined. During the data collection phase, the last 100 comments of the six accommodation businesses that were the subject of the study were evaluated, and a total of 681 complaints data were obtained. The MAXQDA program was used in the analysis of the obtained data. The data were analyzed within the scope of 9 themes and 57 subcodes created based on the data set. As a result of the research, the intensity of customers' complaints; is observed to focus on complementary services, staff, room and restaurant, and food and beverage themes. Concerning sub-codes, pool problems, staff indifference, incivility, and unaesthetic furniture and decoration sub-codes come to the fore with a high complaint rate.

Keywords: Customer Complaint, E-Complaint, Hospitality Businesses, Content Analysis

1. GİRİŞ

Hizmet işletmeleri pazarlama sunumlarını müşterilerine kusursuz bir biçimde ulaştırmak için yoğun çaba gösterse de hizmet hatalarının olması kaçınılmazdır. Hizmet hatası, hizmetin müşteri beklentilerini karşılayamadığı noktada oluşmaktadır (Michel, 2001; Swanson ve Hsu, 2009). Hizmet hatası; koordinasyon ihtiyacı, emek yoğunluğu ve kontrol edilemeyen koşulların sıklığına bağlı olarak gerçekleşebilmektedir. Hizmeti oluşturan alt sistemlerdeki hatalar, çalışanlarla müşteriler arasındaki etkileşimin yoğunluğundan ve hizmet işletmesinin kontrolü dışında meydana gelebilecek durumlardan kaynaklı, hizmet sunumunda hatalara yol açabilmektedir (Koç, 2018: 275). Hizmetin sunumunda hatayı tamamen ortadan kaldırmak tümüyle mümkün olmasa da hizmet hatalarını iyileştirmek ve yönetmek hizmet işletmesinin müşterileriyle kurduğu ilişkinin devamlılığı açısından önemlidir. Gladly’nin (2018) Müşteri Hizmet Beklentileri Anketine (Customer Service Expectation Survey) göre ankete katılanların yüzde 92’si üç veya daha kötü hizmetten sonra işletmeyle ilişkisini sonlandıracaklarını ifade ederken, yüzde 26’sı tek bir kötü deneyimden sonra işletmeyle ilişkisini

¹ Bu çalışma, Ondokuz Mayıs Üniversitesi Lisansüstü Eğitim Enstitüsü bünyesinde, Murat Burucuoglu danışmanlığında Sercan Özdemir tarafından hazırlanan “Müşteri Şikayetlerinin Değerlendirilmesi: Orta Karadeniz Bölgesi Konaklama İşletmeleri Üzerine Bir Araştırma” isimli yüksek lisans tezine dayanarak türetilmiştir.

sonlandıracağını ifade etmiştir (Hyken, 2018). Müşterilerin işletmeyle olan ilişkilerinin devamlılığında hizmet hatalarının belirleyici olmaktadır.

Hizmet hataları, tüm hizmet sektörünü kapsayan bir sorun olsa da konaklama sektöründe hizmet hatalarının kendine has bir yeri bulunmaktadır. Konaklama işletmelerindeki hizmetinin yüksek “insan faktörü” içermesinden dolayı hizmet hataları bu işletmeler için kaçınılmazdır (Kim vd., 2009: 51). Yoğun insan faktörüyle birlikte bu işletmelerin 7/24 faaliyetlerini sürdürmeleri, yüksek dalgalı talep, arz ile sorunlar da hizmet sektörünün diğer kollarına göre konaklama işletmelerini hizmet hatalarına daha yatkın hale getirmektedir (Lewis ve McCann, 2004: 6). Konaklama işletmelerinin, müşteri memnuniyetini sağlama ve hizmet kalitesini arttırmak için yoğun bir rekabetle karşı karşıya (Paryani vd., 2010:7) olduğu göz önünde bulundurulduğunda bu hataların mümkün olan en az düzeye indirilmesi işletmelerin rekabet edebilirliği açısından önemlidir. İşletmeler, müşterileri hatalarını kendilerine ilettikleri durumlarda bu hataları telafi etme veya iyileştirme şansını elde ederler. İşletmeye iletilen şikayetlerin sistematik bir şekilde toplanması, değerlendirilmesi ve sonuca ulaştırılması ise ancak müşteri şikayetlerinin yönetilmesi ile mümkün olmaktadır.

Müşteri şikayetleri sıklıkla yüz yüze ve yazılı olarak yapılmasına rağmen, web 2.0 teknolojilerinin gelişimi ile birlikte müşteri şikayetleri çevrimiçi şekilde de yapılabilmektedir. Bu şikayetler zaman zaman video ve fotoğraf gibi görsel öğelerle de desteklenebilmektedir (Au et al., 2014: 249-250). İnternetin gelişimi bilgi arama ve paylaşma davranışlarını değiştirdiği gibi, destinasyonlar ve turistler arasındaki iletişim biçimini de dönüştürmektedir (Almeida-Santana et al., 2020: 337). İnternet ortamında kullanıcılar tarafından yaratılan içerikler konaklama yapılacak yerler, restoranlar ve yapılacak faaliyetlerin seçimi gibi birçok konuda tüketici kararlarını etkilerken tüketicilerin kötü deneyimlerden sakınmalarına da yardımcı olmaktadır (Filieri et al., 2015: 175). Tüketicilerin seyahat deneyimleri ile ilgili yorumları paylaştıkları dijital ortamlardan birisi de Tripadvisor.com’dur. Tripadvisor dünyanın en büyük seyahat platformu olarak her ay 463 milyon gezginin ziyaret ettiği ve 859 milyonu aşan yoruma ev sahipliği yapan bir internet sitesidir (Tripadvisor, 2022). Bu araştırmanın amacı, Orta Karadeniz’de faaliyet gösteren T.C. Kültür ve Turizm Bakanlığı Belgeli 5 yıldızlı konaklama işletmelerine Tripadvisor platformunda yapılan müşteri yorumlarını değerlendirmektir. Orta Karadeniz Bölgesi doğal güzellikleri, tarihi ve kültürel zenginlikleri, bölgede yer alan her ilin kendine has mutfağı ile büyük bir turizm potansiyeline sahiptir. Orta Karadeniz Bölgesinde bulunan Amasya, Çorum, Ordu, Samsun ve Tokat illeri UNESCO Dünya Mirası Listesi ve UNESCO Dünya Mirası Geçici Listesinde yer alan kültürel ve doğal mirasa sahip illerdir. Çorum’da yer alan Hattuşa Hitit Başkenti, Amasya’da yer alan Haşerma Dağı ve Pontus Kral Kaya Mezarları, Tokat ilinde yer alan Balıca Mağarası Doğa Parkı ve Samsun’da yer alan Kızılırmak Deltası bölgenin kültürel ve doğal mirasının öne çıkan yapı ve oluşumlarıdır (UNESCO Türkiye Milli Komisyonu, 2022; T.C. Kültür ve Turizm Bakanlığı, 2022). Bu bölgedeki konaklama tesislerine yönelik müşteri geri bildirimlerinin değerlendirilmesi ve hizmet hatalarının hangi noktalarda ortaya çıktığını belirlenmesiyle hizmet iyileştirmelerinin gerçekleştirilmesi sağlanabilir. Araştırmada 5 yıldızlı konaklama işletmelerine yer verilmiş olmasına rağmen bölgedeki diğer sınıflandırmalarda yer alan konaklama işletmeleri rakipleri ile kendi hizmetlerini kıyaslayarak süreçlerini iyileştirmede bu araştırmanın bulgularından yararlanabilir.

2. LİTERATÜR TARAMASI

Şikâyet en genel ifade ile müşteriden gelen olumsuz geri bildirimlerdir (Bell vd., 2004: 113). Hizmet hatası meydana geldiğinde müşteriler yaşadıkları tatminsizlikle başa çıkabilmek için şikâyet davranışında bulunabilmektedir (Lee vd., 2011: 198). Hizmet hatası meydana geldiğinde müşterilerin tepkileri işletmeye sadık kalma, işletmeye veya üçüncü parti mecralara şikâyeti dile getirme ve terk etme şeklinde gösterebilir (Colgate ve Norris, 2001: 216). Konaklama sektöründe yaşanan hizmet hatası sonucunda ise müşteriler, işletmeyi sessizce terk etme, olumsuz ağızdan ağıza iletişimi yayma, şikâyeti işletmeye bildirme veya memnuniyetsizliğe rağmen işletmeyle ilişkisini sürdürme tepkilerini verebilirler (Kim vd., 2008: 51). Bu tepkiler işletmenin doğrudan gözlemleyebileceği tepkiler olabileceği gibi doğrudan gözlemleyemeyeceği şekilde de gerçekleşebilir (Koc vd., 2017: 391).

Konaklama sektöründe şikayetlerin müşteriler tavsiyelerini ve şikayetlerini yalnızca işletmeyle paylaşmakla kalmamakta online seyahat bilgi kanalları, sosyal medya, seyahat blogları, çeşitli web sayfalarında paylaşmakta ve böylece potansiyel müşterileri etkilemektedir (Sahin vd., 2017: 373). Konaklama işletmesi rezervasyonlarının büyük bir bölümünün online olarak yapılmasından dolayı konaklama sektörü olumsuz müşteri yorumlarından etkilenmeye daha fazla açıktır (Min vd., 2015: 223). Müşterilerin seyahat konaklama deneyimine ilişkin yaptıkları yorumlar ve oylamalar elektronik ağızdan ağıza iletişim etkisi yaratarak işletmenin gelecekteki talebini ve performansını etkilemektedir (Zhao vd., 2019; Xie vd., 2014).

Müşterilerin konaklama veya seyahat deneyimini paylaşabilecekleri sosyal medya platformları, web siteleri, forumlar gibi birçok mecra bulunmaktadır. *Tripadvisor* web sitesi de müşteri şikayetlerinin dile getirildiği bu mecralardan birisidir. Literatürde *Tripadvisor* sitesi üzerinden konaklama sektörüne yapılan şikayetlerle ilgili çalışmalar incelendiğinde Sparks ve Browning (2010) konaklama işletmelerinde müşteri şikayetlerinin konaklama işletmesinin içsel ve dışsal özelliklerinden kaynaklı olduğunu tespit etmişlerdir. Şikâyeti tetikleyen içsel özellikler gerçek oda özellikleri, hizmet kalitesi, yiyecek içeceklerken dışsal özellikler konaklama işletmesinin konumudur. Zheng vd. (2008) www.tripadvisor.com web sitesinde yer alan ve sistematik tesadüfi örnekleme yöntemi ile seçilen müşteri yorumlarının içerik ve faktör analizi ile incelendikleri çalışmalarında, en çok şikâyetin oda hizmeti, resepsiyon ve yiyecek-içecek ile alakalı olduğu sonucuna ulaşmışlardır.

Şahin, Kitapçı ve Gülmez (2017) çalışmalarında *tripadvisor* sitesindeki şikayetleri ve bu şikayetlere gelen yanıtları incelemişlerdir. Araştırmada 1655 olumsuz yorum genişletilmiş içerik analizine tabi tutulmuştur. Analiz sonucunda 11 kategori ve 82 alt kodda toplanan şikayetlerin yoğunlukları yiyecek içecek servisi, oda konforu, konaklama işletmesi çalışanları üzerinde yoğunlaştığı tespit edilmiştir. Şahin vd. (2017), Bişkek bölgesi özelince *Tripadvisor* web sitesi üzerinden müşterilerin konaklama işletmelerine yaptıkları yorumları inceledikleri çalışmada, en çok şikâyetin ürün(hizmet) ve tutundurma ile alakalı olduğu sonucuna varılmıştır (Şahin vd, 2017:173-175).

Özkan ve Boz (2019) tarafından Çanakkale ilindeki konaklama işletmelerinde gerçekleştirilen çalışmada müşterilerin konaklama işletmelerine yönelik en fazla şikâyetle bulundukları konular oda özellikleri, çalışan davranışları ve hizmet kalitesi olarak tespit edilmiştir. Çalışmada müşteri memnuniyetinin ise konaklama işletmesinin konumu, mutfak, sunulan diğer hizmetler ve personel özellikleri ile ilgili olduğunu ifade edilmiştir.

Işkın ve Baştürk (2020) Sivas ilindeki konaklama işletmelerine yönelik şikayetleri *tripadvisor* sitesinden elde ettikleri veriler üzerinden incelemişlerdir. Araştırmada en çok şikâyet alan temalar kahvaltının yetersiz ve kötü olması, koku ve havalandırma sorunları, temizlik şikâyetleri, internet hizmetinin yetersiz oluşu, personel şikâyetleri, konaklama işletmesi işletmelerinin binasının ve eşyaların eski olması, duş alanlarının küflü ve giderlerin bozuk olması ve konaklama işletmesi ücretlerinin yüksek olması olduğu tespit edilmiştir.

3. YÖNTEM

Çalışma yapısı ve süreçleri itibarıyla nitel bir araştırmadır. Nitel araştırma; “gözlem, mülakat, belge analizi vb. nitel çerçeveli veri yöntemlerinden faydalanıldığı, algılanan unsurların doğal bir ortamda, realist ve bütüncül bir yapı ile sonuçlandırılmasına yönelik nitel sürecinin işlendiği” araştırmalar olarak tanımlanmaktadır (Gülbüz ve Şahin, 2016: 400). Çalışma verilerinin analizi kısmında içerik analizinden faydalanılmıştır. İçerik analizi; çalışma metinlerinde veya toplanan verilerin içerisinde bulunan bilgilerin bir süzgeçten geçirilerek aktarılacak istenen mesaj doğrultusunda sistemli ve kademeli bir şekilde meydana çıkarmayı hedeflemektedir (Güler vd., 2015: 43). İçerik analizi; verilerin kodlanması, temaların bulunması, kodların ve temaların düzenlenmesi ve bulguların tanımlanması/yorumlanması aşamaları takip edilerek gerçekleştirilmiştir (Yıldırım ve Şimşek, 2016: 243).

Verilerin analizinde ilk aşamada veri seti oluşturulmuş ve araştırma kapsamında yer almayan veriler ayıklanmıştır. İkinci aşamada araştırmacı oluşturduğu veri setinde okumalar ve sınıflandırmalar gerçekleştirerek ana temalar ve bu ana temalara bağlı alt kodlar oluşturmuştur. Üçüncü aşamada ise veri seti uzman bir araştırmacı tarafından değerlendirilerek ana tema ve alt kodlar belirlenmiştir. Ana tema ve alt temalara ilişkin ayrıntılara güvenilirlik başlığı altında yer verilmiştir. Ana tema ve alt kodların oluşturulmasında Burucuoğlu ve Erdoğan Yazar (2020), Ünal (2019), Salim ve arkadaşları (2019) yapmış olduğu çalışmalardan faydalanılmıştır.

Verilerin analizinde kod-alt bölümler modeli, kod haritasından yararlanılmıştır. Kod-alt bölümler modeli, bir temanın hangi alt kodları içerdiği göstermektedir. Kodların yanında parantez içinde yer alan değerler sıklıkları göstermektedir. Kod haritası ise kodların bir harita şeklinde görünümünü içermektedir. İki kod ne kadar sıklıkta birlikte kullanılmış bunun görünümünü sağlamaktadır (Maxqda, 2021). Veriler MAXQDA nitel analiz programında analiz edilmiştir.

3.1. Araştırmanın Evreni, Örneklemi ve Veri Toplama Yöntemi

Çalışmanın evrenini, Orta Karadeniz’de bulunan konaklama işletmeleri oluşturmaktadır. Çalışmanın örneklemi ise, Orta Karadeniz’de bulunan T.C. Kültür ve Turizm Bakanlığı Belgeli 5 yıldızlı konaklama işletmeleri arasında *Tripadvisor* web sitesinde 100 ve üzeri yorum alan 6 adet konaklama işletmesi oluşturmaktadır. Veriler, müşterilerin konaklama sonrası edindikleri tecrübeleri paylaştıkları *Tripadvisor* web sitesinden elde

edilmektedir. 6 konaklama işletmesine ait son 100'er yorum değerlendirmeye alınarak toplam 681 adet şikâyet verisine ulaşılmıştır. Veriler Kasım 2014 – Ağustos 2020 arasında Tripadvisor web sitesinden yer alan müşteri yorumlarından elde edilmiştir. Araştırma müşterilerin olumsuz geri bildirimlerine odaklandığı için olumlu yorumlar veri setine dahil edilmemiştir.

3.2. Geçerlilik ve Güvenilirlik

İçerik analizinde güvenilirlik, istikrar, çoğaltılabilirlik ve doğrulanabilirlikle ilgilidir. İstikrar, “zaman içerisinde aynı verinin kodlayıcılar tarafından aynı şekilde kodlanması”; çoğaltılabilirlik, “bir grup kodlayıcının kategorileri zaman içinde aynı şekilde sınıflandırması” ve doğruluk ise “metinlerin standartlara ve istatistiki normlara sadık kalarak sınıflandırılması” olarak tanımlanmaktadır (Güler, Halıcıoğlu ve Taşgın, 2015: 362). İçerik analizinin geçerliliği ise kategorilerin sonuçlara uygunluğu ve sonuçların teoriye genelleştirilebilmesi ile ilgilidir (Carol vd., 2005). Bu çalışmada içerik analizi geçerlilik ve güvenilirlik çalışmaları kapsamında verilerin kodlanması, tecrübeli bir araştırmacı tarafından kodlanması, uyumlaştırma yapılması, kontrol aşamalarını içerecek şekilde bir yol izlenmiştir. Veri setinin oluşumunun ilk safhasında araştırmacı elde ettiği şikâyet yorumları ışığında 10 tema ve 63 alt koddan oluşan bir veri seti hazırlamıştır. İkinci aşamada ise alanında uzman bir akademisyen tarafından yine aynı şikâyet yorumları ışığında 9 tema ve 52 alt koddan oluşan bir veri seti hazırlanmıştır. Bu noktada tema ve kodlarda uyumlaştırma sürecine gidilmiş ve benzer nitelikteki tema ve alt kodlar birleştirilerek 9 tema ve 57 alt koddan oluşan bir veri setinde karar kılınmıştır. Oluşturulan kodlar üzerinden Miles ve Heberman (1994: 64)'in güvenilirlik formülünden faydalanılarak çalışmanın güvenilirliği hesaplanmıştır.

$$\text{Güvenilirlik} = (\text{Anlaşmaya Varılan Kod Sayısı}) / ((\text{Anlaşmaya Varılan Kod Sayısı} + \text{Anlaşmaya Varılmayan Kod Sayısı}))$$

$$\text{Güvenilirlik} = \frac{66}{(12 + 66)} = 0,84$$

Miles ve Huberman (1994)'ın güvenilirlik hesaplaması doğrultusunda %70 üzeri sonuçlar güvenilir kabul edilmektedir. Bu bağlamda çalışmanın güvenilirlik formülü sonucu %84 çıkmakta ve güvenilirliğinin kabul edilebilir sınırlar içerisinde olduğu görülmektedir.

4. ANALİZ VE BULGULAR

4.1. Ana Temalara Göre Konaklama işletmesi Şikayetleri Sınıflandırması

Belirlenen 9 ana tema tamamlayıcı hizmetler, personel, oda, restoran ve yiyecek/içecek, fiyatlandırma, yönetim, ön büro işlemleri, konum, konaklama işletmesi (Kİ) genel görünümü olarak belirlenmiştir. Tamamlayıcı hizmetler teması konaklama dışında kalan hizmetleri; personel teması çalışanların davranış ve müşteri ilişkilerini; oda teması konfor ve konaklama hizmetlerini; restoran ve yiyecek/içecek teması yiyecek ve içeceklerin çeşit, kalite ve lezzetini; fiyatlandırma teması konaklama ve restoran ücretlerini; yönetim teması yöneticilerin idare şeklini; ön büro işlemleri teması karşılama, uğurlama ve resepsiyon hizmetlerini; konum teması konaklama işletmesinin bulunduğu konum ve ulaşım güzergahını; konaklama işletmesi genel görünümü teması konaklama işletmesinin fiziki olarak dış görünüşünü ifade etmektedir. Aşağıda yer alan Tablo-1'de şikâyet temalarının işletmelere göre dağılımı yer almaktadır.

Tablo-1: Şikâyet Temalarının İşletmelere Göre Dağılımı

Sıra No	Kod Dizini	Kİ1	Kİ2	Kİ3	Kİ4	Kİ5	Kİ6	Toplam Şikâyet
1	Tamamlayıcı Hizmetler	53	38	13	16	9	9	138
2	Personel	21	32	16	39	16	7	131
3	Oda	19	57	16	24	8	1	125
4	Restoran ve Yiyecek/İçecek	11	28	21	18	10	9	97
5	Fiyatlandırma	13	25	5	4	7	6	60
6	Yönetim	6	16	6	5	9	1	43
7	Ön Büro İşlemleri	6	5	9	9	4	1	34
8	Konum	10	0	11	2	4	0	27

9	Konaklama işletmesi Genel Görünümü	1	17	2	2	1	3	26
	Toplam Şikayet	140	218	99	119	68	37	681

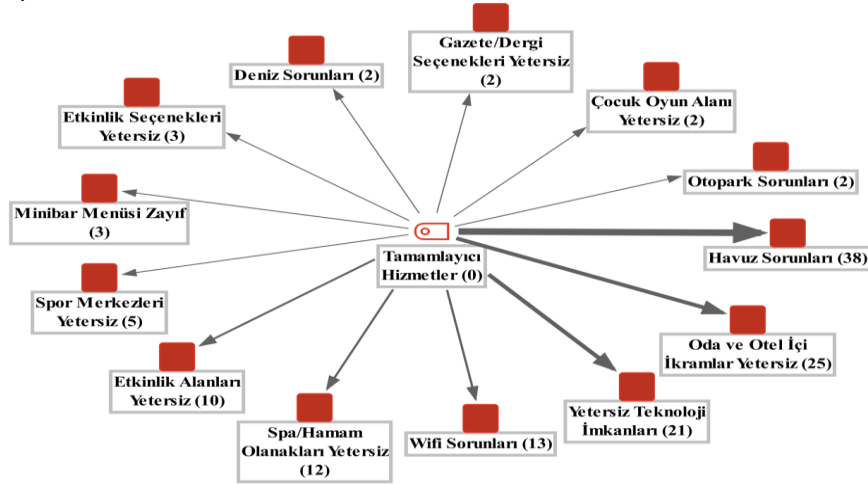
Tablo-1 incelendiğinde şikayetlerin konaklama işletmesi – 2, konaklama işletmesi – 1 ve konaklama işletmesi – 4'te yoğunlaştığı görülmektedir. Tüm konaklama işletmelerinde en fazla şikâyet alan ana temalar sırasıyla tamamlayıcı hizmetler, personel ve oda temalarından oluşmaktadır. En az şikâyet konu olan ana tema ise konaklama işletmesi genel görünümüdür. Belirlenen ana tema ve ilişkili alt kodlarıyla ilişkilerine ise aşağıdaki bölümlerde yer verilmiştir.

4.2. Ana Tema ve Alt Kodlarla Şikayetlerin Sınıflandırılması

Tamamlayıcı Hizmetler

Tamamlayıcı hizmetler teması 13 alt koddan oluşmaktadır. Bu kodlar yoğunluğuna göre; havuz sorunları (38), oda ve konaklama işletmesi içi ikramların yetersizliği (25), yetersiz teknoloji imkanları (21), wi-fi sorunları (13), spa/hamam olanaklarının yetersizliği (12), etkinlik alanlarının yetersizliği (10), spor merkezinin yetersizliği (5), minibar menüsünün zayıflığı (3), etkinlik seçeneklerinin yetersizliği (3), deniz sorunları (2) ve gazete/dergi seçeneklerinin yetersizliği (2) şeklinde sıralanmaktadır.

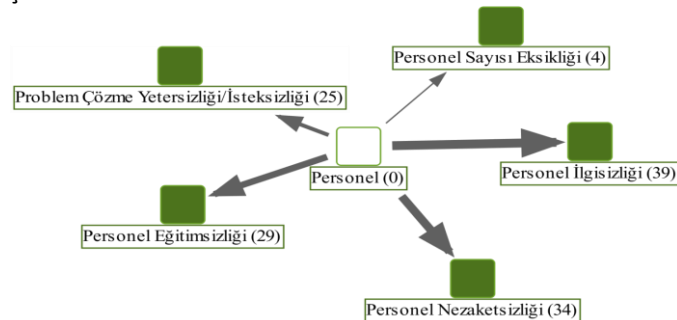
Şekil 1: Tamamlayıcı Hizmetler Teması Alt Kodları



Personel

Personel teması 5 alt koddan oluşmaktadır. Bu kodlar yoğunluğuna göre; personel ilgisizliği (39), personel nezaketsizliği (34), personel eğitimsizliği (29), problem çözme yetersizliği/isteksizliği (25) ve personel sayısı eksikliği (4) şeklinde sıralanmaktadır.

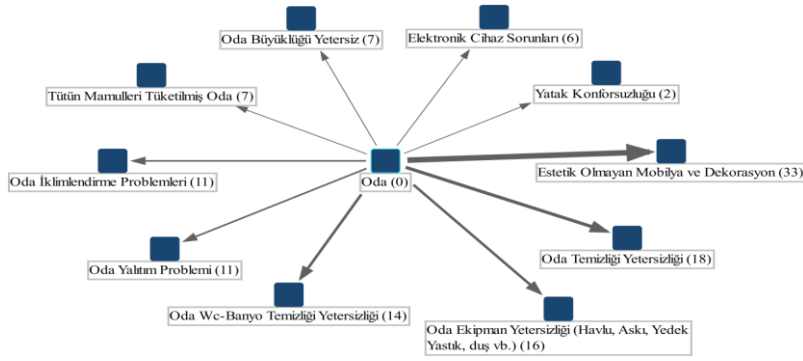
Şekil 2: Personel Teması Alt Kodları



Oda

Oda teması 10 alt koddan oluşmaktadır. Alt kodlar yoğunluklarına göre estetik olmayan mobilya ve dekorasyon (33), oda temizliğinin yetersizliği (18), oda ekipman yetersizliği (16), oda wc-banyo temizliği yetersizliği (14), oda yalıtım problemi (11), oda iklimlendirme problemleri (11), tütün mamulleri tüketilmiş oda (7), oda büyüklüğü yetersiz (7), elektronik cihaz sorunları (6), yatak konforsuzluğu (2) şeklinde sıralanmaktadır.

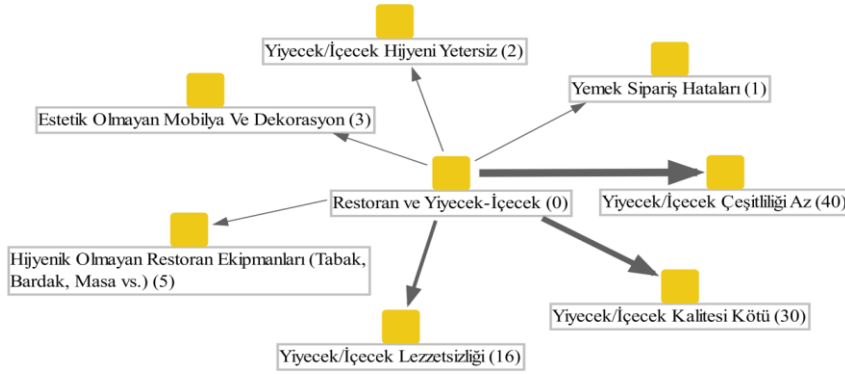
Şekil 3: Oda Teması Alt Kodları



Restoran ve Yiyecek / İçecek

Restoran ve yiyecek/içecek teması 7 alt koddan oluşmaktadır. Bu kodlar yoğunluğuna göre; yiyecek/içecek çeşitliliği az (40), yiyecek/içecek kalitesi kötü (30), yiyecek/içecek lezzetsizliği (16), hijyenik olmayan restoran ekipmanları (5), Estetik olmayan mobilya ve dekorasyon (3), yiyecek/içecek hijyeni yetersiz (2) ve yemek sipariş hataları (1) şeklinde sıralanmaktadır.

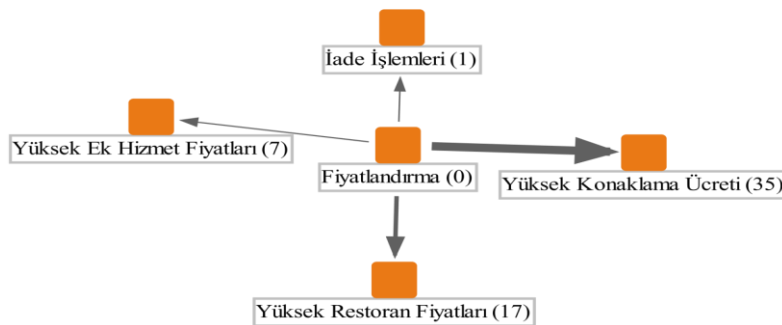
Şekil 4: Restoran ve Yiyecek/İçecek Teması Alt Kodları



Fiyatlandırma

Fiyatlandırma teması 4 alt koddan oluşmaktadır. Bu kodlar yoğunluğa göre; yüksek konaklama ücreti (35), yüksek restoran fiyatları (17), yüksek ek hizmet fiyatları (7) ve iade işlemleri (1) şeklinde sıralanmaktadır.

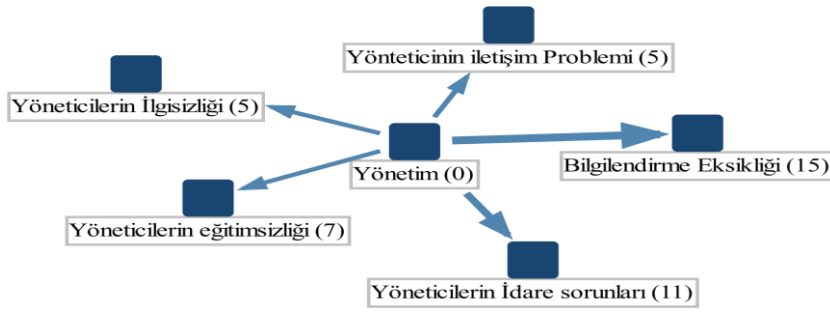
Şekil 5: Fiyatlandırma Teması Alt Kodları



Yönetim

Yönetim teması 5 alt koddan oluşmaktadır. Bu kodların yoğunluğuna göre bakıldığında; Bilgilendirme eksikliği (15), yöneticilerin idare sorunları (11), yöneticilerin eğitimsizliği (7), yöneticilerin ilgisizliği (5) ve yöneticilerin iletişim problemi (5) şeklinde sıralanmaktadır.

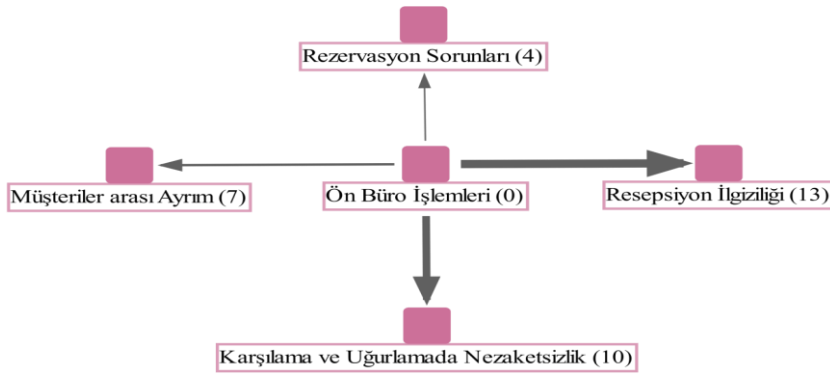
Şekil 6: Yönetim Teması Alt kodları



Ön büro işlemleri

Ön büro işlemleri teması 4 alt koddan oluşmaktadır. Bu kodlar yoğunluğuna göre; resepsiyon ilgisizliği (13), karşılama ve uğurlama nezaketsizliği (10), müşteriler arası ayırım (7) ve rezervasyon sorunları (4) şeklinde sıralanmaktadır.

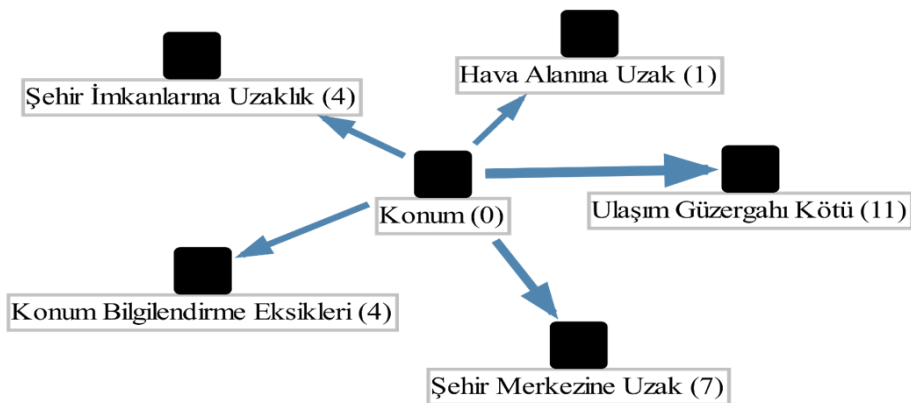
Şekil 7: Ön Büro İşlemleri Teması Alt kodları



Konum

Konum teması 4 alt koddan oluşmaktadır. Bu kodların yoğunluğuna göre; ulaşım güzergahı kötü (11), şehir merkezine uzak (7), konum bilgilendirme eksiklikleri (4), şehir imkanlarına uzaklık (4) ve hava alanına uzak (1) şeklinde sıralanmaktadır.

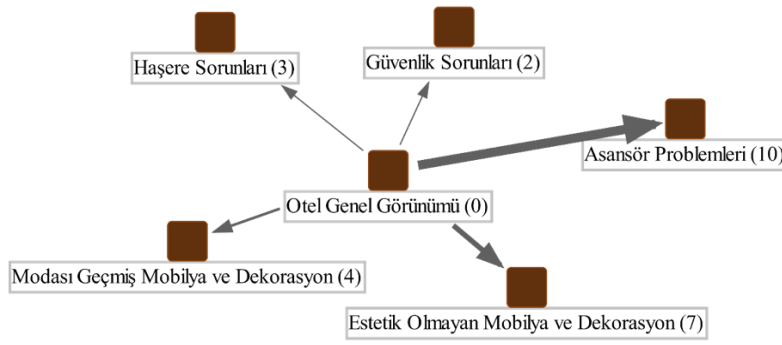
Şekil 8: Konum Temasının Alt Kodları



Konaklama işletmesi genel görünümü

Konaklama işletmesi genel görünüş teması 5 alt koddan oluşmaktadır. Bu kodlar yoğunluğuna göre asansör problemleri (10), estetik olmayan mobilya ve dekorasyon (7), modası geçmiş mobilya ve dekorasyon (4), haşere sorunları (4) ve güvenlik sorunları (2) şeklinde sıralanmaktadır.

Şekil 9: Konaklama işletmesi Genel Görünümü Alt kodları

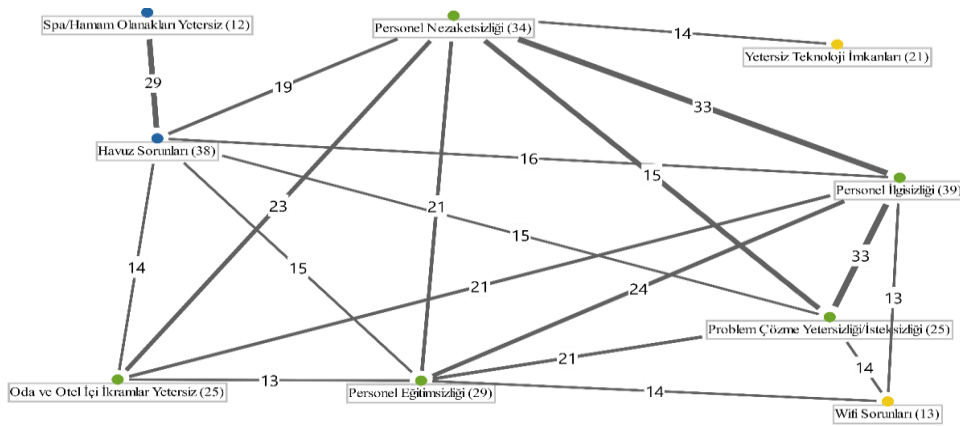


Kod Haritası

Kod haritası, kodların bir harita şeklinde görünümünü içermektedir. İki kod ne kadar sıklıkla birlikte kullanılmış bunun görünümünü sağlamaktadır (Maxqda, 2021). Kodlar ikili kombinasyonlar oluşturacak şekilde birbiri ile ilişkilendirilmiş ve anlamlı ilişkilerin yer aldığı kod haritalarına aşağıda yer verilmiştir. Analiz sonucunda anlamlı çıkan kod haritaları; *tamamlayıcı hizmetler - personel, oda- fiyatlandırma, restoran ve yiyecek/içecek ana temaları* arasındadır.

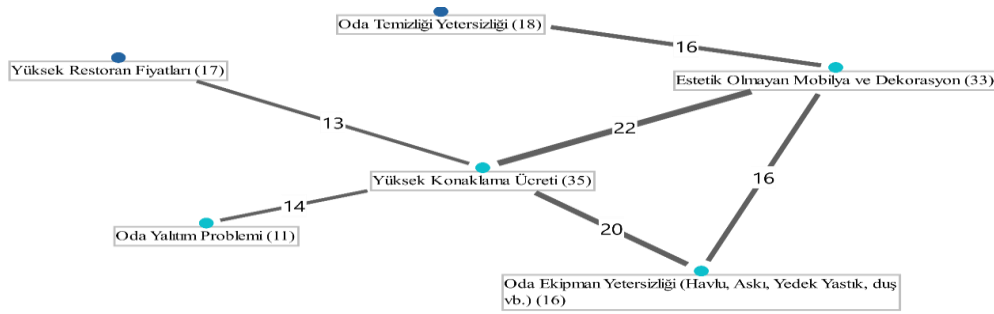
Aşağıda yer alan Şekil-10'da tamamlayıcı hizmetler ile personel arasındaki ilişkiyi göstermektedir.

Şekil 10: Tamamlayıcı Hizmetler ve Personel Temaları Arası İlişki



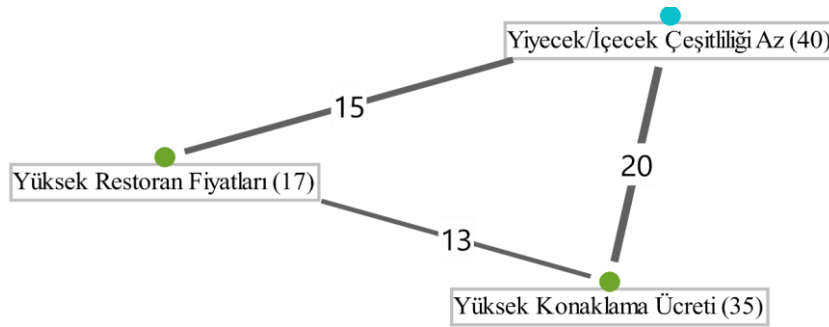
Tamamlayıcı hizmetler teması içerisinde yer alan spa/hamam olanaklarının yetersizliği alt koduna şikâyetle bulunan müşteriler aynı zaman da havuz problemleri alt koduna da şikâyetle bulunmaktadır. Bu durum 29 kez ortak şikâyet konu olmuştur. Personel teması dikkate alındığında personel nezaketsizliği alt koduna şikâyetle bulunan müşteriler; 33 kez personel ilgisizliği, 21 kez personel eğitimsizliği ve 15 kez problem çözme yetersizliği/ilgisizliği alt kodlarına ortak şikâyetle bulunmaktadır. Yine personel teması içerimde yer alan problem çözme yetersizliği/isteksizliği alt koduna şikâyetle bulunan müşterilerin aynı zamanda; 33 kez personel ilgisizliği ve 21 kez personel eğitimsizliği alt kodları da ortak şikâyetle bulunduğu tespit edilmiştir. Ayrıca personel ilgisizliği alt koduna şikâyetle bulunan müşterilerin 24 kez personel ilgisizliği alt koduna da ortak şikâyetle bulunduğu gözlemlenmektedir. Temalar arası alt kodların ilişkisine bakıldığında ise; personel temasında yer alan problem çözme yetersizliği/isteksizliği alt kodu ile tamamlayıcı hizmetler temasında yer alan havuz sorunları ve wi-fi sorunları alt kodlarının arasında anlamlı bir ilişki göze çarpmaktadır. Problem çözme yetersizliği/isteksizliği alt koduna şikâyetle bulunan müşteriler; 15 kez havuz problemleri ve 14 kez de wi-fi sorunları alt koduna ortak şikâyetle bulunmaktadır. Aşağıda yer alan Şekil- 11'de oda ve fiyatlandırma temaları arası ilişki yer almaktadır.

Şekil-11: Oda ve Fiyatlandırma Temaları Arası İlişki



Oda ve fiyatlandırma temaları arasında anlamlı bir ilişki göz çarpmaktadır. Fiyatlandırma temasında yer alan yüksek konaklama ücreti alt koduna şikâyetle bulunan müşteriler oda teması altında yer alan; Estetik olmayan mobilya ve dekorasyon ile 22 kez, oda ekipman yetersizliği ile 20 kez, oda yalıtım problemi ile 11 kez ortak şikâyetle yer almışlardır. Ayrıca yüksek konaklama ücreti alt kodunun yine fiyatlandırma temasında yer alan yüksek restoran fiyatları ile de 13 kez birlikte şikâyet edildiği gözlemlenmektedir. Aşağıda yer alan Şekil-12’de restoran ve yiyecek/içecek ile fiyatlandırma temaları arası ilişkiye gösterilmektedir.

Şekil-12: Restoran ve Yiyecek/İçecek ile Fiyatlandırma Temaları Arası İlişki



Restoran ve yiyecek/içecek ile fiyatlandırma temaları arasında anlamlı bir ilişki olduğu görülmektedir. Restoran ve yiyecek/içecek temasında yer alan yiyecek/içecek çeşitliliği az alt koduna şikâyetle bulunan müşterilerin aynı zamanda yüksek konaklama ücretine 20 kez ve yüksek restoran fiyatlarına 15 kez birlikte değindiği gözlemlenmektedir. Ayrıca fiyatlandırma temasında yer alan yüksek restoran ücreti ve yüksek konaklama ücreti alt kodları da 13 kez birlikte şikâyetle konu oldukları görülmektedir.

5. SONUÇ VE ÖNERİLER

İşletmeler müşteri memnuniyeti ve sadakatini sağlayabilmek ve uzun süreli ilişkiler inşa edebilmek için yoğun bir çaba sarf etmektedirler; ancak pazarlama sunumlarını müşteriye hatasız bir şekilde ulaştırmak her zaman mümkün olmayabilir. Böyle durumlarda ise müşteri beklentilerinin altında kalan mal ve hizmet sunumları müşteri şikâyetlerine konu olabilmektedir. Şikâyet, işletmelere iletilindiğinde işletmelerin hatalarını düzeltmeleri ve müşteri ile yeniden bağlantı kurmalarını sağlayacak benzersiz fırsatlar sunmaktadır. Şikâyetleri, sistematik bir şekilde almak, değerlendirmek ve çözüme ulaştırmak işletmelerin süreçlerini iyileştirmelerini, hataların tekrarlanmamasını sağlarken müşteri gözünde işletmenin değerinin de artmasına yardımcı olacaktır.

Şikâyetler, hizmet işletmeleri söz konusu olduğunda ise müşteri ilişkileri açısından daha önemli hale gelmektedir. Hizmetin kendine has yapısı hizmet hatalarının telafisini zorlaştırmaktadır. Bazı durumlarda hizmetin kusursuz bir şekilde tekrar verilme ihtimalinin olmaması bu zorluğun altında yatmaktadır. Aynı zamanda müşterilerin de hizmet hatalarına karşı hassasiyetlerinin yüksek olması hizmeti satın almadan önce daha uzun bir bilgi arama ve değerlendirme süreci geçirmelerine yol açmaktadır. Müşteriler iletişim ve bilgi teknolojilerinin sunduğu imkanlarla konaklama işletmesi, restoran, eğlence, spor gibi birçok hizmet için oylama, yorum siteleri, sosyal medya mecraları ve forumlar gibi araçları okuyarak işletmeleri değerlendirmekte ve diğer müşterilerinin deneyimlerinden yola çıkarak seçimlerini yapmaktadırlar.

Konaklama sektörü müşterilerin bilgi arama ve değerlendirme süreci yoğun olduğu sektörlerden birisidir. Konaklanılan yerin tüketici seyahat deneyiminin önemli bir bileşeni olması konaklama yerinin seçimini tüketici açısından daha önemli hale getirmektedir. Bu nedenle de tüketiciler seçimlerini yapmadan önce diğer

müşterilerin deneyimlerini -konaklama işletmelerinin kontrolünde olmayan- mecralardan okuyarak yapabilmektedirler. Bu çalışmada Orta Karadeniz’de hizmet veren T.C. Kültür ve Turizm Bakanlığı belgeli 5 yıldızlı konaklama işletmelerinin Tripadvisor web sitesinde yer alan tüketici şikayetleri incelenmiştir.

Araştırma sonuçlarına göre konaklama işletmelerinde şikayetlerin yoğun olarak tamamlayıcı hizmetler, personel ve oda ana temaları altında toplanmıştır. Literatürde Gürkan ve Polat (2014); Behremen vd. (2017); Çulha vd. (2009); Zheng vd.’nin (2008) çalışmalarında da benzer bulgulara ulaşılmıştır. Konaklama hizmetlerinin yapısı göz önünde bulundurulduğunda çekirdek hizmetin dışında yer alan tamamlayıcı hizmetlerin eksikliği müşteriler tarafından kolayca fark edilebilmektedir. Konaklama hizmeti söz konusu olduğunda personelin ilgisi, nezaketi, tavır ve davranışları da konaklama hizmetinin tamamlayıcı unsuru olmaktadır. Oda hizmeti konaklama işletmelerinin çekirdek hizmetidir. Bu hizmetin sunumunda bir hata müşterinin temel beklentilerini karşılamadığı için kolaylıkla müşteri şikayetini konu olabilmektedir. Bu nedenle çekirdek hizmetin verilmesinde hataların ortadan kaldırılması konaklama işletmelerinin birincil önceliği olmalıdır. Müşteriler tarafından en az şikayet bildirilen ana tema ise konaklama işletmesi görünümü olmuştur.

Ana temalara bağlı alt kodlardaki şikayet yoğunları değerlendirildiğinde ise tamamlayıcı hizmetlerde havuz sorunları ve konaklama işletmesi/oda içi ikramların yetersizliği; personel ana temasında personel ilgisizliği ve personel nezaketsizliği; oda ana temasında estetik olmayan mobilya ve oda temizliği; restoran ana temasında yiyecek/içecek çeşitliliğinin azlığı ve yiyecek/içecek kalitesinin kötülüğü; fiyatlandırma ana temasında yüksek konaklama fiyatı; yönetim ana temasında bilgilendirme eksikleri; ön büro ana temasında resepsiyon ilgisizliği; konum ana temasında ulaşım güzergahı ve konaklama işletmesi görünümü ana temasında asansör problemleri ön plana çıkmaktadır.

Kod haritası analizine göre ortak şikayette yer alan kodlardan öne çıkanları personel problem çözme yetersizliği-personel ilgisizliği (33); personel nezaketsizliği-personel ilgisizliği (33); havuz sorunları-spa/hamam yetersizliği (29); konaklama işletmesi/oda içi ikram yetersizliği-personel nezaketsizliği (23); yüksek konaklama fiyatı-estetik olmayan mobilya dekorasyon (22); yüksek konaklama fiyatı-oda ekipman yetersizliği (20); yüksek konaklama fiyatı-yiyecek/içecek çeşitliliği (20) şeklinde gerçekleşmiştir.

Orta Karadeniz Bölgesi doğal güzellikleri, tarihi ve kültürel mirası, bölgede yer alan her şehrin kendine has mutfağı ve zengin kültürel çeşitliliği ile büyük bir turizm potansiyeline sahiptir. Bölgede hizmet veren konaklama işletmelerinin hizmet hatalarından ders çıkartmaları gelecekte aynı hataların tekrarlanmasını önleyerek hizmet kalitesinin artmasını sağlayacaktır. Hizmet kalitesinin artması da beraberinde müşteri memnuniyetini ve daha fazla olumlu ağızdan ağıza iletişim gerçekleşmesini sağlayacaktır. Bu çalışma özelinde incelenen şikayetlere bakıldığında çekirdek hizmet ve tamamlayıcı hizmetlerde iyileştirmeler yapılması, personel eğitimine daha fazla önem vererek çalışan memnuniyetini artırıcı uygulamalar yapılması konaklama işletmeleri için faydalı olacaktır.

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Türkiye’de Gümrük İhracatının Ekonomik ve Finansal Endeksler Arasındaki İlişisinin Nedensellik Analiziyle İncelenmesi: Kapıkule Gümrük Kapısı Örneği

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Özet: İhracat ülkelerin istihdam, yatırım hacmi, milli gelir ve ekonomik büyüme gibi makroekonomik büyüklüklerin artmasında önem arz eden temel bir gelir kaynağıdır. Bunun yanında ülkeye sağlamış olduğu döviz kaynaklarıyla da gerek finansal sistemin gelişmesinde gerekse ülkenin sanayileşerek dünyada çeşitli ülke grupları arasında bir üst basamağa çıkmasında bir mihenk taşı özelliğini de barındırmaktadır.

Bu çalışmada Kapıkule gümrük kapısı baz alınarak gümrük ihracatının çeşitli ekonomik ve finansal endekslerle arasındaki Granger nedensellik ve korelasyon ilişkisi 2013-2022 arası dönemi itibarıyla aylık verilerle incelenmektedir. Çalışmada Kapıkule gümrük sahasından çıkış yapan ihracat rakamlarıyla birlikte, döviz kuru, dış ticaret haddi, ihracat miktar, sanayi ve sınai endeksleri yer almaktadır.

Analiz sonucu elde edilen sonuçlar göz önünde bulundurulduğunda ihracatın karşılıklı olarak nedensellik ilişkisine sahip olduğu ve en güçlü ve doğru yönlü korelasyon ilişkisinin bulunduğu değişkenlerinin döviz kuru ve sınai endeksi olduğu tespit edilmiştir. Ayrıca sanayi endeksiyle de ihracatın korelasyon ilişkisinin güçlü ve doğru yönlü olup söz konusu endeksle ihracat arasında tek yönlü bir nedensellik ilişkisine sahip olduğu elde edilmiştir. Bunun yanında gümrük ihracatından dış ticaret haddine ve ihracat miktar endeksinde doğru tek yönlü bir nedensellik ilişkisi bulunmakta olup, her iki değişkenle de gümrük ihracatı arasında orta büyüklükte korelasyon ilişkisi yer almakta olduğu fakat ilişkinin yönü bakımından miktar endeksiyle pozitif yönlü iken, dış ticaret haddi ile ise negatif yönlü olduğu bulunmuştur.

Anahtar Kelimeler: İhracat, Gümrük, Kapıkule, Sınır Kapısı, Nedensellik.

Abstract: Export is a fundamental source of income, which is important for the increase of macroeconomic sizes such as employment, investment volume, national income and economic growth. In addition, with the foreign exchange resources it has provided to the country, it also has the feature of a cornerstone in the development of the financial system and in the industrialization of the country and taking it to the next level among various country groups in the world.

In this study, based on Kapıkule customs gate, the Granger causality and correlation relationship between customs exports and various economic and financial indices is examined with monthly data as of the period 2013-2022. In this study, together with the export figures leaving the Kapıkule customs area, there are exchange rate, foreign trade terms, export quantity, industry and industrial indices.

Considering the results obtained as a result of the analysis, it has been determined that exports have a mutual causality relationship and the variables with the strongest and most direct correlation relationship are exchange rate and industrial index. In addition, the correlation relationship between the industry index and exports is strong and direct, and it has been found that there is a one-way causality relationship between the industry index and exports. Moreover, there is a one-way causality relationship from customs exports to terms of trade and export quantity index. found to be directional.

Key Words: Export, Customs, Kapıkule, Border Gate, Causality.

1. GİRİŞ

İhracatın ve ithalatın ya da kısaca dış ticaretin en belirgin faktörlerinden birisi döviz kurlarıdır. Döviz kurlarının artması ihracatın arttırmasıyla pozitif yönlü bir işlev görürken; ithalatta ise tam tersine azaltıcı bir işlev görmektedir (Bocutoğlu, 2016: 430). Ayrıca uluslararası ekonomi teorisi literatüründe ihracat ve ithalatın dış ticaret hadleriyle olan ilişkisi çeşitli teorilerle ele alınmış olup özellikle Singer-Prebisch teziyle ayrıntılı olarak ortaya koyulmuştur. Bu teze göre, az gelişmiş tarım ülkeleriyle gelişmiş sanayi ekonomileri aralarında yapmış oldukları dış ticaret sonucunda, dış ticaret hadlerinin az gelişmiş ülke aleyhine ve gelişmiş ülkelerin ise lehine şeklinde sonuçlanmaktadır. Buna bağlı olarak az gelişmiş ülkelerin daha çok dış ticarete korumacılık uygulamalarını tercih etmeleri sonucu üzerinde etkili olmaktadır (Seyidoğlu, 2003: 638). Söz konusu döviz kuru ve dış ticaret haddi değişkenleri dışında çalışmada üretim ve sanayi sektörünü temsilen çeşitli endeksler de yer almıştır.

Türkiye ekonomisinin genel anlamda ihracat durumuna bakıldığında 1980 yılının ekonominin dış ticaret politikasında ithal ikameci sanayileşmeden ihracata dönük sanayileşme politikasına geçişin etkisiyle birlikte 1980'lerin başında 3 milyar dolar düzeyinde olan ihracatın 2015'e gelindiğinde yaklaşık 150 milyar dolar düzeyine yükseldiği görülmektedir. Ayrıca dış ticaretin yapısına da bakıldığında 1970'lerde yaklaşık %80'i tarım ihracatı olan ülkemizde yaşanan dönüşüm neticesinde %90'ı sanayi ürünü ihracatı haline gelmiştir (Şenses, 2018: 210-211).

Çok sayıda gümrük sınır kapısı bulunan ülkemizde özellikle Avrupa'ya açılma yönüyle stratejik ve hacimsel büyüklüğü açısından büyük önem taşıyan gümrük kapılarından birisi de Kapıkule gümrük kapısıdır. Bu çalışmada Kapıkule gümrüğünden çıkış yapan ihraç malların bedeli olarak ülkemize dahil olan Kapıkule özelindeki ihracat değerlerinin bazı ekonomik ve finansal endeks göstergeleriyle aralarındaki nedensellik ve korelasyon ilişkisi analiz edilecektir. Burada öncelikli olarak çalışmada kullanılan veriler hakkında bilgi verilecektir. Sonrasında çalışmaya dahil edilen döviz kurları, dış ticaret haddi, ihracat endeksi, sınai ve sanayi endekslerinin Kapıkuleden çıkış yapan ihracat değerleriyle aralarındaki nedensellik ilişkisi Granger Pairwise nedensellik analizi yöntemiyle incelenecektir. Son olarak da söz konusu değişkenlerin Kapıkule ihracat rakamlarıyla aralarındaki korelasyon ilişkisine yer verilecektir.

2. LİTERATÜR ARAŞTIRMASI

Literatürde Türkiye'de gümrük ihracatının bu çalışmada kullanılan veri setiyle ilişkilendirildiği bir çalışma bulunmamaktadır. Çalışmalar daha çok dış ticaret politikaları, döviz ile doğrudan ihracatın etkisi ve göç konuları üzerine odaklanılmıştır.

Dabin vd., 2009 çalışmalarında Gri teorisi ile gümrük ihracatının tahminlemesi konusunu incelemişlerdir. Kurulan modeli gümrük ihracatını klasik ekonometrik bir modelden daha doğru tahmin edebileceğini tespit etmişlerdir.

Temiz, 2019 çalışmasında dış ticaretin daha çok gümrük birliği ile ilişkisini değişim açısından incelemiştir. İstatistiksel modeller kurmuş ve ekonometrik teknikleri kullanmıştır. Özellikle ihracat ve ticaret hacmi konusunda tespitler yapmıştır.

Özekcioğlu & Soyuyğit, 2019 çalışmalarında ticaret ve göç konusunu incelemişlerdir. Çalışmada panel çekim yöntemi uygulanmıştır. Hem ithalatta hem de ihracatta anlamlı sonuçlar elde edilmiştir.

Boz, 2020 çalışmasında Euro-TL paritesinin, Euro ile yapılan dış ticarete etkisini incelemiştir. Çalışmada doğrusal regresyon yöntemini kullanmıştır. Yapılan analize göre paritenin Euro ile yapılan dış ticarete anlamlı bir etkisi olduğu ortaya konmuştur.

Hendy & Zaki, 2021 çalışmalarında uluslararası ticaretin ve ihracatın kolaylaştırılması gümrük verilerinin kullanılması konusunu incelemişlerdir. Uluslararası ticarete geçen sürenin uzamasının özellikle tarım ve imalat sektörü için maliyet unsuru olduğu, bozulabilir ve mevsimsel ürünlerin ihracatını yapan firmaların süreden daha çok etkilendiğini tespit etmişlerdir. Büyük işletmelerin küçüklere göre olumsuz durumlardan daha çok etkilendiği ortaya çıkmıştır.

3. BULGULAR

3.1. Veri Seti

Aşağıdaki tabloda çalışmada kullanılan değişkenlerin kaynağı ve açıklamalarına yer verilmiştir.

Tablo 1: Çalışmada Kullanılan Değişkenler Ve Kaynakları.

Değişkenler	Açıklama	Kaynak
KGS	Kapıkule Gümrük İhracatı	Türkiye İstatistik Kurumu
DA	Dolar Alış Kuru	bloomberght.com
EA	Euro Alış Kuru	bloomberght.com
DTH	Dış Ticaret Haddi	Türkiye İstatistik Kurumu
IHME	İhracat Miktar Endeksi	Türkiye İstatistik Kurumu
SIE	Sınai Endeksi	Investing.com
MTSE	Mevsimsellikten ve Takvimden Arındırılmış Sanayi	Türkiye İstatistik Kurumu

Endeksi

Çalışmada yer alan verilerin elde edildikleri resmi siteler yukardaki tabloda belirtilmiştir. Burada kullanılan veriler aylık veri olup 2013.02 – 2022.07 arası dönemi kapsamaktadır.

Yukarıdaki tabloda yer alan verilerden IHME, SIE ve MTSE endeks verileridir. DTH ise Türkiye'nin ihrac fiyatının ithal fiyata oranıdır. DA ve EA ise Dolar ve Euro'nun TL karşısındaki değerini temsilen döviz kurlarının alış fiyatı olarak çalışmada bulunmaktadır. KGS verisi ise Kapıkule gümrük kapısından çıkış yapan mal ticareti karşılığında ülkeye giriş yapan döviz temsili eden ihracat değeri olarak çalışmada kullanılmıştır.

3.2. Nedensellik Analizi

İktisatta değişkenler arasında yer alan sebep sonuç ilişkileri nedensellik testleri incelenmektedir. Granger, tarafından geliştirilen bu testler özellikle uzun dönemli zaman serileri için yaygın olarak kullanılmaktadır (Granger, 1969). Ekonometri literatüründe nedensellik testleri klasik ve Granger nedensellik şeklinde 2'ye ayrılmaktadır. Klasik nedensellikte analizdeki değişkenlerin gecikme sayıları farklı olabilirken, Granger nedensellikte aynı oldukları kabul edilmektedir (Tari, 2005).

Aşağıdaki tabloda çalışmada kullanılan Granger nedensellik analizi sonuçları gösterilmiştir.

Tablo 2: Nedensellik Sonuçları.

Pairwise Granger Nedensellik Testi	Gözlem Sayısı: 114		
Dönem: 2013M02 2022M07	Gecikme Sayısı: 1		
Yokluk Hipotezi:	Gözlem	F-İstatistik	Olasılık
DA does not Granger Cause KGS	113	8.29199	0.0048
KGS does not Granger Cause DA		19.8479	2.E-05
EA does not Granger Cause KGS	113	10.5242	0.0016
KGS does not Granger Cause EA		9.83119	0.0022
DTH does not Granger Cause KGS	113	2.54161	0.1138
KGS does not Granger Cause DTH		8.06566	0.0054
IHME does not Granger Cause KGS	113	0.52073	0.4721
KGS does not Granger Cause IHME		11.5128	0.0010
SIE does not Granger Cause KGS	113	20.1134	2.E-05
KGS does not Granger Cause SIE		5.42673	0.0217
MTSE does not Granger Cause KGS	113	2.85489	0.0939
KGS does not Granger Cause MTSE		0.66958	0.4150

Yukarıdaki tabloya göre, Sınai endeksi, Dolar ve Euro alış kurlarıyla Kapıkule gümrük ihracatı arasında karşılıklı nedensellik ilişkisinin anlamlı olduğu görülmüştür. Bunun yanında Kapıkule gümrük ihracatının dış ticaret haddi ve ihracat miktar endeksinin tek yönlü nedeni olduğu tespit edilmiştir. Son olarak da mevsimsellikten ve takvim etkisinden arındırılmış sanayi endeksinin ise Kapıkule gümrük ihracatının nedeni olduğu bulunmuştur.

3.3. Korelasyon Analizi

İktisadi çalışmalarda değişkenler arasındaki ilişkinin büyüklüğü ve yönü hakkında bilgi vermek için standart ölçü birimi olmayan kovaryanstan elde edilerek standart ölçü birimi haline gelen katsayıya korelasyon katsayısı adı verilmektedir (Güriş ve Çağlayan, 2000).

Aşağıdaki tabloda çalışmada bulunan değişkenler arasındaki korelasyon ilişkisi verilmiştir.

Tablo 3: Korelasyon İlişkisi.

Değişkenler	DA	EA	DTH	IHME	SIE	MTSE
KGS	0,959	0,958	-0,779	0,763	0,942	0,822

Yukarıdaki tabloda elde edilen sonuçlara göre, sınai endeksi, Dolar ve Euro alış kurlarıyla Kapıkule gümrük ihracatı arasında pozitif yönlü ve çok güçlü bir ilişkinin bulunduğu tespit edilmiştir. Ayrıca mevsimsellikten ve takvim etkisinden arındırılmış sanayi endeksi ile Kapıkule gümrük ihracatı arasında pozitif yönlü ve güçlü bir

ilişkinin bulunduğu görülmüştür. Bunun yanında dış ticaret haddi ile ihracat miktar endeksinin Kapıkule gümrük ihracatı arasında orta düzeyde bir ilişki olduğu fakat bu ilişkinin yönünün ise, dış ticaret haddi ve Kapıkule gümrük ihracatı arasında negatif yönlüken; ihracat miktar endeksi ve Kapıkule gümrük ihracatı arasında ise pozitif yönlü olduğu tespit edilmiştir.

4. SONUÇ

Ülke ekonomilerinin ihracatı genel anlamda döviz kuru ve buna bağlı olarak değişen ihraç ve ithal ara mali fiyatlarıyla doğrudan ilişki içerisinde. Ayrıca sanayi üreticilerinin yatırımlarını yaparken göz önünde bulundurabilecekleri sanayi, sınai ve ihracat miktar endeksleri de tüm ülke ekonomilerinin ihracatları üzerinde etkili olabilmektedir.

Çalışmada öncelikli olarak teorik bir giriş yapılarak literatür özetine değinilmiştir. Sonrasında çalışmanın analiz kısmında öncelikli olarak veri tanıtımı yapılarak, çalışmada kullanılan nedensellik ve korelasyon analizine geçilmiştir. Burada elde edilen sonuçlar ayrıntılı bir şekilde açıklığa kavuşturulmuştur.

Bu çalışmada elde edilen sonuçlara göre, döviz kuru ve sınai endeksi rakamlarının ihracat ile karşılıklı nedensellik ilişkisine sahip oldukları ve söz konusu ekonomik değişkenlerin aralarındaki korelasyon ilişkisinin de güçlü oldukları tespit edilmiştir. Ayrıca çalışmada yer alan diğer değişkenlerle gümrük ihracatı arasında tek yönlü nedensellik ilişkisinin bulunduğu ve korelasyon ilişkilerinin de genel anlamda orta düzeyde olduğu bulunmuştur.

Çalışmada elde edilen sonuçlar bağlamında politika uygulayıcıları ülkelerinde ihracat potansiyellerini yakalamalarında döviz kuru istikrarı kadar ekonomik ve finansal göstergelerdeki istikrarın da büyük önem taşıdığını göz önünde bulundurmaları gerekmektedir.

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An Evaluation of Alienation Researches in Business and Management Literature

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Abstract: The aim of this study is to examine the current situation of the concept of alienation in business and management literature, and to try to reveal the most emphasized issues and the concepts examined together in the studies carried out in the mentioned fields. In order to achieve the aim of the research, 315 articles in the Web of Science Core Collection database written on the concept of alienation in the fields of business and management were examined. Content analysis was applied on the keywords of these articles and co-occurrence analysis, which is one of the types of bibliometric analysis, was applied on the titles, abstracts and keywords of the related articles. It is aimed to reveal the concepts that are generally considered together with the co-occurrence analysis on alienation. Thus, the research trends and relationship patterns with other subjects that emerged in the alienation researches carried out in the fields of business and management between 1975-2022 were tried to be determined. According to the results of the research, the phenomenon of work alienation was emphasized the most in relation to the concept of alienation; researches was carried out on employees, the relationship between job satisfaction and work alienation was examined; ethics, burnout, and culture have been concepts that are often discussed together with alienation. While nursing stands out as the occupational group in which work alienation is observed, critical theory references draw attention in the conceptual background of the studies.

Keywords: Alienation, Business, Management, Content Analysis, Co-occurrence Analysis

1. INTRODUCTION

Basically, alienation is a concept related to the alienation of a person from his essence. Alienation, which points to a differentiation between the existential self of man and his perception of himself and society, points to a kind of metamorphosis process and result. The economic, political, cultural, religious and scientific changes that occur in social life constitute the integrity of the society with a dynamic character. For various reasons, sometimes some ruptures and separations may occur within this unity, and these situations may create some distances between the individual and the society. According to Yürek (2005), this break is called alienation. Although alienation has various definitions according to different approaches, it refers to a distance between the individual and society, environment or process in a general and common sense (Marshall, 1999: 789). The word "alienation" was formerly used to describe the mentally ill. The words "aliene" in French and "alienado" in Spanish used to describe psychosis, that is, a person completely, absolutely disconnected from himself. (In English, even today, doctors who care for the mentally ill are called "alienists" (Fromm 2006: 116).

When we look at the etymological side, alienation comes from the word "alienare", which is derived from the Latin word "alinear", which is close to the meaning of "mentally ill" (Fromm, 1984 as cited in Akyıldız and Dulupçu, 2003). The concept, which comes from the Greek "alloiosis", means integration with the "One and Only", that is, God, although it carries theological and religious traces in the Hellenistic period. The person separates from his essence and integrates with a higher being (Demirer and Özbudun, 1999: 10). If we look at the Turkish etymology, Alienation comes from the Persian word "wild". Its Persian equivalent means an empty, desolate place. The concept entered the Turkish literature as "Alienciación" by being derived from the word in Persian (Kiraz, 2011: 148). The concept of alienation, which is based on Ionian philosophy when investigated as its origin, was generally handled in a metaphysical dimension until the 8th century. In the Enlightenment process, it was introduced to the philosophical field for the first time by Hegel and to the political field by Rousseau. The concept, which was handled on a materialist level by Marx, indicates an important phenomenon on which empirical studies are still conducted in fields such as sociology, psychology and social psychology today (Akyıldız and Dulupçu, 2003; Akyıldız. 1998; Kılıç, 1984).

Individuals who come together around a predetermined common purpose, which is included in the definition of the organization and constitute the organization, become parts of a social structure created outside of themselves. As a result of these individuals, who are kept together by organizational mechanisms, working and producing; It can be easily seen that they are faced with the phenomenon of alienation in the context of expected behaviors, attitudes towards work and desired performance levels. In order to understand alienation in organizations, it would be appropriate to focus on the reasons that can make this situation possible. Although there are various groupings in different studies, the causes of organizational alienation are mostly

expressed in two groups as organizational and environmental reasons (Şimşek et al., 2006; Salihoğlu, 2014; Demirel and Ünal, 2011).

Table 1. The Causes of Alienation in Organizations I

Organizational Causes	Personal Causes	Environmental Causes
Magament style	Past events and experiences	Economical conditions
Size of organization	Beliefs and attitudes	Technological conditions
Information flow	Modular relationships	Social and cultural structre
Group characteristics	Personality	Industrialization, urbanization
Mode of production		Social disintegration
Division of labour		Political and legislative structure
Working conditions		Unionization
		Media

Source: Generated by the author as derived from the related literature.

In another study, Ofluoğlu and Büyükyılmaz (2008) classified the causes of alienation in organizations as follows:

Table 2. The Causes of Alienation in Organizations II

Psychological Causes	Social Causes
Division of labour	Social and cultural structre
Media	Economical Structure
Working conditions	Industrialization and urbanization
Beliefs, attitudes, and values	Technological conditions

Source: Ofluoğlu and Büyükyılmaz (2008:113-114).

2. METHOD

Parallel to scientific and technological developments, developing and transforming production systems, management models and organizational structure elements, new and various business values, work patterns are revealed, and employees are rowing against “fluid modernity” (Bauman, 2017) in a constant change. Based on the stated views, the basic research interest of this study is also revealed; It is thought that the importance and existence of alienation studies in business and management fields is increasing day by day. This thinking has shaped the following research questions:

RQ.1. What are the main focuses of alienation research in Business and Management literature?

RQ.2. What are the concepts that are mostly discussed together in alienation studies in the field of Business and Management, and have there been any changes over time?

In order to answer these research questions, bibliographic research was conducted. Bibliographic research is a technique for examining the development of a discipline by measuring various features related to scientific documents, which is among the quantitative research methods (Thelwall, 2008: 606; Al, 2012: 1). Bibliometrics, which is based on the digitization and measurement of some parameters related to scientific publications in a particular research field using statistical methods (Pritchard 1969: 348), makes it possible to reveal the general view of scientific outputs in the relevant field, to show research trends in the field and their direction (Rey-Marti et al., 2016: 1652). In bibliometric research, it is also possible to monitor how the subjects studied in a particular research field, how research interests have changed historically, and which subjects increased their importance at certain time intervals (Fetscherin & Heinrich, 2015).

Chai and Xiao (2012:25) describe the analysis types used in bibliometric analysis, citation analysis, co-citation analysis, bibliographic coupling analysis, co-occurrence analysis and bibliometric analysis. Specified as bibliometric mapping. In this research, content analysis was applied to the keywords of the articles examined in order to reveal the topics that are frequently studied in the related literature. Co-occurrence analysis, one of the types of bibliometric analysis, was used to show the concepts that were mostly considered together. Co-occurrence analysis provides a set of patterns by revealing the words that are repeated and used together in

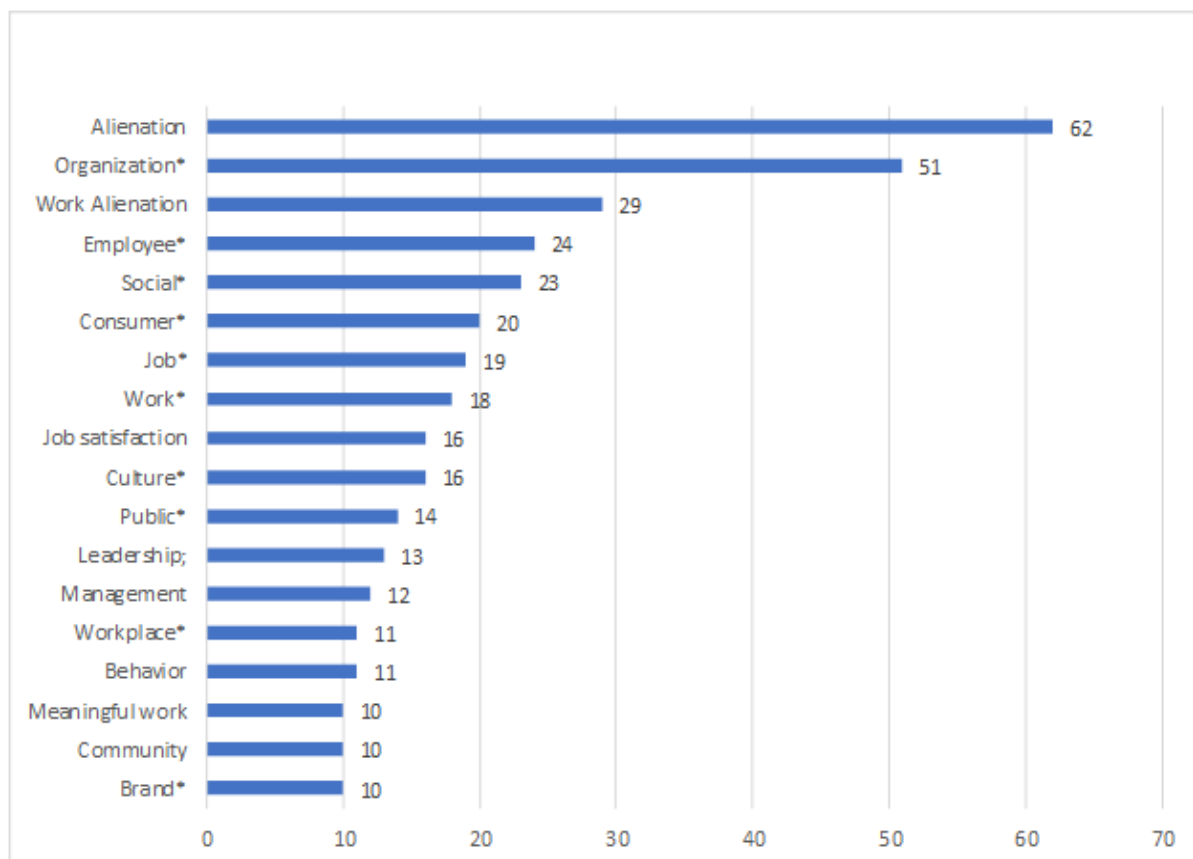
the titles, keywords and abstracts of the studies that are the subject of the research (Van Eck & Waltman, 2010).

In order to determine the main research focuses of the concept of alienation in business and management literature, the data used in this research were obtained by Web of Science Core Collection (WoS) search in October 2022. Among the academic studies published between 1975-2022, the total number of studies included in the title, keywords and abstract of the word "Alienation" is 11524. Based on these results, the "article" filter was added as a document type and 315 articles were reached when the search was done again by limiting it to the "business" and "management" fields. Content analysis was applied to the keywords of the articles in order to identify the main research focuses on alienation in the business and management literature. Within the scope of the titles, keywords and abstracts of the related articles, the co-occurrence analysis (Van Eck & Waltman, 2010) was applied and the subjects that were discussed together the most were tried to be determined. VOSviewer 1.6.17, one of the bibliographic mapping programs for the visualization of co-occurrence analysis results used.

3. FINDINGS

The main focuses of alienation research in the fields of business and management were tried to be revealed by the content analysis made on the basis of keywords and shown in Graph 1. The mapping method of the co-occurrence analysis carried out within the scope of keywords, titles and abstracts is presented in Picture 1 by visualizing which concepts are mostly studied together. In Picture 2, the change in the concepts considered together over time is shown.

Graph 1. Content Analysis Results Based on the Keywords of the Examined Articles

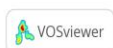
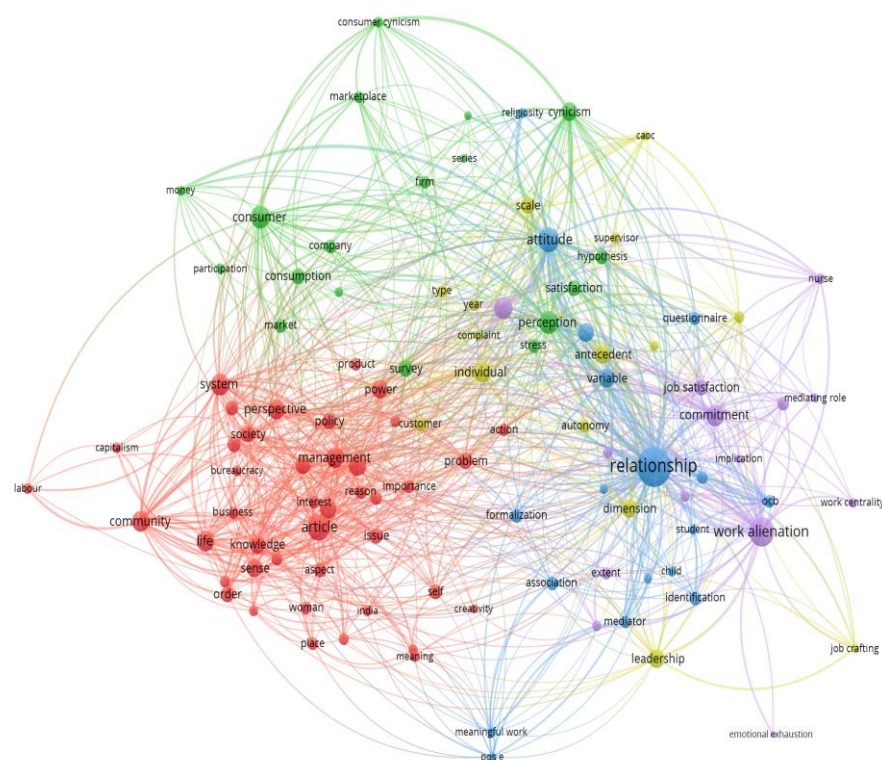


As a result of the content analysis carried out within the scope of all keywords of 315 articles examined, the frequency of the most repeated keywords in all articles was determined and the keywords repeated 10 times or more are shown in Graph 1. Keywords are indexing tools that show the reader what key concepts a study covers. Thus, it can be said that the most shared keywords among the articles examined show which other concepts are mostly studied in the alienation researches in the business and management literature, thus drawing attention to the main research focuses in the field. As can be seen from Graph 1, 62 out of 315 articles contain the word "alienation" as a keyword. 51 articles include the concepts of "organization" among their

keywords. 29 studies examined the issue of work alienation. Other related concepts can be followed from the chart. The sign of “*” means that the followed keyword has some paragoge; for example it must be understood by “organizaton*” that organizational, organizations, organizaton’s etc.

According to the results of the content analysis applied to the keywords of the examined articles, shown in Graph 1., the most researched concepts in the relevant literature were tried to be determined. The co-occurrence analysis, the results of which are visualized in Picture 1, includes the titles and abstracts of the articles examined in addition to the keywords, and shows which concepts are studied more together, apart from the most studied concepts. It can be said that this information is important in terms of shedding light on conceptual relations in terms of revealing which other concepts alienation is studied with more association. According to the results; “management, society, system, woman, capitalism, politics, power and problem” constitute a cluster. In other words, these concepts are generally discussed together in studies. Another set of concepts is “consumer, consumption, market, money, participation, company and firm”. “Attitude, belief, relationality, identification, child, meaningful work, formalization and student” formed another cluster. The cluster of “job satisfaction, nurse, job centeredness, work alienation, emotional exhaustion and commitment” draws attention to the findings of emotional exhaustion and work alienation in the studies conducted in the field of alienation in the nursing profession.

Picture 1. Co-Occurrence Analysis Results Based on Keywords, Titles and Abstracts



The results of the analysis on how the subjects studied and researched together changed over time are also visualized in Picture 2. Accordingly, the significant change in the course of the topics discussed together was more noticeable in the articles published between 2010 and 2016. In the period between 2010 and 2012, concepts such as job satisfaction, job commitment, problems of female employees, and work-centeredness lost their emphasis over time. In the following period, between 2014 and 2016, concepts such as consumption, consumer cynicism, the meaning of work, society and politics attracted attention as the focus of emphasis in alienation studies.

This research examines the current situation of the concept of alienation in business and management literature, and analyzes the developing research trends related to the concept by examining it from a temporal perspective. In this way, creating a comprehensive and up-to-date information set for researchers in the field represents the main output of the study. Here, a number of suggestions will be made about new research on the subject, by looking at all the analyzes and results applied within the scope of the research, through research questions.

The answer that is tried to be produced for the second research question aims to show which concepts are mostly studied together in the articles examined. Accordingly, "management, society, system, woman, capitalism, politics, power and problem" constitute a cluster. In other words, these concepts are generally discussed together in studies. Another set of concepts is "consumer, consumption, market, money, participation, company and firm". "Attitude, belief, relationality, identification, child, meaningful work, formalization and student" formed another cluster. The cluster of "job satisfaction, nurse, job centeredness, work alienation, emotional exhaustion and commitment" draws attention to the findings of emotional exhaustion and work alienation in the studies conducted in the field of alienation in the nursing profession. The inference that these clusters provide to the researchers is that they show the prominent themes in the studies carried out from the first study in 1980 until today, in other words, the content of research trends. How these research trends have changed over time points to the final answer of this study. In the period between 2010

and 2012, concepts such as job satisfaction, job commitment, problems of female employees, and work-centeredness lost their emphasis over time. In the following period, between 2014 and 2016, concepts such as consumption, consumer cynicism, the meaning of work, society and politics attracted attention as the focus of emphasis in alienation studies.

As it is known, this research carried out examinations on the data provided by the “research articles” in the Web of Science Core Collection database. Therefore, inferences based on the analysis and results are limited to the content in the database in question. The inclusion of domestic databases in similar studies in the future will also provide the opportunity for international comparison, and perhaps including not only articles but also other document types such as book chapters and papers will provide a richer study.

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Banka Çalışanlarının Mutluluk Düzeylerinin Belirleyicileri: İstanbul Örneği

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Özet: Mutluluk, genel anlamıyla bireylerin hayatlarında pozitif duyguların ağır bastığı bir duygu durumudur. Bireylerin mutluluk düzeyleri çeşitli faktörlere bağlı olarak değişkenlik gösterebilmektedir. Bu çalışma, kapitalist sistemin kalbinde yer alan banka sektöründeki çalışanların mutluluk düzeylerinin belirleyicilerine odaklanmaktadır. Bu kapsamda, bankacıların deneyimsel harcama davranışları ve çalışma şartları ile mutluluk düzeyleri arasındaki ilişki incelenmiştir. Çalışmada bağımlı değişken olan “Mutluluk Düzeyi”nin ölçülmesi için “Oxford Mutluluk Ölçeği Kısa Formu” kullanılmıştır. Bağımsız değişken olan “Çalışma Şartları”nın ölçümüne ilişkin hazırlanan anket sorularında “Hemşirelik İş Yaşam Kalitesi Ölçeği”nden faydalanılmıştır. Hayat tecrübesi edinmeye yönelik harcamalara karşılık gelen “Deneyimsel Harcamalar” değişkeni ise araştırmacılar tarafından hazırlanan ve geçerlilik ve güvenilirlik testlerinde anlamlı sonuçlar veren anket soruları ile ölçülmüştür. Bu kapsamda kartopu örneklem yöntemiyle erişilen İstanbul'daki banka çalışanlarına çevrimiçi anket uygulanarak toplanan cevaplar Doğrulamalı Faktör Analizi ile boyut indirgeme işlemine tabi tutulurken, boyutlar ve değişkenler arasındaki ilişkiler Yapısal Eşitlik Modeli ile tespit edilmiştir. Boyut indirgeme işlemi ile 12 adet sorudan oluşan ankette boyut sayısı üçe indirilerek uygulanan yapısal eşitlik modelinin sonuçları yorumlanmıştır. Bulgular, bankacıların tatminkâr çalışma şartlarının ve deneyimsel tüketimin mutluluk düzeylerini olumlu yönde etkilediğine işaret etmektedir.

Anahtar Kelimeler: Mutluluk, Çalışma Şartları, Deneyimsel Harcama, Doğrulamalı Faktör Analizi, Yapısal Eşitlik Modeli, Banka çalışanları.

1. GİRİŞ

Yalnızca milli gelirdeki artışla ölçülen ekonomik büyüme modelinin yetersizliği, günümüzde sınırlı tüketim, yüksek refah seviyesi, demokratik yönetim şekilleri, iktisadi yavaşlama ve mutlu yaşam gibi faktörlerin ön plana çıkmasına neden olmuştur. Bu durum toplumları bireylerin mutlulukla üzerinde düşünmeye sevk etmekte, devletler vatandaşlarının mutluluk düzeyini artırmaya yönelik birtakım düzenlemelere gitmektedir. Kallis (2011: 873) tarafından geliştirilen ve kişilerin iyi bir yaşam sürmesi ve küresel tüketimin azaltılması gibi hususlara dikkat çeken “Sürdürülebilir Plânlı Ekonomik Küçülme” modeli, insanın mutluluğunun merkeze alınması ve sosyal kalkınma hedeflerinin gerçekleştirilmesi yolunda atılmış bir adımdır. Bu bağlamda, mutluluk ve yaşam memnuniyeti kavramları üzerine yürütülen çalışmalar önem kazanmaya başlamıştır.

Bankacılık sektörü 2022 Eylül itibarıyla Türkiye’de hizmet sektöründeki istihdamın %1,2’sini (187.586 kişi) sağlamaktadır (TBB, 2022). Sektör çalışanlarının yakındığı sorunlar arasında maaş ve yan hakların yetersizliği, kariyer yollarının kapalı olması, çalışma şartlarının ağırlığı, iş-özel hayat dengesinin sağlanamaması, iş tatmininin düşük olması, yapılan işte inisiyatif alınamaması vb. yer almaktadır (Ergül, 2015: 121). Öte yandan bireylerin herhangi bir madde satın almaya kıyasla deneyimsel alışverişlerinden daha çok mutluluk duyduklarına işaret edilmektedir: Bireyler bu tür alışverişlerin kendi benlikleriyle daha ilintili olduğuna inanmakta (Carter ve Gilovich, 2012: 1304), sohbetler esnasında bu alışverişlerinden bahsetme eğiliminde olmakta (Van Boven, Campbell, ve Gilovich, 2010: 551) ve deneyimleri ilerleyen zamanlarda dahi yeniden zihinlerinde canlandırabilmektedir (Van Boven ve Gilovich, 2003: 1193).

Bu çalışmada, bankacılık sektöründeki çalışanların harcama alışkanlıklarının ve çalışma şartlarının mutluluk düzeylerine olan etkisini göstermek amaçlanmıştır. Araştırma bulguları, bireylerin öz farkındalık kazanarak hayat tarzlarında değişikliğe gidebilmelerine ve böylece toplumun mutluluğuna ve refahına katkı sağlamaya hizmet edecektir. Çalışma ile ikinci olarak, banka çalışanlarının verimliliğini artırmaya yönelik olarak yapılabilecek çalışma şartlarına ilişkin yasal düzenleme ve değişikliklere ayna tutmak hedeflenmiştir. İlâveten, banka çalışanlarının mutluluğuna olumlu katkıda bulunan harcama türlerinin belirlenmesi ve bu şekilde işverenlere çalışanlarını motive edecek yeni teşvik ve ödül mekanizmalarının geliştirilmesinde ışık tutulacaktır.

Çalışmanın ikinci bölümünde ilgili yazında yer alan çalışmalar değerlendirilmiştir. Üçüncü bölümde araştırmada kullanılan yöntem ve veri ile son olarak dördüncü bölümde çalışmanın bulguları ile tartışma ve sonuçlara yer verilmiştir.

2. KAVRAMSAL ÇERÇEVE

2.1. Mutluluk Nedir?

Mutluluğun göreceli bir kavram olması nedeniyle tanımı ve ölçümüne dair çeşitli görüşler ortaya atılmıştır. Bu görüşlerin en yaygın olanlarından biri, genel mutluluk düzeyinin yaşam tatmini ve öznel iyi oluş kavramlarıyla açıklanmasıdır. Veenhoven (2013: 36), mutluluğun tanımını yaşam memnuniyeti ve öznel iyi oluşla eş anlamlı olarak kullanmaktadır. Yazar, yaşam memnuniyetinin yalnızca iyi yaşam standartlarının bilişsel karşılaştırması ile değil aynı zamanda kişinin kendini genellikle nasıl hissettiği ile ölçülmesi gerektiğini savunmaktadır. Yaşam memnuniyetini de bireylerin yaşamlarını bir bütün olarak değerlendirerek derecelendirmeleri şeklinde tanımlamaktadır. Mutluluk ya da öznel iyi oluş olarak nitelendirilen olgu, anlık ve daha uzun vadeye yayılmış duygularla ilişkilendirilebilmektedir. Bir diğer görüş ise mutluluğu hem duygusal hem de zihinsel ve ruhsal açıdan hissedilen tüm pozitif duyguların negatif olanlara ağır basması şeklinde tanımlamaktadır (Ng, 2015: 20). Diener vd. (1997: 2) yaşam memnuniyeti yüksek ve sıklıkla haz duyan, nadiren kaygı ve kızgınlık gibi negatif duygular yaşayan bireylerin yüksek öznel iyi oluş seviyesine sahip olduğuna vurgu yapmaktadır.

2.2. Harcama Türleri ile Bireysel İyi Oluş Arasındaki İlişki

Günümüzde harcama davranışlarının insanların mutluluğunu etkilediği birçok araştırma ve deneysel çalışma ile gösterilmiştir. Aktaş, Şahin ve Gürbüz (2020: 21), ortalama tüketim düzeyi ile mutluluk arasında negatif bir ilişki olduğunu öne sürmüştür. Bireylerin satın aldıkları ürünler sayesinde mutluluklarının anlık olarak arttığı, bununla birlikte mutluluk seviyelerinin çok kısa zamanda eski haline döndüğü bir gerçektir. Brickman ve Campbell (1971: 287-302)'in 'hedonik uyum' olarak tanımladığı, tüketimle birlikte mutlulukta ortaya çıkan anlık artış durumu, bireylerin daha fazla tüketime yönelmesine ve materyalist tüketimin büyük bir hızla bireyleri etkisi altına almasına sebep olmuştur. Böylece kapitalist sistemde adeta mutlu hissetmek için ihtiyaçlarını karşılamamanın ötesinde sürekli tüketime bağımlı olan bir insan tipi ortaya çıkmıştır. Bu sistemde üretimin ihtiyaçların karşılanması için değil fakat kâr ve sermaye birikimi için yapılması, sistemin genişleyen ölçekte bir üretimi sürdürmek için daha fazla tüketimi teşvik etmesini gerekli kılmaktadır. Bu durum şirketleri reklam, marka, satış teknikleri, amblem, logo, slogan vb. vasıtasıyla, artık salt ürün değil ürünlerini özdeşleştirdikleri bir hayat tarzı satar duruma getirmiştir (Klein, 2009: 16). Zamanla, tükettikçe var olduğuna inanan ve bu girdaptan çıkamayan toplum, kapitalist sistemin devamlılığı için gereken tüketim döngüsüne hizmet etmekte ve bu doğrultuda anlık hazlar yaşasa dahi uzun vadede mutsuzluğa sürüklenmektedir. Nitekim Gelibolu & Balıkcıoğlu (2021: 3136)'in de belirttiği üzere, materyalizm bireylerin yaşam tatmini üzerinde olumsuz etkiye sahiptir. Bir eşyaya sahip olmak yerine yaşam tecrübesi kazanma amacına hizmet eden deneyimler değil, maddi nesneler insanlar arasında bir statü göstergesi olmaktadır. Oysa Carter & Gilovic (2010: 146)'un vurguladığı gibi, deneyimsel tüketim materyalist tüketime kıyasla iyi oluş üzerine daha olumlu etki etmektedir çünkü maddi edinimlerin aksine deneyimler bireyler arasında statü kıyaslamaya elverişli değildir. Deneyimsel tüketimin bu olumlu etkisinin bir diğer nedeni ise bireylerin deneyimlerini başkalarıyla daha fazla paylaşabilmeleridir.

2.3. Çalışma Hayatı ile Bireysel İyi Oluş Arasındaki İlişki

Çalışanların iş yaşamlarının kalitesi ile iyi oluşları arasındaki ilişkiye dair muhtelif çalışmalar mevcuttur. Herzberg (1968:9), 'hijyen faktörler' olarak adlandırdığı maaş, çalışma şartları, iş güvenliği, şirket politikası, denetim ve insanlar arası ilişkilerin iyileştirilmesinin, çalışanların işten duydukları tatminsizliği azalttığına yönelik bir kuram geliştirmiştir. Köse & Ekşi (2019: 43)'ye göre, iş tatmini hayat tatmini üzerinde anlamlı bir etkiye sahiptir. Gürdoğan&Uslusoy (2019: 1366)'un hemşireler üzerinde yaptıkları araştırmada, tek yönlü varyans analizi kullanılarak çalışma hayatının kalitesi ile bireylerin mutluluk düzeyleri arasında pozitif bir ilişki tespit edilmiştir. Keleş (2017: 154) de banka çalışanlarının işlerini anlamlı bulmalarının psikolojik iyi oluşlarını pozitif yönde etkilediğini bulmuştur. Diğer yandan Saraji, & Dargahi, (2006: 8)'nin araştırmasında, Tahrân'da bir üniversite hastanesindeki çalışanların büyük çoğunluğunun iş sağlığı ve güvenliği şartları, orta ve üst düzey yöneticilerin tutumları, gelir düzeyi, iş-aile hayatı dengesi vb. açılardan işe duydukları ilgi ve işten aldıkları hazzın düşük olduğu bulunmuştur. Bu bulgu da düşük iş-yaşam kalitesine işaret etmektedir.

Bu makalenin kapsamına benzer bir başka çalışmada, banka çalışanlarının emek sürecine gösterdiği rızanın nedenleri olarak işsizlik tehdidi, şirket vatanseverliği, takım çalışması, terfi ve ödül mekanizmaları ile çalışanların kendilerine atanan hedefleri gerçekleştirmek ve işi daha katlanılabilir duruma getirmek için kuralları ihlal etmeleri ve kendi iradeleriyle risk almalarına işaret edilmiştir (Nurol, 2014: 12). Yine beyaz yakalı çalışanlar üzerinde yapılan bir incelemede işkoliklik ile tükenmişlik duygusu arasında pozitif bir ilişki bulunmuştur (Gülova, İspirli, & Eryılmaz, 2014: 25). Gültekin (2019: 19), postacılar üzerinde yaptığı araştırmada doğrulayıcı faktör analizi ve yapısal eşitlik modeli kullanarak, iş güvencesizliğinin psikolojik iyi oluş üzerinde bir etkisi olmadığı sonucuna varmıştır. İlkin & Derin (2018: 238), bir tekstil firmasının çalışanlarından topladığı anket cevaplarını

regresyon yöntemiyle analiz etmiş ve iş güvencesizliği ile iş tatmini arasında anlamlı istatistiki bir ilişkiye rastlanmamıştır. Ancak, İstanbul'daki ticari ve katılım bankalarının çalışanları üzerinde gerçekleştirilen bir araştırmada, iş güvencesi olmayan, fazla çalışma uygulamasına ve performans ölçütü olarak yöneticilerin belirledikleri hedeflere ilişkin baskıya maruz kalan çalışanların psikolojik iyi oluşlarının ve dolayısıyla işe karşı tutumlarının olumsuz yönde etkilendiği tespit edilmiştir (Güney, 2016: 1). Zabıta personeline uygulanan anketten elde edilen verilerle yapılan Kikare ve Cramer V testleri ve regresyon ve korelasyon analizleri sonucunda çalışma saatleri ile sosyal hayat arasında denge olmasının iş tatminini olumlu etkilediği bulunmuştur (Bölükbaşı&Yıldırım, 2009: 361).

Bu çalışmada modern kapitalist ekonomilerde yüksek düzeyde eğitilmiş ve profesyonel beyaz yakalı çalışanların ağırlıklı olarak istihdam edildiği bankacılık sektöründe çalışanların mutluluk düzeylerinin belirleyicilerine odaklanılmıştır. Bu kapsamda, İstanbul'da banka çalışanlarının hobi, seyahat ve sosyal yaşam gibi deneyimsel harcamalarının mutluluk düzeylerine etkisi olup olmadığı ölçülmüştür. Ayrıca, bankacılıkta çalışma şartlarının çalışanların mutluluk seviyelerine etki edip etmediği incelenmiştir. Literatürdeki çalışmalar ağırlıklı olarak çalışma şartlarının veya harcama türlerinin bireylerin mutlulukları üzerindeki etkisi üzerine yoğunlaşmıştır. Ancak Çalışma Şartları ve Deneyimsel Harcamaların “Mutluluk Düzeyine etkisini aynı anda ele alan bir çalışmaya rastlanmamıştır. Bu makalenin literatüre bir diğer katkısı da, İstanbul'da bankacı meslek grubu üzerine bu kapsamda yapılmış bir mutluluk araştırmasının bulunmamasıdır.

3. ARAŞTIRMA

3.1. Hipotezler

Çalışmanın boş hipotezleri; “Deneyimsel Harcamalar” ve “Çalışma Şartları” değişkenleri ile “Mutluluk Düzeyi” arasında anlamlı bir ilişki olmadığı yönündedir. Araştırmada test edilen alternatif hipotezler şu şekildedir:

H1: Deneyimsel Harcamalar ile Mutluluk Düzeyi arasında anlamlı bir ilişki vardır.

H2: Çalışma Şartları ile Mutluluk Düzeyi arasında anlamlı bir ilişki vardır.

3.2. Yöntem ve Veri

Bu çalışma, analize konu edilen iki bağımsız değişken olan “Deneyimsel Harcamalar” ve “Çalışma Şartları”nın “Mutluluk Düzeyi” üzerine etkisini incelemektedir. Materyalist harcamalar bireylerin fiziki olarak saklama ya da sahip olma amacıyla edindikleri ürünler için yapılan harcamalardır. Öte yandan deneyimsel harcamalar, bireyin bir hayat tecrübesi elde etmek amacıyla gerçekleştirdiği harcamalara işaret etmektedir (Van Boven & Glovich, 2003: 1194). Bu çalışma ile kapitalist sistemin çarkında ömürlerini harcayan emekçi sınıfının mutluluk düzeylerinin ve belirleyicilerinin banka çalışanları özelinde tespiti amaçlanmıştır.

Araştırmamız Türkiye’de özellikle İstanbul’da yürütülmesinin sebebi bir yandan metropoliten bir şehir olarak İstanbul’un genel hayat tarzının ve şartlarının zorlayıcı olması diğer yandan da büyük şehir hayatının sunduğu deneyimsel tüketim yelpazesinin oldukça geniş olmasıdır. Araştırma kapsamında çevrimiçi ortamda demografik sorulara ilaveten mutluluk düzeyi ve deneyimsel harcamalara ilişkin sorulardan oluşan bir anket hazırlanmış ve katılımcılara sosyal medya üzerinden ulaştırılmıştır. Neticede 100 katılımcı ile analiz gerçekleştirilmiştir.

3.3. Bulgular

Verinin Faktör Analizine uygunluğunu kontrol etmek için Bartlett’s ve Kaiser-Meyer-Olkin (KMO) testleri uygulanmıştır. Test sonuçlarına göre korelasyon matrisinin determinantının sıfıra oldukça yakın çıkması değişkenler arasında yüksek korelasyon olduğuna işaret etmektedir. Daha sonra örneklemden toplanan veri SPSS ve AMOS paket programları aracılığıyla Doğrulamalı Faktör Analizine tabi tutularak 16 değişkenin faktörlere yüklenme durumu test edilmiştir. Uyum iyiliği değerlerinin referans aralıklarda bulunmaması ve faktör yüklerinin düşük olması nedeniyle model revize edilerek yeniden teste sokulmuştur. Faktör yükleri 0.50’nin altında gerçekleşen değişkenler analiz dışı bırakılmıştır. Sonuçta değişken sayısının azaltılması ile Tablo 3’te detaylandırılan 12 adet gözlenen değişkene Pearson Korelasyon testi yapılarak, anketin tüm değişkenlerinin görünüş geçerliliğinin anlamlı olduğu görülmüştür. Bartlett’s test sonuçlarına göre, değişkenler arasındaki korelasyonların sıfırdan farklı olduğu hipotezi reddedilememiştir. Aynı şekilde KMO test sonuçları 0.6’nın üzerinde olduğundan veri Faktör Analizi için oldukça uygun görünmektedir.

Tablo 8. KMO ve Bartlett's Test Sonuçları

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.837
Bartlett's Test of Sphericity	Approx. Chi-Square	472.921
	df	66
	Sig.	.000

Anket sorularının güvenilirliğini ölçmeye yönelik Cronbach's Alpha testi sonucunda ise katsayı 0.849 bulunmuştur. 0.05 anlamlılık düzeyinde 12 adet gözlemlenebilen değişken ve üç adet örtülü değişkenin olduğu bir yapısal eşitlik modelinin uygulanabilmesi için gerekli örneklem hacmi 100 olarak belirlenmiş (Westland, 2010: 482) olup, İstanbul'da bankacılık sektöründe çalışan 100 kişiye anket uygulanmıştır. Faktör analizi sonuçları doğrultusunda belirlenen gizil değişkenler arasındaki ilişki yol diyagramı tespit edilmiştir. Akabinde Yapısal Eşitlik Modeli aracılığı ile iki gizil bağımsız değişkenin bağımlı değişken üzerindeki etkisini gösteren yol katsayıları ile tek tek tüm örtük değişkenlerin bağımlı değişken üzerindeki etkisi bir seferde gösterilmiştir. Tüm değişkenler arasındaki korelasyonların da hesaba katıldığı bu modelde her bir değişkene ait hata teriminin asgariye çekilmesi amaçlanmıştır.

Anket katılımcılarının çoğunluğunu lisans mezunları, kadınlar, 26-40 yaş arası bireyler ve aylık net geliri 7.000 TL'nin üstünde olanlar oluşturmaktadır. Verinin eğitim, cinsiyet, yaş ve gelir durumuna göre dağılımları Tablo 2'de gösterilmiştir.

Tablo 9. Örneklemenin Demografik Dağılımı

Eğitim Seviyesi	Kişi Sayısı	%
Lise	2	2.0%
Lisans	67	67.0%
Lisansüstü	31	31.0%
Total	100	100.0%

Cinsiyet	Kişi Sayısı	%
Kadın	63	63.0%
Erkek	37	37.0%
Total	100	100.0%

Yaş	Kişi Sayısı	%
18-25	7	7.0%
26-40	63	63.0%
41-55	29	29.0%
>55	1	1.0%
Total	100	100.0%

Aylık Gelir Durumu	Kişi Sayısı	%
≤7,000 TL	10	10.0%
>7,000 TL	89	89.0%
Belirtilmemiş	1	1.0%
Total	100	100.0%

Analizde kullanılan içsel ve dışsal değişkenler Tablo 3'te belirtilmiştir.

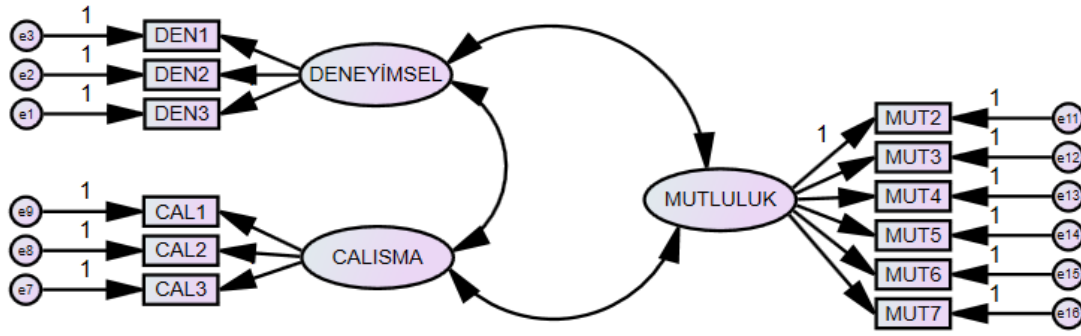
Tablo 10. Değişken Listesi

DEMOGRAFI	cin1	Cinsiyetiniz nedir?
	egit2	Eğitim durumunuz nedir?
	yas3	Kaç yaşındasınız?
	gelir4	Aylık net gelir durumunuz nedir?
6'lı LİKERT ÖLÇEĞİ	MUT2	Hayatın oldukça ödüllendirici olduğunu düşünüyorum.
	MUT3	Hayatımdaki her şeyden oldukça memnunuz.
	MUT4	Çevremdeki güzellikleri fark ederim.
	MUT5	Yapmak istediğim her şeye zaman bulabilirim.
	MUT6	Zihinsel olarak kendimi tamamen zinde (dinç) hissediyorum.
	MUT7	Geçmişimle ilgili pek mutlu anılara sahip değilim.
	DEN1	Her ay elde ettiğim gelirden dışarıda yemek, sinema, tiyatro, konser vb. sosyal faaliyetlere bir miktar bütçe ayırıyorum.
	DEN2	Her ay elde ettiğim gelirden hobilerime bir miktar bütçe ayırıyorum.
	DEN3	Her ay elde ettiğim gelirle yurtiçi ve yurtdışı seyahatlere bir miktar bütçe ayırıyorum.
	CAL1	İlgi alanlarıma uygun ve tatmin edici bir iş yapıyorum.
	CAL2	Yaptığım iş karşılığında aldığım ücret ve yan haklardan memnunuz.
	CAL3	İşimle alakalı önümde çeşitli kariyer fırsatları mevcut.
	CAL4	İşimi kaybetme korkusu yaşamıyorum.
	CAL5	Yaptığım işte inisiyatif alabiliyorum.
	CAL6	İşte geçirdiğim vakitle özel hayatıma ayırabildiğim vakit arasında denge bulunuyor.

3.3.1. Doğrulayıcı Faktör Analizi

Şekil1'de yer alan model, gözlenen değişkenler ile gizli değişkenler arasında kurulan ilişkiyi doğrulamaktadır.

Şekil 3. Doğrulayıcı Faktör Analizi



Tablo 4’te, kurulan modelin veriyle uyum sağladığını gösteren uyum iyiliği değerleri referans aralıklarına göre kabul edilebilir düzeydedir (GFI= 0,884 $\geq$ 0,80; CFI= 0,934 $\geq$ 0,90; RMSEA= 0,075 $<$ 0,080 ve SRMR= 0,075 $<$ 0,080) (Doll vd., 1994: 456; Hu ve Bentler, 1999: 1; Byrne, 2011: 176; Hu ve Bentler, 1999: 1).

Tablo 11. Uyum İyiliği Değerleri (DFA)

χ^2	79,645
p	0,006
χ^2/DF	1,562
GFI	0,884
CFI	0,934
NFI	0,840
AGFI	0,823
RMSEA	0,075
SRMR	0,075

3 boyutu temsil etmekte olan maddelerin faktör yükleri Tablo 5’te gösterildiği gibi “MUTLULUK” için 0,722, 0,798, 0,795, 0,616, 0,582, 0,718 ve 0,509; “DENEYİMSEL” için 0,622, 0,791 ve 0,784; “CALISMA” için 0,509, 0,828, 0,662 olarak hesaplanmıştır. Tüm boyutlar için katsayı değerleri 0.50 üzerinde gerçekleşmiştir.

3.3.2. Yapısal Eşitlik Modeli

Tablo 5’te standardize olmayan tahminlere bakıldığında “DENEYİMSEL” hariç gizil değişkenlerin %5 anlamlılık düzeyinde anlamlı olduğu gözükmemektedir. “DENEYİMSEL” boyutu %10 anlamlılık düzeyinde anlamlıdır. Standardize regresyon katsayılarına göre ise çalışma şartlarının (0,559) kalitesinin mutluluk üzerinde pozitif etkisi vardır.

Tablo 12. YEM SONUÇLARI

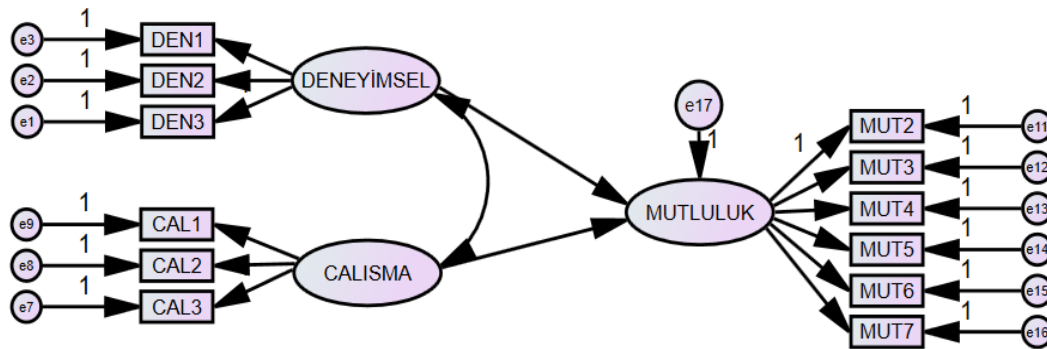
YEM SONUÇLARI			
	STANDARDİZE TAHMİNLER	STANDARDİZE OLMAYAN TAHMİNLER	
	Katsayı	Katsayı	Std. Sapma
DENEYİMSEL--> MUTLULUK	0,220	0,155	0,090
DEN1	0,622	0,688***	0,125
DEN2	0,791	0,870***	0,137
DEN3	0,784	1	-
CALISMA --> MUTLULUK	0,559	0,505***	0,138
CAL1	0,509	0,766***	0,181
CAL2	0,828	1,066***	0,193
CAL3	0,662	1	-
MUT2	0,722	1	-
MUT3	0,798	1,059***	0,144
MUT4	0,795	0,980***	0,133
MUT5	0,616	0,813***	0,142
MUT6	0,718	0,998***	0,150
MUT7	0,509	0,778***	0,164

*p<0,001

Analiz sonuçlarına göre bireylerin mutluluk düzeylerine en yüksek katkısı MUT3 (0,798) ve MUT4 (0,795) faktörleri yapmaktadır. Bireyler hayatlarındaki her şeyden memnun olduklarını ve çevrelerindeki güzellikleri fark ettiklerini dile getirmektedir. Ancak görülen o ki bireylerin geçmişleri ile ilgili mutlu anılara sahip olmamaları (MUT7-0,509) ve yapmak istedikleri her şeye zaman bulabilmeleri (MUT5-0,616), mutlulukları üzerinde daha az belirleyici olmaktadır.

Deneyimsel harcamaların mutluluk düzeyine etkisine bakıldığında DEN1, DEN2 ve DEN3 değişkenlerinin her biri MUTLULUK boyutuna olumlu etkide bulunmaktadır. DENEYİMSEL faktörü içinde faktör yükü en büyük değişken DEN2'dir (0,791). Bu demektir ki banka çalışanları sosyal faaliyetlere (DEN1-0,622) ve seyahatlere (DEN3-0,784) kıyasla hobilerine daha çok bütçe ayırdıkça (DEN2) daha fazla mutlu olmaktadır. Ayrıca beklenildiği gibi çalışma hayatının kalitesini açıklayan tüm gözlenen değişkenlerin bireylerin mutluluk düzeyleri üzerinde pozitif etkisi olduğu görülmüştür. Standardize olmayan sonuçlara göre "CALISMA" değişkenindeki 1 birim artışın "MUTLULUK" değişkeninde 0,505 birim değişime yol açtığı tespit edilmiştir. Çalışanların kariyer fırsatlarının mevcudiyeti (CAL3-0,662) ile ücret ve yan haklardan memnun olması (CAL2-0,828) değişkenleri, "CALISMA" faktörünün en önemli belirleyicilerindendir. Bankacıların ilgi alanlarına uygun ve tatmin edici iş yapıyor olmalarının (CAL1-0,509) mutluluk düzeylerine olumlu etkisi sınırlı kalmaktadır. Buna göre İstanbul'daki bankacıların daha çok maddi kazanımlar ve terfi imkânları ile tatmin oldukları söylenebilir.

Şekil 4. Yol Diyagramı



4. SONUÇ

Bu çalışmada, İstanbul'da banka çalışanlarının mutluluk düzeyi üzerinde tüketim davranışlarının anlamlı etkisi olduğu gösterilmiştir. Deneyimsel alışveriş bankacıların mutluluklarına pozitif yönde etki etmektedir. Bu ilişkinin altında yatan sebeplerden biri deneyimsel tüketim davranışlarının bankacıların yoğun çalışma tempoları ve sektörün yıpratıcı şartlarını telafi edici etkisi olabilir. Özellikle bireylerin kendilerine ayırabildikleri sınırlı vakitlerinde yemek, sinema, spor gibi faaliyetlerle hayatlarını daha anlamlı ve çok yönlü hale getirme dürtüleri ile zihinsel yorgunluklarını telafi etmek için edindikleri hobileri bu ilişkiyi açıklayabilmektedir. Seyahat etme isteği ise banka çalışanlarının kültürel seviyelerini artırmalarına katkı sağlayacak bir unsur olarak görülebilir. Aynı şekilde sosyal ortamlarında deneyim amaçlı tüketimlerine ilişkin paylaşımda bulunma istekleri ve bu deneyimlere kendileriyle benzer profillere sahip diğer bireylerin de sahip olması onları bu türden tüketim yapmaya sevk etmektedir.

Analizin sonuçlarına göre çalışanların iş yaşamlarının mutlulukları üzerine olumlu etkisi olduğu görülmektedir. Ücret ve yan hakların yeterliliği, kariyer geliştirme yollarının açık olması, tatmin edici iş yapıyor olmaları, iş-özel hayat dengeleri, işte inisiyatif alabilme ve iş kaybetme korkusu yaşamamaları banka çalışanlarını mutlu eden faktörler olarak karşımıza çıkmaktadır. Mutlu çalışanların işverene daha bağlı oldukları ve kendi işleri gibi benimseyerek uzun süreli çalıştıkları sonucu çıkarılabilir. Bu araştırma kapsamında, çalışanlarının mutluluğuna önem veren işverenlere verilebilecek tavsiyelerden bazıları çalışanların özel ve çalışma hayatları arasındaki dengeyi koruyabilmeleri adına fazla mesai zorunluluklarını kaldırma, mesai saatleri dışında çalışanlara iş hayatını hatırlatacak aksiyonlardan kaçınma, çalışanların insani ihtiyaçları için uzaktan çalışma, kolaylıkla alabilecekleri izin veya esnek çalışma saati imkanları sağlamak olabilir. Ayrıca İstanbul'da bankacıların ekseriyetle ücret ve yan haklarından duydukları tatminin onları mutlu kıldığından hareketle, düşük ücret ve çıplak maaş uygulamalarının geride bırakılarak çalışanlara değerli olduklarını hissettirecek sağlık ve eğitim imkanları, indirim ve kampanyalar, prim ve bonus uygulamaları, performansla dayalı ücret modeli uygulamaları geliştirilebilir.

Söz konusu çalışma, tüketim talebinden üretim faaliyetine giden ekonomik döngünün yapıtaşı olan işgücüne ilişkin bir modelleme sunmaktadır. İstanbul'da bankacılık sektörü çalışanlarının tüketime olan talepleri ile bu taleplerin karşılanması sürecinde üretim faktörü olarak yer almalarının kendi yaşam memnuniyetlerine etkisi incelenmiştir. Aslında ekonomik aktivitenin hem (üretici olarak) kaynağı hem (tüketici olarak) hedefi olan banka çalışanlarının rasyonel iktisadi birey olmaları varsayımı altında kurulan sistem, onların insani yönlerini görmezden gelmektedir. Bu araştırma, deneyimsel harcama ve çalışma şartlarının mutluluk düzeyine etkisini iki ayrı analizle incelemek yerine, alan yazına iki boyutlu bir model kazandırarak klasik regresyon analizinin zorluk ve aksaklıklarını bertaraf etmektedir. Araştırma yaklaşımı, tasarımı ve ulaştığı bulgularla, toplumların mutluluk ekonomisi üzerine eğilerek bireylerin mutluluğunun sosyo-ekonomik kalkınmaya dönüştürülmesi için çabalamasına katkı sağlayacak nitelikte bir çalışmadır.

Bu araştırma kısıtlarından biri bankacılık sektörü üzerinde yapılmış olmasıdır. Diğer bir kısıt da evrenini yalnızca İstanbul'daki ticari bankalarda çalışan bireylerin oluşturmasıdır. Veri toplama işleminin Türkiye çapında banka çalışanlarından gerçekleştirilmesi daha genele uyarlanabilir sonuçlar verecektir. Araştırmacıların örneklem büyüklüğünü arttırması, modele daha fazla değişken dâhil ederek daha detaylı bir analiz gerçekleştirmelerine de imkân tanıyacaktır. Ayrıca bu analizde en büyük etkiye sahip olarak tespit edilen değişkenlerin detaylı irdelenmesi, insan kaynakları uygulamalarının geliştirilmesi ve devlet tarafından çalışan haklarının yeniden düzenlenmesine ve böylece mutluluk ekonomisine geçişe katkı sağlayacaktır.

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Bosna Hersek'in Avrupa Birliğine Üyeliğinin Ulusal Güvenlik Denklemi Üzerindeki Etkileri

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Özet: 2016 yılından itibaren Avrupa Birliğinin İstikrar ve Ortaklık Süreci kapsamında birliğe üyelik başvurusu değerlendirmeye alınan Bosna Hersek çok yönlü bir dış politika sürecine girmiştir. Bu süreçte ulusal ve bölgesel olarak tüm diğer dinamiklerin dışında güvenlik perspektifini de önceleyen ülke için bu durum dış politikasında en önemli girişimlerden biri olmuştur. 1990'lı yılların ortasına kadar uzun bir çatışma tarihi olan ülke 1995 Dayton Anlaşması sonrası var olan anayasal yapının karmaşıklığı ile içeriğinden dolayı istikrarı ve barışı önceleyen bir ihtiyaç içinde olmuştur. Bosna Hersek bugün ile gelecekte Avrupa Birliği ile olan ilişkilerinde güvenlik ve istikrarı önceleyen bir ilişki kurmuştur. Bu kapsamda birliğin resmi üyesi olabilmek için yoğun bir politika izlemektedir. Çalışmada analitik yöntem ile Bosna Hersek'in Avrupa Birliğine üyelik süreci ve politikaları ele alınacaktır. Bu kapsamda önce Birliği'nin İstikrar ve Ortaklık Süreci ele alınacaktır. Daha sonrasında ise Bosna Hersek'in bu süreç içindeki güvenlik ve barış ihtiyaçları kapsamında başvurusu değerlendirilecektir. Çalışmada amaç Bosna Hersek'in güvenlik denklemi çerçevesinde izlediği politikanın temel hedeflerinin tespit edilmesi sonrasında Avrupa Birliği ile olan sürecin uyumu ve örtüşmesinin test edilmesidir.

Anahtar Kelimeler: Bosna Hersek, Avrupa Birliği, Güvenlik, İstikrar ve Ortaklık Süreci, Barış ve güvenlik.

The Effects of Bosnia and Herzegovina's European Union Membership on the National Security Equation

Abstract: Since 2016, Bosnia and Herzegovina, whose membership application has been evaluated within the scope of the Stabilization and Association Process of the European Union, has entered a multi-faceted foreign policy process. In this process, this situation has been one of the most important initiatives in its foreign policy for the country, which prioritized the security perspective apart from all other national and regional dynamics. The country, which had a long history of conflict until the mid-1990s, was in a need that prioritized stability and peace due to the complexity and content of the constitutional structure that existed after the 1995 Dayton Agreement. Bosnia and Herzegovina has established a relationship that prioritizes security and stability in its relations with the European Union today and in the future. In this context, it follows an intense policy in order to become an official member of the union. In the study, the European Union membership process and policies of Bosnia and Herzegovina will be discussed with the analytical method. In this context, the Stability and Association Process of the Union will be discussed first. Afterwards, Bosnia and Herzegovina's application will be evaluated within the scope of security and peace needs in this process. The aim of the study is to test the compatibility and overlap of the process with the European Union after determining the main objectives of the policy followed by Bosnia and Herzegovina within the framework of the security equation.

Key Words: Bosnia and Herzegovina, European Union, Security, Stabilization and Association Process, Peace and security.

1.GİRİŞ

Güvenlik Türk Dil Kurumu sözlüğüne göre “Toplum yaşamında yasal düzenin aksamadan yürütülmesi ve kişilerin korkusuzca yaşayabilme durumu” olarak tanımlanmaktadır (TDK). Her bireyin, toplumun ve devletin güvenlik ihtiyacı ve arayışı söz konusudur. Bu durum beraberinde güvenlik ile ilgili arayışların ve çözümlerin de bulunmasını beraberinde getirmektedir. Birey düzeyinde var olan ve ihtiyaç duyulan korkudan kaçınma durumu devletler düzeyinde de çeşitli bakış açılarının geliştirilmesini ortaya çıkarmıştır.

Uluslararası ilişkilerde güvenlik devletler için de en önemli ihtiyaçlardan biri olarak görülmektedir. Literatürde güvenlik konusunda iki yaklaşım söz konusudur. Hobbesçu yaklaşım şiddet eğiliminin doğal ve ortadan kaldırılması mümkün olmayan bir durum olduğunu belirtirken, Kantçı yaklaşım şiddet ile çatışmanın sona erdirilmesinin mümkün olduğunu savunmaktadır (Yıldırım, 2020: s.1700). Dolayısı ile Uluslararası ilişkilerde devletler bu iki bakış açısı çerçevesinde oluşturulan teoriler çerçevesinde dış ve iç politikalarını oluşturmaktadır.

Uluslararası ilişkiler literatüründeki bu iyimser ve karamsar yaklaşımlar temelde dünya siyasetindeki yaşanan gelişmelerin ve şartların etkisi ile şekillenmiştir. Milletler Cemiyeti döneminde Kantçı, Soğuk Savaş döneminde Hobbesçu yaklaşım ağırlık kazanırken, Soğuk Savaşın bitiminin ardından yeniden Kantçı yaklaşım ön plana çıkmıştır. Küreselleşme ile birlikte insanların ve toplumların geçişkenliği hızla artarken güvenlik unsurunun yapısal olarak gündemden hiç düşmediği görülmektedir. Bu durum aslında dünya genelinde belirsizlik ve

karmaşanın devam etmesinden kaynaklanmaktadır. Bu nedenle devletler gerek ulusal gerekse uluslararası düzeyde güvenlik ihtiyacı arayışını devam ettirmektedir. Bu süreçte uluslararası hukuk normları, işbirliğini güçlendirmeye yönelik örgütlenmeler, değerler ile demokratik gelişmelerin artması, durumu azaltsa bile devletlerin güvenlik ihtiyacı ile arayışını ortadan kaldırmaya yetmemiştir (Baylis, 2008: s.84).

Tüm bu tartışmalar kapsamında güvenliğin devletlerin hayatında önemli bir rol oynadığı görülmektedir. Bir ülkenin değişen koşullara göre güvenliğinin sınırlarını belirlemek zor olsa da dar anlamda var olma ve anavatanın savunulması, geniş anlamda ise çatışma ile istikrarsızlığın önlenmesi ön plandadır. Faruk Sönmezoğlu'na göre özellikle 1991 sonrası globalleşen dünyada ülkeler birbirine bir bütün olarak ekonomik sistemle bağımlıdır ve bir ülkenin güvenlik sorunu sadece askeri/stratejik değil geniş bir perspektiften değerlendirilmelidir (Sönmezoğlu,2000: s. 255- 256).

Güvenlik kavramının metodolojik olarak analizinde 1950 yılında John H. Herz'in yazdığı "Politik Realizm" ve "Politik İdealizm" kitapları önemli bir tanımı ortaya koymuştur: Güvenlik ikilemi. Herz tarafından "Güvenlik ikilemi" olarak tanımlanan bu olgu güvenlik kavramı ile ilgili yaşanan durumu ortaya koyan bir çerçeve de sunmuştur. Bu kapsamda Güvenlik ikilemi; bir devletin savunma amaçlı askeri yapılanması ve faaliyetleri diğer devletler açısından potansiyel veya fiiliyatta saldırganlık olarak görülmesidir. Böylece diğer devletler de askeri olarak faaliyetler içine girmektedir. Bu bağlamda devletlerin özellikle güvenlik amaçlı olarak savunma faaliyetlerinde bulunması diğer devletler ile yapılar tarafından saldırganlık olarak görülmektedir (diplomasi.net, 2022).

Güvenliğin çok boyutlu yapısı içinde maddi ve soyut algılamalar güvenlik ve dış politikada devletler için zorlayıcı bir durumdur. Bu kapsamda tespitler ve atılacak adımları belirlemek devletler için bir ikilem yaratmaktadır. Güvenlik ikilemi güvenlik hedeflerinin belirlenmesinde devletlerin dış ve iç politika amaçlarını oluşturmada yaşadıkları en önemli süreçlerin başında gelmektedir (Erhan, 2002: s.58).

Temelde güvenlik kavramının Soğuk Savaş dönemi zirve noktasına çıkan realist durumu yansıttığı söylenebilir. Bu kavramın devlet merkezli olarak tek ve bütüncül bakış açısı ile ortaya konduğu bu dönem sonrasında yapısal olarak olumsuz algılanması devam etmiştir. Ali Bilgiç'e göre Güvenlik ikilemi yaratan bu durum devletlerin karar alma mekanizmasındaki farklılıkları göz ardı etmekte ve savaş ile çatışmayı önlemektedir (Bilgiç, 2011: s.125). Devletler, sistemsel olarak güvenlik ikilemi ile kimliklerini ve politikalarını oluşturmaktadır. Bu durum ortak olarak devletler sisteminde norm, çıkar ve kimlik oluşturulması ile değişim gösterebilir ve aşılabılır (Balci ve Deniz, 2019: s.620).

Her halükarda devletler açısından tartışmaları da beraberinde getiren güvenlik ihtiyacı ve arayışı globalleşen dünyada varlığını korumaya devam etmektedir. Uluslararası ilişkilerde devletler koşulların gerektirdiği durumlarda başta güvenlik olmak üzere ekonomik, siyasi, sosyal, kültürel birçok konuda ittifaklar yapmaktadır. Özellikle güvenlik ikilemi içindeki devletler bu kapsamda çeşitli ittifaklara girebilmektedir. Mehmet Gönülbol'a göre devletler özdeş çıkar için yani hedef ve amaçları bir olduğu için ittifak kurabilmektedir. Bu ittifakta bir tarafın hedefi diğer tarafın da hedeflerini oluşturmaktadır. Tabii bu ittifak türünde devletlerarasında karşılıklı ve simetrik bir ilişki her zaman olmayabilir. Bunun dışında Gönülbol'a göre tamamlayıcı olarak devletlerin belli konularda politikalarının sürdürülmesine yardımcı olma durumu ile oluşturulan ittifak türü de vardır. Gönülbol'a göre ideolojik amaçlı ittifaklarda ise doğası gereği moral ilkeler daha ön plandadır (Gönülbol,1993: s. 87).

Devletler güvenlik ikilemi durumu karşısında çeşitli yöntemler ile baş etmeye çalışabilir. Bunun için en önemli yöntem savunma sistemleri ile askeri yapılarını geliştirmek ve kuvvetlendirmektir. Burada devletin yeterli ekonomik ve teknolojik araçlara sahip olması gerekmektedir. Bu araçlara yeterli düzeyde sahip olmayan devletler ise savaş olmak üzere birçok durumda kendisini güvende görmemektedir. Temel de dünyada birçok devlet kendi kendine yeterli durumda olmadığı için ittifak ve işbirliği mekanizmalarını kullanarak güvenliğini oluşturmaya çalışmaktadır. Devletler bölgesel veya uluslararası ittifak ve işbirliği ile etkili bir biçimde güvenlik ihtiyacı konusunda kendilerini korumaya çalışmaktadır. Tabii olarak bu ittifak ve işbirliklerinin başarısı üyelerin yakın işbirliği ile sağlanmaktadır (Özcan, 2013, TUIÇ).

Devletlerin ittifak ve işbirliği çerçevesinde güvenlik başta olmak üzere yaptığı birçok ihtiyaçları için bir araya geldiği durumlar dışında başta yöntemler de kullandıkları görülmektedir. Bu yöntemlerin en başta gelenlerinden diğeri ise bütünleşme ve birleşme yöntemidir. Sistemde var olan egemen devletler egemenliklerini aşamalı olarak devrederek, evrensel bir üst yapı oluşturma girişiminde bulunmaktadır. Bu bütünleşme yönteminde kısmi olarak da bölgesel düzeyde bir araya gelmek mümkündür. Bütünleşme yönteminde önemli olan işbirliği içinde ortak çıkarlar ve ihtiyaçlar için bir araya gelmektir (Şahin, 2018: s.92).

Bütünleşme yönteminde Avrupa Bütünleşmesi bu anlamda en iyi örnek olmuş birliktir. AB (Avrupa Birliği) II. Dünya Savaşı sonrasında üye ülkeler için politik, ekonomik, sosyo kültürel ve askeri olarak çatışma sonrası oluşturulmuş örnek bir ulus üstü yapılanma olmuştur. Bu birlik en başta ekonomik araçları kullanarak devletler arasında işbirliğini geliştirmeyi amaçlamıştır. Böylece kıta Avrupası devletleri aralarında siyasi ve askeri yeni çatışmaların oluşmasını da engellemek istemişlerdir (Urgancı, 2014: TUİÇ).

Avrupa bütünleşmesi bu amaçlarla uzun süren bir bütünleşme hareketi olmuştur. Bütünleşmenin ortaya konan norm, kural ve değerler çerçevesinde olduğu görülmektedir. AB'nin bütünleşme projesinin bir değerler silsilesi ile farklı devletlerin uzun tarihi süreçlerin etkisi içinde bir araya gelmesi ile temelinin oluşması söz konusudur. Bu kapsamda bu değerlerin harmanlandığı ve ortak değerler oluşturulduğu görülmektedir (Akşemsettinoglu, 2011: s.2).

Her halükarda devletler temel güvenlik ihtiyaçları başta olmak üzere birçok nedenden dolayı bir araya gelmekte, ittifaklar kurmakta hatta bütünleşme politikaları izlemektedir. Bu politikalar geçmişten günümüze hep var olagelmış, Soğuk Savaş ile birlikte ise gittikçe hız kazanmıştır. Dünya genelinde bütünleşme hareketleri için Avrupa kıtası da örnek teşkil edecek bir model oluşturmuş ve AB'nin kurulması gerçekleşmiştir. Bu birlik Soğuk Savaş döneminden günümüze öncelikli olarak kıta içinde ve daha sonrasında ise dışında önemli bir merkez haline gelmiştir. Bu kapsamda Bosna Hersek'in de güvenlik başta olmak üzere diğer ihtiyaçları için yöneldiği AB'nin Balkanlar politikasına bakıp, daha sonra bu ülke ile ilişkilerini ele almak faydalı olacaktır.

2. AB'NİN BALKANLAR POLİTİKASI

Dünyada devletlerarasında bütünleşme amaçlı olarak gerçekleştirilen en önemli oluşumlardan biri olan AB'nin 1950'li yıllardan itibaren temelinin atılması söz konusudur. II. Dünya Savaşı'nın yarattığı ağır güvensizlik, askeri ve ekonomik yıkım sonrasında Avrupa devletlerinin bir araya gelerek oluşturduğu yapılar günümüze kadar etkili ve örnek oluşturabilecek bir bütünleşmeyi beraberinde getirmiştir.

İlk olarak Kıta Avrupası ülkeleri 1951'de Avrupa Kömür Çelik Topluluğu adı ile bir araya gelerek ekonomik amaçlı bir ittifak ve örgüt kurmuşlardır. Bu topluluk 1957 yılında Roma Anlaşmasıyla Avrupa Ekonomik Topluluğu adını almıştır. 1965 yılında Füzyon (Birleşme) Anlaşması ile Avrupa Toplulukları adının alınması sonrasında 1968 yılında Gümrük Birliğine geçilmiştir. İlk genişleme dalgasına da 1973'te başlayan topluluk, 1987 yılında Avrupa Tek Senedi ile geniş boyutlu değişikliğe gitmiştir (AB Başkanlığı, 2021).

1992 yılında Maastrich Anlaşması ile AB bütünleşme hareketleri çerçevesinde birbirinden farklı ekonomik ve sosyal ülkelerin makro çerçevede bir araya gelmesi söz konusu olmuştur. AB adını alan birlik, ortak amaçlar ile serbest piyasa ekonomisinin üst seviyede tespit edilmesini ilke olarak benimsemiştir. AB kavramı birliğin hedef ve politikaları ile aşamalı olarak Ekonomik ve Parasal Birlik, Avrupa Vatandaşlığı ile Ortak Güvenlik ve Dış Politika başlıklarında bir bütün olarak ortaya konulmuştur. Ekonomik ve siyasal olarak üye ülkeler arasında bütünleşme ile Avrupa toplumları arasında yakın işbirliği olanakları yaratılarak, barış ve özgürlükler içselleştirilmeye çalışılmıştır (Kıraç ve İlhan, 2010: s.194- 199).

AB'nin 22 Haziran 1993 tarihinde yapılan Kopenhag Zirvesi'nde Doğu Avrupa ülkelerinin de genişlemeye alınacağı kabul edilmiştir. Bu çerçevede AB'ye aday ülkeler için insan ve azınlıkların haklarının korunması, hukukun üstünlüğü, piyasa ekonomisi, rekabetçi ekonomi modeli gibi siyasi ve ekonomik kriterler getirilmiştir. AB'ye aday olacak ülkeler yeni genişleme dalgasına bu kriterleri karşılamak koşulu ile girebilecektir. Böylece yeni üyelerinde entegrasyon ve bütünleşmeden dışlanmadan AB değerlerini benimsemesi sağlanmış olacaktır. AB de aynı şekilde bu yol ile kendi değerlerini korumuş ve yaygınlaştırmış olarak kazançlı çıkacaktır (AB Başkanlığı, 2021).

AB, Avrupa'da çatışmayı önleyici yapısı ile hem bölgesel düzeyde barışa önemli ölçüde katkıda bulunmuş, hem de söz konusu kıtanın küresel etki geleneğinden hareketle global barışa önemli katkılar sağlamıştır. Avrupa bütünleşme sürecinin sonunda üye devletlerarasında barışa yapılan katkı kıtada çatışmaları sona erdirirken, bunun dışında birliğin insani, demokratik, ekonomik birçok alanda devletler açısından katkısı söz konusu olmuştur (Mor, 2010: s.533).

AB'nin 1990'lı yılların başından itibaren geçirdiği değişim ve dönüşüm ile birlikte bütün kıta genelinde başlattığı genişleme çalışmaları Balkanlarda da etkisini göstermeye başlamıştır. Dönem başı Balkanlar için aşağıda ele alınacağı gibi Yugoslavya'nın dağılmasını ve Bosna Savaşı'nın başlamasını beraberinde getirirse de bölge AB için bu dönemde daha da önemli hale gelmiştir.

Balkanlar hinterlandı geçmişte ve günümüzde Avrupa kıtasının güvenliği ile doğrudan ilintili bir coğrafyadır. Bu alan Avrupa'ya doğudan gelen ve gelecek olan hareketleri engelleme ve karşılama konumunda bulunmaktadır. Bunun dışında karışık yapısı nedeni ile yaşanan ve yaşanabilecek kriz ile istikrarsızlıklar Avrupa'ya doğrudan etki etme kapasitesine sahiptir. Ekonomik olarak ise zengin ve gelişmiş ekonomileri olmasa bile yer altı ve yer üstü değerli kaynakları vardır. Böylece bütün olarak Balkan coğrafyası Avrupa'nın güvenliğinde, ekonomisinde, geleceğinde ve bütünleşme gücünde önemli bir yere sahiptir (Gökçen,2007: s.115).

AB bölgede ekonomik özellikle güvenlik endişeleri nedeniyle Balkan bölgesini kendi bünyesine dahil etme ihtiyacında olmuştur. Bölgede AB'nin varlığı ile çatışmaların sona erdirilmesi ve ekonomik refah seviyesinin yükseltilmesi amaçlanmış, ayrıca Avrupalı devletlerin Balkanlar'ın transit konumundan yararlanarak pazar piyasasını kurma isteği de bölgeye olan ilgiyi arttırmıştır (Armişen ve Tatar, 2022: s. 216).

Rusya'nın da jeopolitik olarak Balkan ülkelerini tarihi anlamda sıcak denizlere açılması için bir kapı olarak görmesi söz konusudur. Moskova bölgeye ekonomik açıdan büyük yatırımlar yapmış ayrıca askeri üsler kurmaya çalışmıştır. 2008 yılında AB'yi derinden sarsan ekonomik kriz döneminde ve bu sürecin hemen ardından başta Yunanistan olmak üzere birçok ülkenin krize sürüklenmesi Rusya'nın bölgede elini güçlendirmesine sebep olmuştur. Ekonomik olarak toparlanmaya başlayan AB de 2000 sonrası Rusya'nın bölgedeki etkisini azaltmak, güvenliği sağlamak, jeopolitik, kültürel ve ekonomik anlamda bölgede daha önemli rol oynamak için politikalarını geliştirmektedir (Alan, 2018).

Balkan ülkelerinin de AB çatısı altında bulunmaları etrafında bulunan tüm bölgelere ekonomik, kültürel ve siyasi ilişkilerde pozitif kazanım olarak görülmektedir. Balkanlar, AB'nin genişleme perspektifinde tamamlanması gerekli parçalarından biridir. Balkan coğrafyasında bulunan Karadağ, Bosna Hersek, Makedonya, Arnavutluk, Sırbistan ülkelerinin ekonomik, siyasi ve hukuki sisteme sahip olan AB çatısı içerisinde bulunmaları önemlidir. AB'nin genişleme sürecinde Balkanların da olması hem Birlik hem de bölge ülkeleri için uzlaşma ve uyum süreçlerinin daha kolay olmasını da beraberinde getirecektir (Özgöker ve Batı, 2017: s.35).

AB yeni döneminde Ortak Güvenlik ve Dış Politikası Yugoslavya savaşının başlaması ile birlikte test edilmiştir. Yugoslavya savaşı yarattığı göç akınları, bölgenin birçok alanına yayılma riski, ülkelerin toprak bütünlüğünün korunması ve kendi kaderini tayin hakkına dayanan ilkelerin çokça vurgulanması gibi birçok açıdan AB'nin de zor bir döneme girmesine neden olmuştur. Balkanlarda yaşanan güvensizlik ve istikrarsızlık Avrupa kıtasının ve Birliğin bu bölgeyle olan bütünlüğü açısından ciddi bir güvenlik ve kriz ortamını da beraberinde getirmiştir (Demirtaş,2018: s.190).

AB Balkanlar politikası; Arnavutluk, Kuzey Makedonya, Karadağ, Bosna-Hersek, Sırbistan ve Kosova üzerinden değerlendirilmektedir. Bu ülkelerin coğrafi konumu göz önünde bulundurulduğunda güvenlik, istikrar, geçiş yolları ve ticaret açısından Avrupa için geçmişten günümüze önemli bir Balkanlar'ın büyük önem arz ettiği anlaşılmaktadır. Etnik çeşitliliği fazla olan bölge, Yugoslavya'nın dağılmasıyla birlikte etkilerinin günümüzde dahi devam ettiği etnik çatışmalara, bağımsızlık mücadelelerine ve tüm bunların neticesinde azınlık sorunlarına sahiptir (Bal, 2022).

AB, Balkan ülkeleri ile siyasi, ekonomik ve kültürel mekanizmalar geliştirerek Avrupalı değerlerin, demokrasi unsurunun benimsenmesini de amaçlamıştır. Böylelikle demokratikleşen Balkan ülkelerinden AB'ye tehdit gelmeyerek bölgeden AB'ye gerçekleşen düzensiz göçünde engellenmesini sağlayacaktır. Kısacası Balkanların transit konumuna baktığımızda AB açısından bir takım avantaj ve dezavantajlar getirecektir. Özellikle Avrupalı üye devletler için yaratacağı pazar ekonomisi ile kazan-kazan anlayışı doğacaktır. Ekonomik açıdan gelen fayda AB'nin yanı sıra Balkan ülkelerinin ekonomik, sosyal ve huzur ortamının sağlanabilmesini mümkün kılacaktır. Eğer bu durum gerçekleşmezse olası senaryoda enerji güvenliği kapsamı doğrultusunun yaratacağı kırılganlık AB'nin düzenli veya düzensiz göçlerle çatışma ortamının oluşmasına sebebiyet verecektir. Ortaya çıkacak göç hareketleri ekonomik anlamda büyük makasları oluşturduğundan ve kültürlerin çatışması anlamını taşıma ihtimalini barındırdığından Balkan genişlemesi AB nezdinde diğer genişlemelerden farklı olmuştur (Armişen ve Tatar, 2022:s.227- 228).

AB'nin bu çerçevede Balkanlar politikasına yönelik ilk yaklaşımı "Royaumont Süreci"dir. 13 Aralık 1995 tarihinde Fransa'nın Royaumont kasabasında bir araya gelen yirmi yedi ülke, "Güney-Doğu Avrupa'da İstikrar ve İyi Komşuluk İlişkileri Süreci" Deklarasyonunu kabul etmişlerdir. Royaumont Süreci'ne katılan taraflar eski Yugoslavya'yı oluşturan Bosna-Hersek, Sırbistan-Karadağ, Makedonya, Hırvatistan, Slovenya ile bu ülkelere komşu olan Arnavutluk, Macaristan, Bulgaristan ve Romanya'nın yanı sıra Türkiye, AB'ye üye ülkeler, Rusya ve ABD olmuştur (Batı, 2017: s.6).

Royaumont Süreci sonrası Bosna'da savaşın bitmesine ile imzalanan Dayton Barış Anlaşmasının uygulanması için 15-16 Şubat 1996 tarihlerinde AB Konseyi'nin daveti ile AB Komisyonu, Balkan ülkelerine yönelik kapsamlı bir rapor hazırlanmıştır. Bu raporda Komisyon Balkanlara yönelik olarak 'Bölgesel Yaklaşım' adlı yeni bir politika önermiştir (Kavalalı, 2005:145). Komisyonun önerdiği Bölgesel yaklaşım politikası Balkan ülkelerine ticari, ekonomik ve mali işbirliği önerileri içermiştir. Bu işbirliği Balkan ülkelerinin öncelikli olarak ekonomik, daha sonrasında ise siyasi olarak istikrarına yönelik bir yaklaşımdır. Bu yaklaşım ayrıca bu bölgedeki mültecilerin durumu, Dayton Anlaşmasının uygulanması, insan ve azınlık hakları ile iyi komşuluk ilişkilerinin sağlanması gibi kriterleri de içermiştir (Erkmen, 2019: s.7).

Bölgesel Yaklaşım politikası AB'nin Balkanlara yönelik olarak değerlerini ve normlarını belirlediği ilk geniş kapsamlı politika olmuştur. Bölgesel Yaklaşım kapsamında 1997 yılında 'Koşulluluk' stratejisi ile bölgede dönüşümün sağlanmasında AB değerleri ve normlarını temel noktalar olarak belirlenmiştir. Bu çerçevede ilk etapta Arnavutluk, Bosna-Hersek ve Makedonya'nın yeniden yapılanmasında ekonomik yardım programı yürürlüğe girmiştir. Bu program sayılan ülkelerin rehabilitasyonu ve yeniden inşası için bir Avrupa Topluluğu girişimidir. Temmuz 1996'da oluşturulan bu program, Dayton Anlaşmalarını ve 14 Aralık 1995'te Paris'te imzalanan barış anlaşmalarını güçlendirmeyi amaçlamıştır. Koşulluluk stratejisi AB'nin Balkanlarda demokrasi, insan ve azınlık hakları, pazar ekonomisi gibi alanlarda geliştirilmesi ve takdir edilmesini de planlamıştır (Çiftçi, 2018: s. 58).

Balkanlar'ın tekrar çatışmalar ve diğer istikrarsızlık unsurları ile tehdit yaratan bir bölge olmaması için AB bölge ülkelerine üyelik vaadinde de bulunmuştur. 1999 yılında başlatılan "İstikrar ve Ortaklık Süreci ", AB'nin Balkanlar'a ilişkin politikasının bu kapsamda diğer temel çerçevesini oluşturmuştur. İstikrar ve Ortaklık Süreci'nin dayandığı temel unsurlar bölgede işbirliği yapılması, demokratikleşme, sivil toplumun gelişimi ve devlet kurumlarının oluşturulması konuları olmuştur (Agca, 2010: s.49).

İstikrar ve Ortaklık Süreci ile bölge ülkelerinin istikrarı ve ekonomik kalkınması için uzun dönemli stratejiler belirlemiştir. Böylece AB açısından Balkan ülkelerini Avrupa'nın değerlerine ve kurumsal yapısına yaklaştırmak da mümkün olacaktır. Yani bu süreç ile birlikte AB Balkan ülkelerinde barış ortamının sağlanması, demokrasinin benimsenmesi, insan haklarına gereken önemin verilmesi ve ekonomik kalkınmanın hızlandırılması çabalarını destekleyerek, bölgede istikrarın sağlanmasına destek olmayı amaçlamaktadır (Özgöker ve Batı, 2017: s.33).

AB'nin Balkanlara yönelik İstikrar ve Ortaklık Süreci 3 aşamadan oluşturulmuştur; İstikrar ve Ortaklık Anlaşması, tek taraflı dış ticaret ödünü ve mali yardım. Bu süreçlerin her biri aynı zamanda Balkan ülkelerinin belirlenen kriterleri karşılayıp karşılamadığının test edileceği aşamalar olarak planlanmıştır. Her devletin kendi özel koşulları çerçevesinde ilerleyecek olan süreç öncelikli olarak bölgede ekonomik ve mali yakınlaşmanın sağlanması ile başlayacaktır. Sonrasın da ise bölgesel işbirliğinin gelişmesi ile birlikte kurumsallaşma sağlanacaktır. İnsan ve azınlık hakları, hukukun üstünlüğü, iyi komşuluk ilişkileri gibi konularda yeterli seviyeye ulaşma ile süreç adaylık anlaşmalarının imzalanması ile devam edecektir (Çiftçi, 2018: s.59).

AB'nin Balkanlar politikası yukarıda ele alındığı gibi çeşitli aşamalardan geçmiştir. AB 1990'lardaki savaş döneminde başarısız aktörlük sürecinin ardından 2000'lerin başında bölge ülkelerine üyelik perspektifi vererek değişim sürecini başlatmıştır. Burada da bölge ülkeleri için demokrasi teşviki yöntemlerinden siyasi koşulluluğu temel almıştır (Demirtaş, 2018:205).

Yine bu kapsamda AB ile üyeliği için Balkan ülkeleri 20- 21 Haziran 2013'te Selanik'te bir araya gelmiştir. Bu zirvede Arnavutluk, Makedonya, Sırbistan, Karadağ, Hırvatistan ve Bosna Hersek'in Avrupa kıtası geneli ile siyasi ve ekonomik ilişkilerinin güçlendirilmesi için görüş birliğine varılmıştır. Selanik Zirvesi'nde Balkan ülkelerinin somut projelerle güçlendirilmesi kararına da varılmıştır (Gökçen, 2007:s.120- 121). Böylece Selanik Zirvesi'nde bölge ülkelerinin Kopenhag kriterleri çerçevesinde AB üyeliği koşulu kendilerine aktarılmış ve Balkan Avrupa Bütünleşmesi Süreci denilen yeni bir perspektif başlamıştır (Uzgel, 2013:s. 692).

Selanik Zirvesi sonrası ortaya koyulan Selanik Gündemi ile devletlerin üyelik yolunda izlemesi gereken yol haritası çizilmiştir. Selanik Zirvesi kararlarına bakıldığında AB'nin Balkan ülkelerini ekonomik, mali ve teknik destek vererek bu ülkelerin Birliğe üye olmasını hedeflemektedir. Bu gelişmeler ışığında Selanik Zirvesi'nde, "Balkanlar'ın geleceği AB ile birliktedir" ifadesi ile katılan ülkeler için üyelik hedefi ortaya konulmuştur. İstikrar ve Ortaklık Sürecinin ortaklık antlaşmaları ile Kopenhag kriterlerini kapsamı dışında bölgeye özel olarak Uluslararası Ceza Mahkemesine üyelikte şart koşulmuştur (Erkmen, 2019: s.8; Çiftçi, 2018: s.60)

Avrupa Komisyonu, 2014 yılında ise genişleme politikasını, temel konuların öncelikle ele alınması olarak belirlemiştir. Bu kapsamda hukukun üstünlüğüne öncelik veren yeni yaklaşım kapsamında Balkanlardaki gelişmeleri yakından izleyecek, AB'nin Balkanlara genişleme sürecini teşvik edecektir. Bütünleşmenin ve genişlemenin derinleşmesi birbirine bağlıdır ve AB'nin geleceğinin nasıl olması gerektiği ele alınmadan genişleme politikasının geleceği belirlenmemektedir. Yeni üye ülkelerin AB ile değerler ve ilkeler temelinde bütünleşebilmesi için genişleme politikalarının yanı sıra AB içerisinde gerekli siyasi ve kurumsal çerçevenin oluşturulması gerekmektedir. Üye ülkelerin farklı ihtiyaçlarına cevap oluşturabilecek esnek ve çok katmanlı AB'nin oluşturulmasına ihtiyaç duyulmaktadır (Karluk, 2014).

AB'nin güvenliği Balkan ülkelerinin güvenliği ile iç içe görülmektedir. Bu bölgenin barış ve istikrarının sağlanması AB ile bütünleşme sürecinin bir parçası olarak görülmektedir. Bu ülkelerin AB'ye tam üye olması siyasi, kültürel, ekonomik olarak gelecek için de önem arz etmektedir. Ayrıca AB üyeliği Balkan ülkeleri arasındaki etnik ve kimlik sorunları ortak tarihsel ve kültürel paydalarla çatışma potansiyelinin ortadan kaldırılması için önemli bir çerçeve oluşturacaktır (Erkmen, 2019: s.9).

AB'nin geçmişten bugüne geçirdiği evreler göz önüne alındığında bölgesel olarak mali ve ekonomik politikalar üyelerinin gelişmişlik düzeyini arttırmıştır. Ulus üstü yapısı ile egemenlik devrinin de yapıldığı Birlik, dünyada nevi şahsına münhasır bir özellik göstermektedir. Balkan ülkelerinin de kriz ve savaş yaratan durumlarını aşmaları, ekonomik refah seviyelerini arttırmalarında AB çatısı altında bulunmaları önemli bir yol olarak görülmektedir. Bu nedenle yukarıda ele alındığı gibi AB, ittifaklaşma ve bütünleşme politikaları çerçevesinde Balkanları kendisi için her açıdan güvenli bir alan haline getirmek istemiştir. Bunun dışında ekonomik, siyasi, kültürel birçok alanda bu bölge özelinde kazancı yüksek olacaktır.

Bu kapsamda AB'nin Balkan ülkelerine yönelik başlattığı politikalar ve başta güvenlik olmak üzere diğer ihtiyaçları diğer Balkan ülkelerinde olduğu gibi Bosna Hersek için de söz konusudur. Bosna Hersek'in bölgede Yugoslavya'nın dağılması sonrasında içinde düştüğü durum geniş bir perspektif ile daha özel olmuştur. Özellikle Yugoslavya'nın dağılma süreci ve sonrasında ülkenin de güvenlik arayışı had safhaya ulaşmıştır. Diğer arayışları ile birlikte sıralamada güvenlik arayışı ve ihtiyacı diğer sebeplerle birlikte Bosna Hersek için de ittifaklaşma veya bütünleşme politikalarının kendisi açısından önemli hale gelmesine neden olmuştur. Bu nedenle bu ülkenin AB ile olan ilişkisine bakılması gerekmektedir.

3. AB'NİN BOSNA HERSEK POLİTİKASI VE GÜVENLİK

Bosna Hersek Balkanların kültürel, siyasi, ekonomik ve jeopolitik olarak karmaşık havzasında yer alan ülkelerden biridir. Yüzyıllardır Balkan hinterlanda uzun mücadelelerin alanlarından biri olmuş ülkenin geçirdiği süreçler sadece bu ülkeyi değil bölgesel ve küresel aktörleri de etkilemiştir.

“Küçük Yugoslavya” denilen ülkede etnik demografik yapının karışıklığı, ekonomik olarak az gelişmiş yapısı, Yugoslavya'da merkezîyetçi yapıdaki güç kaybı ve milliyetçilik ekseninde gelişen koşulların 1991 sonrası dağılmadan bu ülkenin de payını almasına neden olmuştur (Kenar, 2007: s.169-170). 1992- 1995 arası ülkede yaşanan savaş uluslararası güçlerin savaşın ortasından itibaren müdahalesi ile ancak bitirilmiş, zaten özellikle siyasi ve ekonomik durumu kırılgan olan ülkede kriz ve sorunlar aşılıma çalışılmıştır.

Bosna Hersek'in AB açısından Balkan politikasında en önemli yeri Ortak Dış Güvenlik ve savunma politikası çerçevesinde kriz üreten bir alan olmasıdır. Bu alan Avrupa'nın kendi coğrafyası üzerinde öncelikli olarak güvenlik alanı olarak değerlendirilmiştir. Özellikle Bosna savaşı sırasında kendi bölgesinde meydana gelen kriz AB açısından ilk uyarıcı olmuştur. Güvenlik algılamasının yanı sıra ekonomik araçlar ile bölgenin demokratikleşmesini sağlamak ve bu vasıta ile istikrar ile güvenliği sağlamak diğer amaç olmuştur. Sadece bu araç ile de çözüm bulmanın zor olacağı düşüncesi genel olarak Balkan'a yönelik ortak bir dış politika oluşturma da öncelikli hale gelmiştir (Kale, 2001: s.299- 302).

Ülkede 3.5 yıl süren savaş sonrası imzalanan Dayton Anlaşması ile ülkede Boşnak- Hırvat ve Sırp'ların kurucu unsur olarak kabul edildiği ve ülke yönetimine ortak olduğu bir yapı kurulmuştur. Bu kapsamda ülkede Boşnak ve Hırvatların birlikte kurduğu Federasyon ile Sırp Cumhuriyeti kurulmuştur. Üç kurucu halktan kaynaklanan yönetim, bu iki federe birim ile temsil edilmektedir. Bunun dışında ülkede ayrı bir Brcko Bölgesi bulunmaktadır. Boşnak Hırvat Federasyonu da kendi içinde on ayrı kantona bölünmüştür. Ülkede Devlet Başkanlığı üç ayrı halkın temsilcilerinden seçilen üç üyeli ve rotasyonlu bir biçimde seçilmektedir (TC Dışişleri Bakanlığı).

Dayton Barış Anlaşması ile entitelere geniş siyasi haklar verilmesi, ülkenin karşı karşıya kaldığı en büyük problemlerden biridir. Anlaşma ile federe birimlere verilen geniş yetkiler merkezi hükümetin yetkilerinin

aşınması hatta bazı noktalarda ortadan kalkması ile sonuçlanabilecek potansiyele sahiptir. Özellikle Sırp Cumhuriyetinin aşağıda ele alınacağı üzere bağımsızlık başta olmak üzere birçok konuda attığı adımlar merkezi yönetimin varlığını zayıflatmaktadır. Bosna Hersek merkezi hükümetinin dış politika ve dış ticaret dışında zayıflayan otoritesi ile kamu hizmetlerinin federe birimler arasında yarı yarıya paylaşılmış olması ülkenin geleceği konusunda endişeler oluşturmaktadır (Deniz, 2013).

1995 yılında imzalanan Dayton Anlaşmasının sivil yönlerinin uygulanmasından anlaşma sonrası oluşturulan OHR (Yüksek Temsilcilik Ofisi) yetkili kılınmıştır. Dayton Anlaşmasına göre Yüksek Temsilci ülkede “nihai otorite” olarak kabul edilmektedir. Yüksek temsilci aynı zamanda tarafların anlaşmazlıklarında tavsiye, yönlendirmelerini yapmak ve bunları kamuoyuyla paylaşmakla görevlendirilmiştir. Yeniden yapılanma kapsamında askeri olarak ise NATO (Kuzey Atlantik İttifak Paktı)’nın 1996 yılları ve sonrasında oluşturulan IFOR ile SFOR güçleri yerini 2004 yılında AB Gücü (EUFOR) olan Althea’ya bırakmıştır. 2012 yılında EUFOR’un Bosna Hersek’teki askeri varlığı 600 personelden oluşan bir kuvvete indirilmiştir. Söz konusu birlik hâlihazırda, Bosna Hersek Ordusunun eğitimi ve teşkilatlandırılması faaliyetleri üzerinde yoğunlaşmaktadır. Bosna Hersek’te 1995 sonrası AGİT (Avrupa Güvenlik ve İşbirliği Teşkilatı)’te demokratik bir devlet inşa sürecinde aktif rol oynamaktadır. AGİT oluşturulan Bosna Hersek Misiyonu ile ülkede eğitim, demokratikleşme, insan hakları, kamu yönetimi reformları ve seçim güvenliği alanlarında çalışmalar yapmaktadır (Semercioğlu, 2017: s.1348-1350, Kamil, 2017: s. 196-198). İnan Rüma’ya göre Bosna Hersek’in devlet yapısı tüm tartışmalar ile birlikte karmaşık, işlevsiz, etnisite temellidir. Rüma’ya göre ülkenin uluslararası himaye altında kurulduğu söylenebilir (Rüma, 2008: 248).

Oldukça karmaşık ve karar üretilmesi zor olan ülke içinde gelecek senaryoları uluslararası güçlerin ülkeden ayrılması halinde taraflar arasında yeniden savaşın patlak vermesi, Hırvat ve Sırp’ların ana ülkeleri ile zamanla birleşmesi veya merkezi hükümetin sağlıklı işlemediği bölünmüş, istikrarsız bir ülkenin ortaya çıkması ihtimalleridir (Güney, 1997: s.280- 281).

Bu kapsamda AB Bosna savaşının bitmesinin ardından bölgenin kendisi açısından güvenlik krizi oluşturan yapısı nedeni ile 1996 yılından başlayarak bölgeye yönelik yeni bir yaklaşım ortaya koymaya başlamıştır. Temelde Bosna Hersek için de savaşın ardından güvenlik ihtiyacı bu sürecin karşılıklı olarak ortaya çıkmasına neden olmuştur. Bu yaklaşım 1997 yılında AB Konseyinin kabul ettiği politik ve ekonomik açılım ile 1999 yılında İstikrar ve Ortaklık Süreci ile somut şekilde ortaya konmuştur. Bu anlaşmaların amacı Balkan ülkelerini AB’ye entegre edebilmek ve yaklaştırmak olarak belirlenmiştir (Kale, 2001: s.304- 305).

1992 yılında bağımsız olan Bosna Hersek’e Haziran 2013 Selanik Zirvesi’nde potansiyel aday ülke statüsü verilmiştir. Bosna Hersek ile AB arasında 2008 yılında İstikrar ve Ortaklık Anlaşması imzalanmış ve anlaşma 1 Haziran 2015 tarihinde yürürlüğe girmiştir. Bosna Hersek ile AB arasında imzalanıp yürürlüğe giren İstikrar ve Ortaklık Antlaşması’nda ülkenin demokratik ve hukukun üstünlüğünün güçlendirilmesi, istikrarının sağlanması, diyalog kanallarının geliştirilmesi, hukuksal düzenlemeler, Pazar ve serbest ticaret bölge ekonomisine geçiş gibi çerçeveler oluşturulmuştur (Kamil,2017: s. 208).

Bosna Hersek 15 Şubat 2016 tarihinde ise AB’ye üyelik başvurusunda bulunmuştur. AB Komisyonu bu başvuruyu hali hazırda bekletmektedir. 20 Eylül 2016’da AB Konseyi Komisyon’a Bosna Hersek’in üyelik başvurusu ile ilgili görüş hazırlamasını tevdi etmiştir. Komisyonun 2016 yılı İlerleme raporunda üyelik konusunda ülkede üyelik için koordinasyon mekanizmasının kurulmadığı ve AİHM (Avrupa İnsan Hakları Mahkemesi)’nin Sejdic-Finci Kararı’nın uygulanmaması önemli eksiklikler olarak belirtilmiştir. AB’nin 2019 yılı Genişleme Strateji Belgesi’nde ise ülkenin adaylığının ilanı için erken olduğu belirtilmiştir. Strateji Belgesinde ayrıca ülkenin adaylık yönünde ilerlemesi için kapsayıcı bir yol haritası önerilmiştir. Bosna Hersek - AB ilişkilerinin bütünleşme süreci açısından bir diğer önemli boyutu vize serbestisi süreci ile ilgili olmuştur. AB ile Bosna Hersek arasında Vize Kolaylığı ve Geri Kabul Anlaşması 1 Ocak 2008 tarihinde yürürlüğe girmiştir. Bosna Hersek Aralık 2010’dan itibaren ise vize serbestisinden yararlanmaya başlamıştır (AB BAŞKANLIĞI 2019; Barış, 2018: s.1142).

Bosna-Hersek’in AB üyelik başvurusunda bulunabilmesi için 2011 yılında AB tarafından ön şart kabul edilen ve İstikrar ve Ortaklık Anlaşması’nın yürürlüğe girebilmesinin koşulu olan dış ticarete devlet yardımlarını durdurulması ile nüfus sayımı kanunu çıkarılması gerçekleştirilmiştir (Kamil, 2017: s.209). Ancak diğer koşul olan Anayasası’nı AİHM’nin Sejdic-Finci Kararı¹ doğrultusunda değiştirmesi gereklidir. Bosna Hersek, bu konuda

¹AİHM Sejdic- Finci kararı kurucu halklar arasında sayılmadıkları için Bosna Hersek’li Yahudi ve Roman vatandaşların seçimlere aday olarak katılmalarına izin verilmediği için alınan karardır. AİHM 2009 yılında, başvuru sahiplerinin başkanlık seçime katılamamasını hak ihlali sayan karar almıştır. AB, Bosna Hersek’in seçim kanununda bu çerçevede değişiklik yapılmasını talep etmektedir (Kamil, 2017: s. 209).

gerekenleri yapmadığı için 2013 yılında katılım öncesi yardım aracı kapsamında alması öngörülen fonların önemli bir kısmını alamamıştır (Karluk, 2014: 7).

AB Komisyonu Bosna Hersek'in aday statüsü için birçok adım atmasını ve düzenleme yapmasını talep etmektedir. Bunlardan başlı talep edilenler kamu maliyesinin düzenlenmesi, işsizlik oranlarının gençler lehine düşürülmesi, yoksulluk ile mücadele edilmesi, enerji piyasasında iyileştirmeler yapılması, hukukun üstünlüğü, seçim ve siyasi parti yasalarının değiştirilmesi gibi AB standartların uygun düzenlemelerin yapılmasıdır. Ülkede siyasal istikrarsızlıkların önüne geçilmesi için bu adımlar mutlaka atılması gereken eşikler olarak görülmektedir (Bati, 2018).

Tüm bu gelişmelere rağmen 12 Haziran 2022'de AB Konseyi'nin ülkeye adaylık statüsü verilmesi teklifinde bulunduğu açıklaması sonrası AB'nin Genişlemeden Sorumlu Komisyon Üyesi Oliver Varhelyi, 12 Ekim 2022'de Bosna Hersek'e aday ülke statüsü verilmesi yönünde görüş bildirildiğini duyurmuştur. Bu amaçla AB Komisyonu ülke için belirlenen 14 temel önceliğin uygulanması hakkında rapor sunmaya davet edilmiştir. AB'nin Bosna Hersek'i yolsuzlukla mücadele, ifade ve basın özgürlüğü, yasal reformlar gibi konularda denetlemeye devam edeceğini belirten Varhelyi, "14 öncelik" olarak bilinen maddelerin uygulanmasının önemine vurgu yapmıştır. Bosna Hersek Devlet Başkanlık Konseyi Hırvat Üyesi Zeljko Komsic de AB'ye aday statüsü almasının Bosna Hersek'in güvenliğini ve egemenliğini güçlendireceğine dikkat çekerek, uygulamada herhangi bir özel prosedür ifade etmemekle birlikte, jeopolitik eğilimler göz önüne alındığında tam üyeliğe giden süreci hızlandırmanın gerekli olduğunu ifade etmiştir (Tgrt,2022).

Bosna-Hersek'te, AB entegrasyonuna dair stratejik hedef tam olarak somut eyleme dönüştürülmemiştir. Siyasi liderlerin bölücü söylemler ve yapıcı olmayan siyasi tartışmalarda yer almaya devam etmesi ile birlikte, siyasi ortamdaki kutuplaşma devam etmiş, bu da 14 temel öncelikte genel ilerlemeyi engellemiştir. Devlet kurumlarındaki tıkanma ve reformların geriye götürülmesi çağrıları derin endişe kaynağı olmuştur. Yine de, 12 yıl sonra Mostar'da belediye seçimlerinin yapılması da dahil olmak üzere, bazı önemli adımlar atılmıştır. Bosna Hersek'in seçim ve anayasa reformları da dahil olmak üzere 14 önceliği ele alması, ayrıca Komisyon'un ülkeye aday statüsü verilmesini tavsiye edebilmesi için önce kritik düzeyde reformları gerçekleştirmesi gerekmektedir. Bunlar demokrasi/işlevsellik; hukukun üstünlüğü; temel haklar; ve kamu yönetim reformudur (AB Türkiye Delegasyonu, 2021; BİH, 2022). Komisyon, 14 önceliğe ek olarak, Bosna Hersek tarafından yargı reformu, çıkar çatışmalarının önlenmesi, yolsuzluk ve organize suçla mücadele, sınır ve göç yönetimi, medya özgürlüğü, gazetecilerin korunması ve sivil toplum örgütlerine odaklanma, işkence ve kötü muameleyle karşı önleyici mekanizmaların oluşturulması gibi sekiz ek adım talep etmiştir (Brezar, 2022).

Bosna-Hersek'te, AB sürecinde yaşanan gelişmeler ile birlikte Bosna Sırp Cumhuriyeti'nin Temmuz 2015'te devlet düzeyinde mahkemelere ilişkin referandum kararı alması söz konusu olmuştur. Bu karar devlet düzeyinde otorite ve kamu yönetimin geleceği konusunda AB ilerleme raporunda kaygı ile karşılanan bir hareket olarak değerlendirilmiştir. AB Komisyonuna göre ülkede yönetim mekanizmasında işbirliği ve uyum sağlanması, Birliğe entegrasyon için etkili koordinasyon biriminin kurulması ilerleme yolunda gerekli olan en önemli ödevlerden bir tanesidir (Kısacık ve Bunjaku, 2016:s.313).

Yine Bosna Hersek Anayasa Mahkemesi, Bosna Sırp Cumhuriyetinin 25 Eylül 2016'da bir referandum düzenleyerek 9 Ocak Sırp Cumhuriyet Günü ilan etmesini geçersiz bir karar olarak nitelendirilmiştir. Sırp Cumhuriyeti'nin 9 Ocak 2017'de gününde polis gücü eşliğinde kutlama yapmasına AB yaptırım ikazında bulunmuştur. Anayasaya aykırılığı açıklanan bu eylem ülke içinde ve dışında olumsuz karşılanmıştır. AB Komisyonu Sözcüsü Peter Stano Bosna Sırp Cumhuriyetinin aldığı kararın ve yapılan kutlamaların siyasi olarak gerileme yol açacağını belirtmiştir. Stano ayrıca Sırp Cumhuriyeti lideri Milorad Dodik'in söylemlerinin bölücü ve olumsuz karşılandığını belirtmiştir. Sırp Cumhuriyetinde halihazırda her yıl 9 Ocak'ta Sırp Cumhuriyet günü kutlamaları yapılmaya devam etmektedir (Euronews, 10.01.2022).

Sırp Cumhuriyeti'nin ülke içindeki eylemleri ve problem yaratan politikaları devam etmiş, entite meclisi, entitenin kontrolünde olacak Hakimler ve Savcılar Yüksek Kurulunun oluşturulmasına ilişkin yasa tasarısını 10 Şubat 2022'de kabul etmiştir. Sırp lider Dodik'in çağrısı üzerine olağanüstü oturum yapılmış ve Bosna Hersek'teki silahlı kuvvetler, vergi idaresi ve adli kurumlar ile ilgili entite kurumlarının merkezi hükümetin yetkilerini alması tartışılmıştır. Tasarı olarak görüşülen karar Sırp Meclisinde kabul edilmiştir. Küresel aktörler ve AB bu karara sert tepki göstermiş ve entitenin karardan vazgeçmesi için uyarıda bulunulmuştur (Nurduhan, 2022).

AB ülkelerinin dışişleri bakanları, Bosna Hersek'teki Sırp Cumhuriyeti entitesi yetkililerinin ayrılıkçı adımlarının önüne geçebilmek için 21 Şubat 2022'de Brüksel'de toplanmıştır. AB Dış İlişkiler ve Güvenlik Politikası Yüksek

Temsilcisi Josep Borrell, toplantıda yaptığı konuşmada, “Bosna Hersek'te yükselen milliyetçi ve ayrılıkçı söylem, ülkenin istikrarını ve hatta bütünlüğünü tehlikeye atıyor” diyerek endişesini dile getirmiştir. Bosna Hersek'teki Sırp Cumhuriyeti entitesi yetkililerinin ayrılık yanlısı hamlelerini "kabul edilemez" bulan AB'nin toplantısında, Sırp yöneticilere yaptırım konusunun görüşülmesi beklenmiştir (Euronews, 21.02.2022).

Bosna Hersek'te yaşanan siyasal karmaşanın dışında ülke ekonomisi son derece yavaş gelişmektedir. Kişi başına düşen GSYİH AB averajının %28'i kadardır. Bosna'da işsizlik %28 civarında ve ortalama aylık ücret 425 Eurodur. Ülkede uygulanmaya çalışılan politikalar yetersiz kalmakta, siyasi liderler ise sık sık birbirlerinin önünü kesmektedirler. Daha önce uzun yıllar Sırp Cumhuriyetinde başbakanlık görevini yapmış ve halen Devlet Başkanı olan Milorad Dodik'in hırçın beyanatları ve devlet düzeyindeki kurumların engellemesi siyasi süreci zehirlemiştir. Bosna Hersek sık sık “işlevsiz” ve bazen de “başarısız” bir devlet olarak gösterilmekte; yolsuzluk, yaygın bir bürokrasi ve aşılamayan etnik bölünmelerden dolayı suçlanmaktadır. Tüm bu olumsuz gelişmelere karşın Batı'nın müdahale ettiği durum sonrasında ülkede çatışmasızlık ortamı sağlanmıştır. Evlerinden olmuş kişilerin çoğu evlerini veya dairelerini geri alabilmişler, birçoğu da yurtlarına geri dönmüşlerdir. Bu mülteciler arasında farklı etnik kökenleri nedeniyle ülke dışına kaçanlar veya sınır dışı edilenler de bulunmaktadır: Boşnak ve Hırvat mültecilerin üçte biri Sırp Cumhuriyetine geri dönmüştür. Azınlıkların Federasyona geri dönüşlerinde de aynı oran görülmektedir. Savaş sırasındaki “etnik temizlik” kampanyasından sonra bu oranlar oldukça yüksektir. Hareket özgürlüğü ortama hakimdir ve demokratik standartlara uygun seçimler düzenli olarak yapılmaktadır. Yolsuzluk var ama işleyişi felce uğratacak düzeyde değildir. Devlet düzeyinde çeşitli idari düzeyler olmasına rağmen yönetim yapıları hızla yayılmamaktadır (Stiglitz, 2015).

Bosna-Hersek'in ve ülkede yaşayan üç halkın (Boşnak, Sırp, Hırvat) AB'ye katılım süreci, ülkedeki siyasal liderlerin ve partilerin uyumlu biçimde çalışarak AB Komisyonu tarafından talep edilen reformları ne derece gerçekleştirebileceklerine bağlıdır. Başka bir ifadeyle, bir zamanlar Yugoslavya Federasyonu bünyesinde “özyönetimli sosyalist-demokratik toplum” kurmak için mücadele etmiş olan Bosna-Hersek halklarının yaşamları ve gelecekleri, Avrupalı devletlerin AB kurumları vasıtasıyla talep ettikleri reformlar çerçevesinde şekillenmektedir (Sancaktar, 2007).

Bosna Hersek'in de AB üyeliği için ülkede demokratik ve gelişmiş bir piyasa ekonomisinin kurulması, işlemesi zor kurumların yeniden yapılandırılması önemlidir. Bunun tarafların kendi iradeleriyle gerçekleşmesi zor görünmekte, bu konuda uluslararası toplumda ise herhangi bir girişim bulunmamaktadır. AB üyeliği perspektifi ülke için bu açıdan önemli bir alandır (Semercioğlu, 2017: 1355).

Bosna-Hersek'in AB'ye adaylığı sonrasında üyelik için siyasi, idari, ekonomik sorunlarının çözülmesi gerekmektedir. Aynı şekilde ülkede hukukun üstünlüğü ve kamu yönetimin güçlendirilmesi elzem olarak görülmektedir. Etnik tartışmaların ve krizlerin devam ettiği ülkede siyasi yapıdaki parçalanmışlık endişe yaratmaktadır. Bu nedenlerle ülkede hızlı ve etkili kararlar alabilen siyaset ve bürokratik mekanizmalarının kurulması en başta bu parçalanmışlığın aşılması gerekmektedir (Barış, 2018: 1157).

Bosna Hersek Avrupa'nın bir parçası olarak görülmektedir. AB'nin Balkanlar perspektifinin üzerinden uzun bir zaman geçmiştir. Bölgenin kozmopolit yapısından kaynaklı sorunlar Bosna Hersek için de geçerlidir. AB'ye tam üyelik süreci sadece Bosna Hersek özelinde değil tüm Balkanlar coğrafyası için istikrar ve refah getirecek durumdadır. Son yıllarda Bosna Hersek'te etnik temelli olarak Sırp Cumhuriyeti ve liderliğinin yaratmaya çalıştığı popülist politika ve tehlikeli adımlar sadece ülke içinde değil aynı zamanda Balkanlar genelinde olumsuzluklar yaratmaktadır. AB'nin güvenlik ve savunma politikası dikkate alındığında Bosna Hersek'in AB için jeopolitik kaygılarını gidermesi açısından da önemli olduğu görülmektedir. Özellikle Rusya Ukrayna arasında yaşanan çatışma ile birlikte bu kaygı daha da artmıştır (Batı, 2022). Bu nedenle Bosna Hersek'in güvenlik ikilemini aşmak için ülkenin başta askeri daha sonrasında ise ekonomik, siyasi, toplumsal ve insani olarak içinde bulunduğu durum AB ile bütünleşmekten geçmektedir. Bu durum AB için de güvenlik ile birlikte ekonomik hinterlandının genişlemesine ve norm ile değerlerinin pekişmesine katkı sunacaktır.

SONUÇ

Bireylerin, toplumların ve devletlerin hayatında en önemli ihtiyaçlardan biri olan konu başlığı güvenlidir. Bu kapsamda Uluslararası ilişkilerde de devletler düzeyinde güvenlik arayışı ve ihtiyacı hep ön sıralarda olagelmıştır. Disiplinin güvenlik kavramına iyimser ve karamsar yaklaşımlar çerçevesinde geliştirdiği bakış açıları uluslararası konjonktür gereği değişkenliğe uğrasa da bu ihtiyaç hep algı ve inşaa ile artarak devam etmiştir.

Bu kapsamda devletler güvenlik ihtiyacı çerçevesinde yaşadıkları ikilemi çeşitli araçlar ve yöntemler kullanarak aşmaya çalışmaktadır. Aralarında ittifaklar kurarak veya bütünleşme politikaları takip ederek birçok ihtiyacın

yanı sıra güvenlik konusunda da işbirliği içinde olmak en önde gelen araç ve yöntemler olarak ön plana çıkmaktadır.

Yüzyıllardır çatışma içinde olan Avrupa kıtasının da Soğuk Savaş döneminde önce ekonomik daha sonra siyasi, askeri ve kültürel bütünleşme çerçevesinde bir araya geldiği görülmektedir. AB özellikle 1990 sonrası bütünleşme politikasını çevre bölgelere de yaymaya başlamıştır. Doğu Avrupa ve Balkanlar bu çevre bölgeleridir. Doğu Avrupa çok daha önce AB'nin genişleme hareketi içinde yer almış, Balkanlar ise 1990'lı yıllarda içine düştüğü çatışma ortamının sona ermesinden sonra dönem sonunda bu sürece dahil olmaya başlamıştır. AB için çevresinde çatışma ve istikrarsızlık yaratabilme potansiyeli yüksek olan bu bölge için başta güvenlik olmak üzere kültürel, ekonomik ve siyasi birçok açıdan istikrarın gelmesi için çalışmalar yapmaya başlamıştır. Balkan ülkeleri de en başta güvenlik ihtiyaçları kapsamında daha sonrasında ise ekonomik, siyasi bir çok nedenle bu sürece dahil olmak istemişlerdir.

Balkan ülkelerinden biri olan Bosna Hersek'te AB bütünleşmesi çerçevesinde 1995 Dayton Anlaşması sonrası karşılıklı yarar ilkesi ile içinde bulunduğu karmaşık yapının güvensizlik üreten sarmalından kurtulmak istemiştir. Bu durum aynı zamanda AB için de dış politikasında ve birliğin yapısal olarak gücünün test edilmesinde önemli olmuştur. Şöyle ki Bosna Hersek'te başarıya ulaşacak bir ülkesel yapı ve bütünlük, tüm bölge ile kıtanın geleceği için büyük bir kazanım yaratacaktır.

Ne var ki Bosna Hersek Dayton Anlaşması sonrasında silahlı çatışma ortamından kurtulsa bile ülkenin karmaşık etnik, siyasi, idari ve ekonomik yapısı gelecek için endişe yaratmaktadır. Ülke içinde yönetim yapısı içinde ilerisi için risk oluşturabilecek entitelerin politikaları ve durumu bu kaygıları arttırmaktadır. Bu nedenle AB Bosna Hersek için bütünleşme kapsamında istikrar ve Ortaklık Sürecini başlatmış ve gerekli reformların yapılması karşılığında Birliğe üyelik için yeşil ışık yakmıştır. Bu sürecin karmaşık ve uzun soluklu olacağının bilincinde olan AB aynı zamanda üyelik ile Bosna Hersek'te kendisi için ve ülke için en başta güvenlik olmak üzere diğer başlıkları sağlamaya çalışmaktadır. Bosna Hersek'te için de entitelerin farklı talepleri olsa da gelecek tasavvurunda AB üyeliği birçok açıdan kaybedilemeyecek en önemli kazanç olarak durmaktadır. Dolayısı ile birçok sorun olmasına rağmen ülkenin güvenlik ihtiyacı AB üyeliği ile örtüşmektedir. Aynı şekilde AB'nin de güvenlik ve bütünleşme perspektifi Bosna Hersek'i üye olarak birliğe katmak için uygun düşmektedir.

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Yapısal Faktörler ve Dolaylı-Dolaysız Vergi Ayrımı Açısından Türkiye’de Vergi Adaleti

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Özet: Vergi adaleti ile vergileme sürecinde adaletli bir yapının oluşturulması ve bu doğrultuda vergi gelirlerinin bireylerden tahsil edilmesi amaçlanmaktadır. Bireyden tahsil edilen vergiler, bireyin kamu hizmetlerinden yararlanması nedeniyle “yararlanma ilkesi” çerçevesinde veya bireyin mali gücüne bağlı olarak “ödeme gücüne göre vergilendirilmesi” olarak iki şekilde uygulanmaktadır. Kamu hizmetlerinden yararlandırma esnasında vergilendirilmenin pek mümkün olmaması nedeniyle daha adil bir vergilendirme sistemi olan herkesin gelirine göre vergilendirilmesini esas alan ödeme gücüne göre vergilendirme temel alınmaktadır. Nitekim Anayasanın 73. maddesinde “Herkes, kamu giderlerini karşılamak üzere, malî gücüne göre, vergi ödemekle yükümlüdür.” ibaresinin konulmasıyla, ödeme gücüne göre vergilendirilmenin esas alınması amaçlanmaktadır. Ancak Türkiye’de “mali güç” anlayışı doğrultusunda vergilemede adaletin ne derece sağlandığını tespit etmek için dolaylı ve dolaysız vergileme tercihinin incelenmesi gerekmektedir. Çalışmamız ile Türk vergi yapısının vergi adaletini sağlamadaki rolü incelenmektedir. Ayrıca vergileme sürecinde ortaya çıkan ekonomik, sosyal ve siyasal yapısal faktörler de yine vergi adaleti perspektifinde irdelenmektedir. Adil bir vergi yapısının oluşturulması için öncelikle mükellef potansiyeli dikkate alınarak vergi bilincini ve vergi ahlakını ele alan faktörlerin düzenlenmesi gerekmektedir. Ekonomik, sosyal ve siyasal yönden düzenlemelerin yapılması aynı zamanda vergi gelirlerinin artmasını da etkilemektedir.

Anahtar Kelimeler: Vergi Adaleti, Ödeme Gücü İlkesi, Vergileme İlkesi, Dolaylı ve Dolaysız Vergiler.

Structural Factors and Indirect-Direct Tax Discrimination In Terms of Tax Justice in Turkey

Abstract: With tax justice, it is aimed to create a fair structure in the taxation process and to collect tax revenues from individuals in this direction. The taxes collected from the individual are applied in two ways as “benefiting principle” depending on the due to the individual's utilization of public services or “taxation according to the ability to pay” depending on the individual's financial power. Due to the fact that taxation is not possible during the utilization from public services is based on taxation according to the power of payment based on the taxation according to revenue of everyone who has a fairer taxation system. As a matter of fact, according to Article 73 of the Constitution, “Everyone is obliged to pay taxes according to their financial power to meet public expenditures.” the taxation is intended to be based on according to the power of payment. However, in line with understanding of financial power in Turkey in order to determine the extent to justice in taxation provided that it is necessary to examine the direct-indirect taxation preferences. This study examines the role of Turkish tax structure in ensuring tax justice. In addition, the economic, social and political structural factors that emerged in the taxation process are also examined from the perspective of tax justice. In order to create a fair tax structure, it is necessary to regulate the factors that deal with tax awareness and tax morale, taking into account the taxpayer potential. Making economic, social and political arrangements also affects the increase in tax revenues.

Key Words: Tax Justice, The Power of Payment Principle, Taxation Principle, Indirect and Direct Taxes.

1. GİRİŞ

Toplumsal gelişme ve kalkınma gereksinimi devletin ekonomideki nispi payını daima büyütmektedir. Tabi bu büyüklüğün finansmanında ciddi sıkıntılar ile karşı karşıya kalındığı da bir gerçektir. Sürekli büyümekte ve gelişmekte olan devlet ekonomilerinin en önemli problemi ise adalet kavramının etkin olarak korunamaması gelmektedir. Ayrıca gelir dağılımında adaletli bir sistemin hâkim olmaması, vergi gelirlerinin toplum içindeki dağılımında da adaletli bir yapının oluşturulmasını mümkün hale getirmemektedir. Dolayısıyla daha adil bir vergi sistemi olan dolaysız vergiler yerine dolaylı vergilerin bütçe gelirleri içindeki payının sürekli yüksek oranlarda seyretmesi, adaletsiz vergilendirme sisteminin varlığını ortaya koymaktadır.

Zamanla artan kamu harcamalarındaki büyüklüğün dolaysız vergiler ile finanse edilmesi pek mümkün olmamıştır. Çünkü toplumun artan vergi yükünden haberdar olması, mevcut rejime veya hükümete tepkilerinde artmasına yol açabilmektedir. Bu nedenle özellikle genişleme dönemlerinde olmak üzere, ekonominin darboğaza girdiği dönemlerde yeni vergileme sistemi veya vergi oranlarında artışın gerçekleştirilmesi vazgeçilmez bir yöntemdir. Genellikle yeni vergilendirilme sistemi dolaylı vergilerin çoğunlukta olduğu bir düzenlemeyi kapsamaktadır.

Bu çalışma ile Türkiye’nin vergilemedeki adalet yapısı incelenmektedir. Özellikle 1980 sonrası artan kamu harcamalarının finansmanı gereği vergilendirme yapısında ciddi düzenlemelerin yapıldığı görülmektedir. Ekonomik krizlerin neden olduğu piyasa dengesizliğinin giderilmesi, makroekonomik verilerin istenilen düzeye

ulaştırılması aşamasında vergilerin rolünün büyüklüğü tartışmasız daima en etkili kalem olarak karşımıza çıkmaktadır. Vergi gelirleri arasından en öne çıkan kalemler ise dolaylı vergiler olmuştur. 1980 yılı sonrasında dolaylı vergi kategorisinde getirilen birçok vergisel düzenleme bu düşünceyi güçlendirmektedir.

2. VERGİNİN TANIMI

Vergi, zaman içinde gelişmiş, kurumsallaşmış, sağlam bir düşünce sistemine kavuşmuş bir kavramdır (Türk, 2010: 111). Vergi, birçok iktisatçı tarafından farklı şekilde tanımlanmıştır. Ancak en belirgin tanımlama ise klasik ve modern maliyecilerden gelmiştir. Bu iki tür vergi tanımlamasını ele aldığımızda;

Klasik maliyecilere göre: Klasik maliyenin kurucusu olan Fransız maliyeci Gaston Jéze'ye göre; vergi, kişilerden kamu giderlerini karşılamak üzere, cebri, nihai ve karşılıksız olarak istenen parasal bir yükümlülüktür (Türk, 2010:111).

Modern maliyecilere göre: Klasik maliyecilerin vergi ile ilgili tanımlamalarına ek olarak modern maliyeciler vergiyi, kişilerden kamu harcamalarını karşılamak veya devletin ekonomik ve sosyal hayata müdahalesini sağlamak üzere, cebri, nihai ve karşılıksız olarak, doğrudan doğruya istenen, parasal bir yükümlülük şeklinde tanımlamışlardır (Türk, 2010:111).

Modern maliyeciler, verginin sadece mali amaçlar ile değil ekonomik ve sosyal yönden düzeni sağlamak için de alınmasının mümkün olabileceğini vurgulamaktadır. Örneğin vergiler, ekonomik ve sosyal hayata müdahale edilmesi, ekonomik faaliyetlerinin (makroekonomik büyüklüklerinin) tabii seyrini değiştirmek için de alınabilir.

3. VERGİNİN GELİŞİMİ

Küçük veya büyük, ilkel veya modern toplulukların olduğu her yerde adı vergi olmasa bile toplumun ortak ihtiyaçlarını finanse edebilmek için vatandaşlarca gönüllü veya zorunlu olarak aynı veya nakdi ödemeler yapılmıştır (Sağbaş, 2010: 7).

Vergi verme yükümlülüğü, insanların siyasi bir topluluk halinde yaşamaları sonucunda ortaya çıkan kamusal nitelikteki hizmetlerin sağlanması yönündeki düşüncenin gelişmesi ile başlamıştır. Vergi, farklı toplumlarda farklı vergileme sistemleri ile alınmıştır. İlk dönemlerde gönüllülük esasına dayanılarak ödenen vergiler, daha sonraları bir yükümlülük teşkil ederek zorunlu olarak alınması gereken bir ödev haline dönüşmüştür (Kayan, 2000: 81).

Verginin ödeme yönteminin tarihsel gelişim sürecinde üç temel safhası bulunmaktadır. Birincisi, verginin bedenlen yani çalışarak ödenmesidir. Günümüzde artık geçerliliğini kaybeden bu yöntem, Türkiye de bir dönem Varlık Vergisi ile uygulanmıştır. İkincisi, aynı olarak verginin ödenmesidir. Para ekonomisinin olmadığı dönemlerde mübadele (takas) sistemi ile vergilerin tahsil edildiği bir yöntemdir. Günümüzde geçerliliği olmayan bu yöntem genellikle tarımsal ürünlerin (buğday, arpa vb.) belirli bir kısmının devlete vergi olarak verilmesi ile gerçekleşmiştir. Son olarak üçüncü yöntem ise, piyasa ekonomisinin hâkim olduğu dönem ile vergiler artık para olarak ödenmektedir (Sağbaş, 2010: 7-8).

Günümüzde uygulanan vergilerin konusunu incelediğimizde ise vergi hem gerçek kişilerden hem de tüzel kişilerden alınmaktadır. Vergi, kamu giderlerinin finansmanı ve kamu düzeninin sağlanması için cebri olarak tahsil edilmektedir. Tahsil edilen vergilerin hata veya mevzuat gereği bir yaptırım yok ise iadesi mümkün değildir. Ekonomik yönden paranın aktif olarak kullanılmadığı dönemlerde vergiler aynı veya hizmet şeklinde de ödenmiştir. Geçmişte Türkiye de uygulanan Âşar Vergisi ve Yol Vergisi aynı olarak alınan vergilere örnektir.

4. VERGİNİN AMAÇLARI

Geçmişten günümüze devlet anlayış ve yapısında bazı değişiklikler olmuştur. Özellikle müdahaleci devlet anlayışının yaygın bir hal almasıyla, devletin yüklenmiş olduğu görev boyutlarında ve niteliklerinde de değişimler gerçekleşmiştir. Gelişen devlet yapısı, gelir yönünden de ihtiyaçların artmasına neden olmuştur (Tunçer, 2005: 118). Dolayısıyla vergi gelirleri, tamda devletin ihtiyacı olan, kamu giderlerini finanse edebilmek için kullanmış olduğu bir gelir kaynağıdır. Devlet yapısına göre değişmekle beraber genellikle vergiler, bir ülkenin kamu gelirlerinin % 90-95'ini oluşturmaktadır.

Her ne kadar verginin temel amacı kamu hizmetlerini sağlarken gerekli finansmanı temin etme görevi olsa da modern maliyecilerin savunduğu gibi bazen vergiler sosyo-ekonomik düzenin sağlanabilmesi için de etkili

kullanılabilir. Verginin asıl amacı mali yapının desteklenmesi olmasına rağmen iktisadi, sosyal ve ahlaki yönden de amaçları olduğunu belirterek kısaca özetleyelim.

Verginin mali amacı, piyasa mekanizmasına zarar vermeden herkesin mali gücüne göre kamu harcamalarını finanse etmesidir. Rekabette eşitsizliğe yol açmadan, vergi tarh ve tahsilinin ucuz bir maliyetle sağlanmasıdır. Ayrıca, makroekonomik kavramlarla uyum içinde ve milli gelirdeki değişimlerinde göz önünde bulundurulması ile vergi geliri sağlanmaya çalışılmaktadır (Yüce, 2004: 3).

Verginin iktisadi amacı, kişi başına düşen üretimin arttırılması ile beraber, toplumsal kalkınma ve refah için mümkün olan kalkınma hızının sağlanmasını kolaylaştırmaktır. Böyle bir amaca ulaşmak için de hem vergi yükünü önleyecek hem de reel gelir artışını sağlayacak bir niteliğe sahip olması gerekmektedir (Özer, 1993: 74). Özellikle vergi, enflasyon ve deflasyon dönemlerinde maliye politikasının bir aracı olarak, konjonktürel dalgalanmaları önlemek adına kullanılan önemli bir araçtır.

Verginin sosyal amacı, sosyal adalet, gelir ve servetin yeniden bir düzenleme ile dağılım yapılmasında etkinliği oluşturmaktır. Vergilendirme, sosyal kaynakların dağılımında etkinliği sağlamak için kullanılmasının yanı sıra planlı kalkınmanın özendirilmesi için de ele alınabilecek etkili bir araçtır (Çelik, 2013: 20). Günümüzde asgari ücret ile çalışmakta olan bireylerden alınan gelir vergisinin yine kişinin kendisi ve ailesinin sosyal yaşamlarının dikkate alınması nedeniyle asgari geçim indirimi adı altında belirtilen oranlar dahilinde vergi mükellefine hesaplanan gelir vergisinin iade edilmesi, verginin sosyal amacına bir örnektir.

5. VERGİNİN TÜRLERİ

Vergi, gün geçtikçe ekonomik gelişmelerinde etkisiyle geniş alanlara dağılmıştır. Birçok konunun vergilendirilmesi söz konusu olmuştur. Vergi türlerindeki çeşitlilik verginin sınıflandırılması esasını da beraberinde getirmektedir. Ayrıca vergideki sınıflandırma, verginin kolaylaştırılması ve daha pratik bir sistem ile yürütülmesine de yardımcı olmaktadır. Vergi sınıflandırması sayesinde vergi gruplarının mali, ekonomik ve sosyal etkileri konusunda genellemeler yapmak mümkün olmaktadır (Sağbaş, 2010: 15). Vergilerin sınıflandırılması, verginin konusunun genişlemesiyle paralellik göstermektedir. Vergi sınıflandırması, konularına, dolaylı-dolaysız yapılarına, etkilerine, objektif-subjektif yapısına, niteliğine ve merkezi-yerel yapısına göre yapılmaktadır. Özellikle verginin dolaylı-dolaysız yapısı vergideki çeşitliliğin artması ve kamu giderlerinin finansmanındaki gerekliliğinin artması ile beraber daha fazla önem arz ettiği görülmektedir.

6. VERGİ ADALETİ KAVRAMI

Vergi sisteminde adil bir yapının oluşturulması için verginin tarihsel gelişimi boyunca daima maliyecilerin üzerinde en fazla durdukları konulardan biri olmuştur. Adil vergi sistemi ile kamu hizmetlerinin finansmanı için en etkili araç olan vergilerin, toplum arasındaki paylaşımının hak ve adalet esasına dayandırılarak uygun bir şekilde dağıtılması amaçlanmaktadır (Edizdoğan vd., 2011: 251).

Ünlü iktisatçı Amartya Sen iktisadın iki ayak üzerinde yükseldiğini belirtmektedir. Bunlar, etkinlik ve adalettir. Kaynakların etkin dağılımı, daha fazla refah sağlayacak başka hiçbir dağılım biçiminin olmaması anlamına gelmektedir. Tabii bu yargı, birçok kurumsal değişikliklerin veri olarak kabul edilmesi ile mümkündür. Ancak, veri mülkiyet hakları rejimi ve mülkiyet dağılımı altında kaynakların etkin dağılımından söz edilebilir. Adalet kavramı ise, iktisat teorisinden çok siyaset felsefesi disiplini içinde tartışılmakta olan bir kavramdır. Bu temelde belirli bir adalet kriteri kabul edildikten sonradır ki, bu kriteri ulaşmak için devletin, gelirin yeniden dağılımı konusunda nasıl ve hangi araçların bir rolü olacağı konusu maliye teorisinin alanına girmektedir (Kirmanoğlu, 2009: 63-64).

Adam Smith'e göre, bir devletin vatandaşlığında bulunan her bir birey, devletin varlığını sürdürebilmesi için, devlet himayesinde elde ettiği gelirle orantılı olarak mali gücüne göre devlet gelirine iştirak etmelidir (Nadaroğlu, 1996: 298). Dolayısıyla devletin, toplumdaki bireylerin katılımı ile oluşturulmuş bir organizasyon olduğu görülmektedir. Bu organizasyon dâhilinde bireyler tarafından elde edilen gelirler ile yine bu organizasyonun finansmanına katkı sağlanmasıyla devlet kavramının sürekliliği sağlanmaktadır. Bu sistem ile vergilemede adaletin etkinliği mümkün olabilmektedir (Güran, 2004: 245).

Vergi yükünün adaletli bir şekilde dağıtılmasını amaçlayan bir vergi sisteminde; bütün mükelleflerin tam olarak kavranması, kayıt dışılığın önlenmesi, kimden ne kadar vergi alınacağını, bireylerin kişisel ve mali durumlarına göre ölçüsünün ne olacağını belirlenmesi, büyük önem taşımaktadır. Bununla birlikte, adalet kavramına bağlı olarak, vergide adaletin de kişiye, topluma, yere ve zamana göre değişir bir yapısının bulunması, herkes için

geçerli olan değişmez ölçülerin bulunmasını olanaksız kılmaktadır. Bu durum, bazı teknik esaslardan yararlanılması suretiyle vergi adaletine ulaşmaya çalışmak düşüncesinin ilke olarak kabulüne yol açmıştır. Vergi kaçakçılığı ve çifte vergilemenin önlenmesi, vergi yükünün mükellefler arasında dengeli dağılımı, farklı durumlarda olanlardan aynı düzeyde vergi alınmaması, kişinin geçimine ancak yetecek gelirin vergilendirilmemesi, ailevi duruma göre vergi yükünün farklılaştırılması ve gelirin kaynağına göre farklı işleme tabi tutulması bu anlamda yararlanılan ve dikkate alınan uygulamalardır (Akdoğan, 2009: 2001-2002). Dolayısıyla adil bir vergi yapısının oluşturulması için özellikle bireylerin mali güçleri olmak üzere zamana ve mekâna bağlı olarak tüm toplumu kapsayan bir vergi sistemin geliştirilmesi gerekmektedir.

7. VERGİLEMEDE YAPISAL FAKTÖRLER VE VERGİ ADALETİ

Toplumsal düzeyde vergi kültürü ve bilincinin yerleştirilmesi, vergileme sisteminde adaletin sağlanabilmesi için bazı faktörlerin etkin bir şekilde uygulanması gerekir. Eğitim, ekonomik, sosyal ve siyasi faktörlerin analiz edilmesiyle vergi sisteminin uygulanması, daha adil bir vergilendirme yapısının oluşturulmasına da yardımcı olabilmektedir.

7.1. Vergilemede Ekonomik Faktörler

Vergi kültürüne bağlı olarak oluşabilecek olan ekonomik faktörler, vergi oranlarının yüksekliği, gelir dağılımında adalet, kişisel gelir düzeyi, kayıt dışı ekonomi, vergi adaleti, vergi yükü vb. unsurlar şeklinde sıralanabilmektedir.

Literatürdeki birçok çalışma modeli, mükelleflerin gelir düzeyinin yükselmesine bağlı olarak vergi oranlarının da artış göstermesi, vergi kaçırma ve vergi kaçakçılığının da artmasına neden olduğu görülmektedir. Ayrıca laboratuvar ortamında gerçekleştirilen deneyler sonucunda genellikle vergi oranlarındaki yükseliş, daha yüksek vergi kaçırma ve beraberinde getirdiği ve bu iki durum arasında doğru orantının mevcut olduğu saptanmıştır (Taytak, 2016: 1938).

Vergi adaleti ile gelir dağılımında adalet kavramları hemen hemen aynı sonuçları vermektedir. Muter vd. göre, adil bir vergi düzeni kurulmadıkça ve vergi mükelleflerinin aşırı vergi yükü altında bırakıldığı sürece vergiye karşı direniş ve/veya vergi isyanı olasılığı yüksek olacağı görüşüne sahiptirler (Taytak, 2016: 1938). Adaletsiz bir vergileme sistemi beraberinde mükellef davranış ve tutumlarında da bir farklılığın oluşmasına neden olmaktadır. Mükelleflerin bu davranış ve tutumları iki şekilde ortaya çıkmaktadır. İlk olarak, pasif bir tepki olarak vergi gelirlerinin dolaylı olarak azaltılmasına sebep olabilir, ikinci şekli ise aktif bir tepki olarak verginin kaçakçılığı veya verginin reddi şeklinde gerçekleşmesi mümkündür (Canbay ve Çetin, 2007: 53). Dolayısıyla adil bir vergileme sistemi beraberinde devletin vergi gelirlerinde de artış sağlamasına yardımcı olacaktır.

7.2. Vergilemede Sosyal Faktörler

Bir toplumda oluşabilecek vergi kültürünün bazı sosyal normlardan bağımsız olarak ele alınması mümkün değildir. Vergi kültürünün benimsenmesinde, dini inancın, vergi psikolojisinin, vergi ahlakının, vergi bilincinin ve vergi zihniyetinin etkisi vardır (Abdiyeva vd., 2015: 50). Bu tür sosyal normların, toplumun vergiye karşı bakış açısını belirlemede ve adil bir vergileme sisteminin hâkim olmasında etkin rol aldığı söylemek mümkündür. Vergi zihniyeti, vergi bilinci ve vergi ahlakı gibi sosyal faktörleri de içine alan geniş anlam bütünlüğü sağlayan bir kavramdır. Bu nedenle vergi kültürünün benimsenerek adil bir vergileme yapısının toplumda yer bulabilmesi için öncelikle vergi bilinci ve vergi ahlakı kavramlarının herkes tarafından benimsenmiş olması gerekmektedir.

Vergi bilinci, kamu hizmetlerinin gerçekleştirilmesi bakımından verginin önemini bilen toplum bireylerinin, vergi ile ilgili ödevlerini yerine getirmedeki istekliliklerinin düzeyine denir. *Vergi ahlakı* ise, mükelleflerin vergi yasalarından doğan yükümlülüklerini, gerçeğe uygun bir şekilde yerine getirme konusundaki davranışlarının düzeyine denir (Akdoğan, 2009: 187-188). Vergi ahlakının ve vergi kültürünün yüksek seviyede benimsendiği toplumlarda, vergi kaybının ve vergi kaçakçılığının düşük seviyelerde izlendiği görülmektedir. Bu durum vergi kaybını önlemek için uygulanan yüksek oranlı cezaların değil, vergi kültürünün benimsenmesi sonucunda vergilemede adaletin sağlanabileceğini göstermektedir. Ayrıca vergileme yapısında başarı elde eden ülkeleri incelediğimizde, neredeyse hepsinde vergi ahlakı ve vergi bilincinin hâkim olduğu bir kültürün benimsendiğini görebilmekteyiz (Tosuner ve Demir, 2007: 12-13). Dolayısıyla adil bir vergilendirme sisteminin varlığı için ilk etapta vergi bilinci ve vergi ahlakının benimsendiği bir toplumun inşa edilmesi gerektiği görülmektedir. Böylece vergiden kaçınma ve vergi kaçakçılığı gibi adaletli vergilendirmenin varlığını zedeleyen faaliyetlerin de zamanla yok olabileceği söylenebilir.

7.3. Vergilemede Siyasi Faktörler

Siyasi faktörlerin vergilendirme yapısı ve vergi kültürünün benimsenmesinde etkin rol aldığı bir gerçektir. Toplumun devlete, hükümete, siyasi yapıya ve vergi dairesine olan güvenine bağlı olarak vergi ödeme isteğinin şekillendiği görülmektedir.

Vergi kültürünün yerleşmesinde güven duygusu önemlidir. Bu yönüyle güven, inanç ve tutumlardan farklı olarak daha yüksek seviyede yer alan bir kavramdır. Güven duygusunun adalet algısından gelmesinden dolayı bu denli önemlilik arz etmektedir. Örneğin; mükelleflerin vergi boyutunda vergi idaresinin kendilerine adaletli ve saygılı bir tutum içinde olduğunu hissettiklerinde, devlete ve vergi idaresine karşı güven duyguları artacaktır. Ayrıca mükellefin ödemiş olduğu vergilerin kamu tarafından sunulan hizmetlerin finansmanında kullanıldığı algısını benimsemiş olması, yine aynı şekilde mükellefin devlete ve vergi idaresine olan güven duygusunu arttıracaktır (Taytak, 2016: 1940-1941). Dolayısıyla mükellefin devlete ve vergi idaresine olan güveni, vergi ödeme bilincini oluşturmaktadır. Aynı şekilde mükellefin duymuş olduğu bu güven, vergi kayıp ve kaçığın azalmasına yardımcı olabileceği gibi toplumda adil bir vergilendirme sisteminin hâkim olmasını ve pozitif yönlü bir etkinin oluşmasını da teşvik edecektir.

8. DOLAYSIZ VE DOLAYLI VERGİ AYRIMI

Dolaysız vergi, verginin iktisadi mükellefi olarak, gerçek veya tüzel kişilerin kendi mal varlığından vergi ödemekle yükümlü olduğu mükellefiyet türüdür. Bu vergi türünde mükellefin vergi yükünü bir başkasına devretmesi mümkün değildir. Dolaysız vergilere gelir vergisi, kurumlar vergisi ve emlak üzerinden alınan vergiler örnek verilebilir (Soydal ve Yılmaz, 2009: 298). Gelir vergisi gibi dolaysız vergilerde de mükellefiyet süreklidir ve önceden bilinir. Dolaysız vergiler sübjektif özellikli ve kişiselleştirilebildikleri için daha adildir (Sağbaş, 2010: 19). Dolaylı vergiler ise, yasama organı tarafından verginin fiyatlar içine yerleştirilip, tüketicilerden talep edildiği bir vergi türüdür. Harcama üzerinden alınan vergi statüsünde olan dolaylı vergiler, bireyin maddi durumuna bakılmaksızın yaşamak ve tüketime dâhil olmak zorunda olan herkeste aynı yükümlülüğü getirmektedir. Ayrıca vergi yükümlüsünün şahsi durumundan bağımsız olarak üretim ve tüketim paradoksu gelişmektedir. Üretim ve tüketim üzerinden alınan vergiler; katma değer vergisi, özel iletişim vergisi, banka ve sigorta muameleleri vergisi, gümrük vergisi ve damga vergisi şeklinde sınıflandırılmaktadır.

Gelir üzerinden alınan vergiler, yasalar ile belirlenen oranların gerçek veya tüzel kişilerin (şirketlerin) elde ettiği gelirleri ve beyan ettiği kârları üzerinden hesaplamanın yapılması ile belirlenmektedir. Gelir vergileri kendi içinde gelir vergisi ve kurumlar vergisi olarak iki ayrı başlıktan oluşmaktadır. Dar anlamda gelir, bir gerçek kişinin belli bir dönemde elde ettiği iktisadi değerlerin safi tutarı olup, dönem içinde elde edilen ücret, maaş, faiz ve benzeri ile kârların toplamından oluşmaktadır (Edizdoğan ve Çelikkaya, 2010: 4). Geniş anlamda ise gelir, hangi kaynaktan doğarsa doğsun, belirli bir dönemde kişinin satın alma gücünde veya öz varlığında meydana gelen artıştır. Bir başka ifadeyle gelir, bir kişinin belirli bir dönemdeki tüketim harcamaları ile yine aynı dönemde malvarlığında (servetinde) meydana gelmiş olan net artışın toplamıdır (Öner, 2014: 242). Bu tanımlar ışığında gelirin elde edilmesi aşamasında kullanılan üretim ve emek faktörleri ile elde edilen kazançlar bir sınıflandırmaya tabi tutulmaktadır. Bunlar;

- ✓ Ticari Kazançlar,
- ✓ Zirai Kazançlar,
- ✓ Ücretler,
- ✓ Serbest Meslek Kazançları,
- ✓ Gayrimenkul Sermaye İratları,
- ✓ Menkul Sermaye İratları,
- ✓ Diğer Kazanç ve İratlar, şeklinde ayrılmıştır (Şenyüz, 2005: 41).

Türk vergi sisteminde gelir üzerinden alınan ikinci vergi türü de kurumlar vergisidir. Bu yönüyle incelendiğinde kurumlar vergisi ile gelir vergisinin konusu aynıdır. Ancak aralarında farklar mevcuttur. Kurumlar vergisi, gerçek kişiler gibi muayyen bir dönemdeki iktisadi faaliyetleri sonucunda gelir elde eden kurumların toptan safi kazançları üzerinden alınan genel nitelikte objektif dolaysız bir vergidir (Aksoy, 2010: 287). Kurumlar vergisini, sermaye şirketleri ile kanunda sayılan diğer tüzel kişi ve kurumlar öder. Gelir vergisinden farklı olarak kurumlar

vergisi, tüm kurum kazançlarının kurum kazancı adı altında bir bütün olarak düşünülür ve genel olarak ticari kazanç esaslarına göre tespit edilir (Öner, 2014: 365).

Servet üzerinden alınan vergiler ülkemizde, servetin el değiştirmesi veya servete sahip olma sürecinde vergilendirmenin yapıldığı bir kamu gelirinin elde etme türüdür. Bu yönüyle servet, kişinin ödeme gücünü gösteren bir yapıdır. Türk vergi sisteminde servet üzerinden alınan vergiler; veraset ve intikal vergisi, emlak vergisi ve motorlu taşıtlar vergisinden oluşmaktadır. Veraset ve intikal vergisi, bir servetin bağış veya yardım yoluyla el değiştirmesi işleminin vergilendirilmesidir. Emlak vergisi, herhangi bir gayrimenkule sahip olunması ile vergilendirilmenin yapılmasıdır. Motorlu taşıtlar vergisi ise motorlu bir taşıta sahip olunmasıyla vergilendirilmektedir (Ömür ve Gerçek, 2017: 207). Dolayısıyla elde edilen mülkün kişinin beyanı ile vergilendirilmesi esas alınmasından bu tür vergiler, dolaysız vergi kategorisinde sayılmaktadır.

Dolaylı vergilerden olan katma değer vergisi, üretimden tüketime kadar her aşamada malların ve hizmetlerin satışından, nisbi olarak alınan yayılı bir muamele vergidir. Bir diğer deyişle, katma değer vergisi, her ekonomik safhada satış değeri üzerinden alınmakla beraber; her üretim ve dağıtım aşamasında yaratılan katma değerlerin vergiye tabi tutulmasıdır (Aksoy, 2010: 364). Verginin sürekli katlanarak bir sonraki safhaya devredilmesi verginin de yükünü arttırmaktadır. Bu nedenle katma değer vergisini ödemekle yükümlü olan nihai tüketici satın aldığı mal veya hizmetin bedelinin yanı sıra yüksek meblağlı vergiyi de ödemekle mükellef olmaktadır. Ancak bu tür dolaylı vergilerin mali anestezi adı verilen yöntemin etkili olması ile verginin, ürünün fiyatı içinde gizlenmiş olması ve nihai tüketicinin ödediği verginin farkında dahi olmaması bu vergi türünün en belirgin özelliğidir.

Dolaylı vergilerin ikinci önemli vergi türü olan özel tüketim vergisi ise, malların durumuna göre ithalat veya üretim veya dağıtım sürecinin sadece birinde alınan tek safhalı bir vergidir. Ülkemizde özel tüketim vergisinin uygulanması dolaylı (tüketim veya harcama) vergiler alanında katma değer vergisinden sonra en önemli adımı oluşturmuştur (Şenyüz, 2005: 517-518).

Dolaylı vergilerden olan banka ve sigorta muameleleri vergisinin konusu, banka ve sigorta şirketlerinin 3226 sayılı Finansal Kiralama Kanunu'na göre yapılanlar dışında, her ne şekilde olursa olsun yapmış oldukları bütün muameleler dolayısıyla kendi lehlerine her ne nam ile olursa olsun nakden veya hesaben aldıkları paralardır. Bankerlerin yapmış oldukları banka muamele ve hizmetleri dolayısıyla kendi lehlerine her ne nam ile olursa olsun nakden veya hesaben aldıkları paralar da banka ve sigorta muamele vergisine tabidir. Bu vergi türünün mükellefi, bankalar, sigorta şirketleri ve bankerlerdir (Aksoy, 2010: 406).

Gümrük vergiler de dolaylı vergi kategorisinde bulunan vergilerdendir. Gümrük Kanunu'na göre "gümrük vergileri" deyimini, yürürlükteki hükümler uyarınca eşyaya uygulanan ithalat vergilerinin ya da ihracat vergilerinin tümünü ifade etmektedir. Günümüzde eşyanın ihracından vergi alınmadığından, gümrük vergileri deyimini uygulamada esas itibarıyla ithal edilen eşyaya konulan vergiler için kullanılmaktadır (Öner, 2014: 510). Gümrük vergilerinden ithalde alınan KDV, vergi gelirleri açısından büyük önem taşımaktadır.

Damga vergisi de dolaylı vergi kategorisinde sayılan, çok sayıda hukuki işlemi ve geniş vatandaş kitlelerini ilgilendiren bir mükellefiyet türüdür. Geniş bir uygulama alanı olduğu için, hiçbir mükellefiyeti bulunmayan kişiler dahi bu vergiyi doğrudan ödemek durumuyla karşı karşıya kalabilir (Öner, 2014: 460). Damga vergisinin konusunu, 488 sayılı Damga Vergisi Kanunu'nun 1 sayılı tablosunda belirtilen damga vergisine tabi kağıtların hazırlanması oluşturmaktadır. Damga vergisinin mükellefiyetliği ise belirtilen tabloda yer alan kağıtların kişi veya kişiler tarafından imzalanması ile meydana gelmektedir.

9. DOLAYSIZ VE DOLAYLI VERGİLERDE VERGİ ADALETİ

Vergilemede adaletin sağlanması konusunda gelişmekte olan ülkeler önemli sorunlar ile karşılaşmaktadır. Gelişmekte olan ülkelerin vergileme sisteminde temel olarak adaleti sağlamak yerine, sanayileşmeyi arttıracak politikaları benimsediği görülmektedir. Dolayısıyla adil bir vergilendirmeyi beraberinde getiren dolaysız vergilendirme yerine, satış üzerinden alınan dolaylı vergilerin vergi gelirleri içindeki yükü artmaktadır. Ayrıca gelişmekte olan ülkelerde vergiler daha çok mali amaca hizmet etmek için kullanılmaktadır. Bu nedenle hükümetler, vergi sistemini oluştururken vergi adaletini sağlayacak politikalara öncelikleri arasında yer vermemektedir (Kılıç, 2018: 400).

Tablo 1: Vergi Gelirlerinin Genel Bütçe Gelirleri İçerisindeki Payı (%) (2007-2020)

Yıllar	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
%	82,7	85,8	82,6	85,5	88,5	86,9	86,8	86,2	87,8	86,0	88,3	84,9	79,0	82,8

Kaynak: Bütçe ve Mali Kontrol Genel Müdürlüğü sayfasındaki veriler kullanılarak oluşturulmuştur.

Ülkemizdeki vergi gelirlerinin genel bütçe gelirleri içindeki payını gösteren Tablo 1 ile son yıllarda dalgalı bir seyir izlediği görülmektedir. Son on dört yıl içinde ortalama vergi gelirlerinin genel bütçe gelirleri içindeki payı incelendiğinde ise ortalama %79,1 civarı olduğu gözlemlenmektedir. Vergilerin bir politika aracı olarak dikkate alınabileceğini varsaydığımızda, verginin kamu gelirleri içindeki payının büyüklüğü, aynı zamanda milli ekonomideki önemini de belirtmektedir.

Bütçe gelirlerinin büyük çoğunluğunu oluşturan vergilerin, konularına göre ayırma tabi tutularak dolaylı ve dolaysız vergilerin detaylı incelenmesi sonucunda vergi adaleti kavramının etkinliği daha iyi irdelenmiş olacaktır. Daha önceki konularda değinildiği gibi vergi sisteminde adaletin sağlanabilmesi için ödeme gücüne göre vergilendirmenin hâkim olduğu bir vergi yapısının oluşturulması gerekmektedir. Dolayısıyla dolaysız vergilerin ağırlıklı olduğu özellikle gelir vergisi gibi gelire göre artan oranlı tarifeyi izleyen, mükellefin şahsi durumunu dikkate alan, en az geçim indirimini uygulayan ve ayırma prensibine olanak sağlayan bir vergileme sisteminin esas alınması gerekmektedir. Çünkü yukarıda sayılan mükellef özelliklerinin dikkate alınarak vergilemenin yapılması aynı zamanda vergi adaletinin sağlanmasını da pozitif yönde etkilemektedir.

Toplumsal yapının dolaylı vergi yüküne yatkınlığı bir başka deyişle dolaylı vergilerin toplum üzerinde anestezi uygulayarak vergi tahsilini gerçekleştiren bir yapıya sahip olması ve hem riski hem de kayıp kaçığının çok az olması nedeniyle devletin gün geçtikçe ağırlık verdiği en önemli vergi geliri olduğu görülmektedir. İlk etapta ekonomik yapıdaki dengesizliğin giderilmesi adına geçici olarak kanunen getirilen birçok vergi türü, tahsilinin kolay ve gelirinin çok olması nedeniyle vergi sistemimizde kalıcı hale geldiğini görmekteyiz. Bu vergi türlerinin büyük çoğunluğunu ise dolaylı vergiler oluşturmaktadır.

Tablo 2: Dolaylı ve Dolaysız Vergilerin Vergi Gelirlerindeki Payı % (2007-2020)

Gelir Çeşidi		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Dolaysız Vergiler	Gelir Vergisi	22,5	22,6	22,2	19,1	19,2	20,2	19,5	20,9	21,0	21,0	20,9	22,4	24,1	19,0
	Kurumlar Vergisi	9,0	10,0	10,4	9,9	10,6	10,4	8,9	9,3	8,2	9,4	9,8	12,6	11,7	12,6
	Diğer	2,6	2,5	2,4	2,4	2,4	2,4	2,2	2,2	2,2	2,2	2,0	2,2	2,3	2,1
Dolaylı Vergiler	KDV	30,4	30,0	29,6	29,8	31,0	29,4	30,9	29,1	29,8	28,5	29,1	28,7	26,8	27,7
	ÖTV	25,6	24,9	25,3	27,2	25,3	25,7	26,3	25,8	25,9	26,2	25,8	21,5	21,8	24,9
	Diğer	9,9	10,0	10,1	11,6	11,5	11,9	12,2	12,7	12,9	12,7	12,4	12,6	13,3	13,7

Kaynak: Bütçe ve Mali Kontrol Genel Müdürlüğü sayfasındaki veriler kullanılarak oluşturulmuştur.

2010 yılından sonra gelir üzerinden alınan vergilerde gerilemenin yaşandığı Tablo 2 ile görülmektedir. Hem kurumlar vergisinin hem de gelir vergisinin vergi gelirleri pastasındaki dilimi küçülmektedir. Buna karşın dolaylı vergilerin vergi gelirlerinin büyük çoğunluğunu yüklediğini söylemek mümkündür. Hatta 2011 ve sonrasındaki yıllarda dolaylı vergilerin diğer kısmında ele almış olduğumuz damga vergisi, özel iletişim vergisi, harçlar vb. vergi türlerinin de pastadan büyük bir dilim aldığı görülmektedir. Son on yılın ortalamasına baktığımızda dolaylı vergilerin toplam vergi gelirlerinin % 67'sini oluşturduğunu görmekteyiz. Bu tablo ise vergi sistemimizin ne denli adaletten uzak bir yapıya sahip olduğunu göstermektedir.

Siyasi gücün dolaysız vergilerin vergi gelirlerindeki payının arttırılmasını siyasi risk olarak görmesi, adil olmayan vergilendirme sisteminin de toplum üzerinde geçerliliğini koruyacağını göstergesidir. Tablo 2 ile anlaşıldığı üzere KDV'nin vergi gelirlerindeki payı daima tartışılmaz düzeyde ve daima birinci sıradadır. KDV'yi takip eden ÖTV ise kamu harcamalarının finansmanında etkinliğini koruyan bir diğer dolaylı vergi türüdür.

Son on yılda vergi gelirlerindeki oranı % 20 civarında olan gelir vergisini ve % 10 civarında olan kurumlar vergisini Tablo 3 ile detaylı incelediğimizde beyana dayalı vergilendirmenin oldukça düşük oranlarda bulunduğunu görmekteyiz.

Tablo 3: Gelir ve Kurumlar Vergisinin Vergi Gelirlerindeki Payı % (2007-2020)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Gelir Vergisi	71,5	69,2	68,1	65,9	64,4	66,1	68,7	69,6	72,0	69,2	68,0	63,8	67,4	60,2
Beyana Dayalı GV	4,4	4,8	5,2	5,1	5,6	5,4	4,8	4,1	4,3	4,7	4,5	5,1	4,9	5,2

Basit Usulde GV	0,6	0,5	0,6	0,6	0,6	0,5	0,5	0,4	0,4	0,4	0,2	0,1	0,1	0,1
GV Tevkifatı	91,9	91,6	91,3	91,3	90,9	91,6	92,2	93,2	93,2	92,9	93,3	92,9	93,3	92,7
Gelir Geçici Vergi	3,1	3,1	2,9	3,0	2,9	2,5	2,5	2,3	2,1	2,0	2,0	1,9	1,7	2,0
Kurumlar Vergisi	28,5	30,8	31,9	34,1	35,6	33,9	31,3	30,4	28,0	30,8	32,0	36,2	32,6	39,8
Beyana Dayalı KV	1,1	3,1	2,7	2,4	13,1	5,3	7,2	1,9	1,3	6,6	4,3	5,4	4,1	-0,2
KV Tevkifatı	0,3	1,1	2,2	1,1	1,2	0,8	0,5	0,6	0,8	0,6	0,4	0,3	0,2	0,2
Kurumlar Geçici Vergi	98,6	95,8	96,1	96,5	85,7	93,9	92,3	97,5	97,9	92,8	95,2	94,3	95,7	100

Kaynak: Bütçe ve Mali Kontrol Genel Müdürlüğü sayfasındaki veriler kullanılarak oluşturulmuştur.

2007 yılında gelir vergisinin vergi gelirleri içindeki payı % 71,5, kurumlar vergisinin payı ise % 28,5 olarak gerçekleşmiştir. Yıllar itibarıyla incelendiğinde dalgalı bir seyir izlediği görülmekte ve 2020 yılında gelir vergisinin vergi gelirleri içindeki payı % 60,2 olurken, kurumlar vergisinin payı % 39,8 olmuştur. Gelir vergisinin gelir üzerinden alınan vergiler içindeki payının düşmesine karşın kurumlar vergisinin payı artış göstermiştir. Bu durum ayırma prensibinin uygulamaya çalışıldığının göstergesidir. Fakat gelir üzerinden alınan vergiler içerisinde gelir vergisi payının düşüş yaşaması, artan oranlı tarife yapısında dikleşmenin oluşmasına neden olmaktadır. Bu durum ise vergi adaletini olumsuz etkilemektedir.

Belirtilen yıllar arasında gelir vergisinin % 92,1'i kaynakta kesinti (tevkifat) yoluyla tahsil edildiği görülmektedir. Kaynakta kesinti yoluyla vergiler mükellefe ödenmeden önce tahsil edilmektedir. Bir başka deyişle vergi yükümlüsü vergiyi, gelirini elde etmeden önce ödemektedir. Gelir vergisinin büyük çoğunluğunu kapsayan bu yöntem daha çok ücret üzerinden vergilendirilmede kullanıldığından dolayı ve esasında gelir beyanından ziyade dolaylı vergilerde olduğu gibi kesinti yoluyla elde edilmesi nedeniyle vergilemede adaletin sağlanmasına engel olmaktadır.

Kurumlar vergisi gelirlerinin ise beyana dayalı kurumlar vergisi oranının oldukça düşük olduğu, belirtilen yıllar arasında ortalama % 4,4 civarında olduğu görülmektedir. Buna karşın kurumlar vergisi gelirinin neredeyse tamamına yakını denilebilecek olan % 94,7'si geçici vergi gelirlerinden oluşmaktadır. Dolayısıyla kurumların yıl içerisinde belirli tarihler arasında ödediği geçici vergi gelirleri dışında, kurumlar vergisi beyannamesinde ayrıca vergi beyanında bulunulmadığı görülmektedir. Bu durum ise vergiden kaçınma veya vergi kaçakçılığına başvurularak vergi yükünün azaltıldığını göstermesinden dolayı vergilemede adaletsizliğin oluşmasına neden olmaktadır.

Özetle ülkemizin bütçe gelirlerinin büyük çoğunluğunun dolaylı vergilerden oluşması, gelir üzerinden beyan edilen ve ödenen vergilerin oldukça düşük oranlarda olması, adaletsiz vergi sisteminin de kronik hale geldiğini göstermektedir. Tüketim toplumu haline getirilerek harcamanın özendirildiği bu çağda dolaylı vergilerin azaltılması da söz konusu değildir.

10. SONUÇ

Vergileme sisteminde belirginleşen ve üzerinde uzlaşılan, adaletli bir yapı henüz söz konusu değildir. Fakat maliye yazınında, vergilemede adalet konusuyla ilgili birbirine yakın çeşitli tanımlamalar ve çalışmalar yapıldığı görülmektedir. Bu çalışmalarda genellikle geçen vergi adaleti kavramı, adaletli bir vergilendirme için vergi yükünün, vergi yükümlüleri arasında dengeli ve adil bir dağılımın yapılması şeklindedir. Literatürde ise verginin, yükümlüler arasında dağılımı iki şekilde olacağı belirtilmektedir. Bunlar; mal ve hizmetten yararlanma (faydalanma) ve ödeme gücüne göre vergilendirme şeklindedir. Yararlanma ilkesinin günümüzde uygulanabilirliği pek mümkün olmadığı için ödeme gücüne göre vergilendirme yaklaşımı benimsenmektedir. Vergi yükümlüleri; gelirin, edinmiş olduğu servetine ve mal ve hizmet karşılığında yapmış olduğu harcamalara bağlı olarak ödeme gücüne (mali gücüne) göre kamu finansmanına katkı sağlamaktadır.

1982 Anayasası'nın 2., 10., 55. ve 73. Maddelerinde verginin, adaletli, eşitlikçi, herkesi kapsayacak genelliğe sahip ve mali gücüne göre vergilendirilme ilkelerine özellikle vurgu yapılmaktadır. Dolayısıyla vergi sistemi Anayasal düzeyde güvence altına alınmaya çalışılmış ve verginin uygulanmasında adaletin sağlanması için düzenlemeler yapılmıştır. Ancak bugünkü uygulama sonuçlarına baktığımızda vergilemede adaletin sağlanması amaçlanarak oluşturulan bir sistemin mevcut olmadığını açıkça görebilmekteyiz.

Çalışmada incelemiş olduğumuz 2007-2020 yılları arasında adil bir vergilendirmeyi gösteren dolaysız vergilerin oldukça az durumda olduğunu, buna karşın vergi yükünün ağırlıklı olarak dolaylı vergilere dayandığını görebilmekteyiz. Ayrıca dolaylı vergiler, vergi gelirlerinin yarısından fazlasını oluşturmaktadır. Dolaysız vergilerin yarısından fazlasını oluşturan gelir vergisinin de % 90'ından fazlasının tevkifata dayalı vergi gelirlerinden

oluşması, vergi yükünün ücretliler üzerinde yoğunlaştığını göstermekte ve vergilemede adalet ve ayırma ilkelerine aykırı sonuçların ortaya çıkmasına neden olmaktadır. Kurumlar vergisinin ise büyük çoğunluğunun yıl içerisinde geçici vergiler ile beyan edildiği ve yılsonunda beyanın oldukça düşük düzeyde olduğunu görebilmekteyiz. Bu durum ise vergiden kaçınma ve vergi kaçakçılığı gibi faaliyetlerinin var olduğunu göstermektedir. Servet üzerinden alınan vergiler de dolaysız vergi kategorisinde sayılmakla beraber vergi gelirleri içerisindeki payı oldukça düşük düzeyde olduğu görülmektedir.

Özetle son on dört yılda vergileme sisteminde dolaylı vergilerin yoğunlukta olduğu görülmektedir. Dolaylı vergilerin, vergilemede adaletsizliği ortaya çıkarması nedeniyle, esas olarak dolaysız vergileri arttıracak politikaların benimsenmesi gerekir. Ancak günümüzde bu yönde herhangi bir uygulama görülmemektedir. Dolaylı vergilerin, vergi gelirlerinin yarısından fazlasını karşılıyor olması, ödeme gücüne göre vergilendirilme ilkesinin de dikkate alınmadığının göstergesidir.

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Determination of Consumers' Chicken Meat Purchase and Consumption Preferences: A case study of Adıyaman Province in Turkey

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Özet: Beyaz et, kırmızı ete göre daha ucuz olduğu ve daha kolay ulaşılabildiği için tüketiciler tarafından tercih edilen bir protein kaynağıdır. Yağ içeriğinin düşük olması beyaz eti daha cazip hale getirmektedir. Yapılan çalışmalardan beyaz et çeşitleri (balık, hindi, ördek, kaz vs.) içerisinde en fazla tavuk etinin tüketildiği görülmektedir. Bu çalışmada Türkiye’de tüketicilerin tavuk eti satın alma ve tüketim tercihleri Adıyaman ili özelinde araştırılmıştır. Çalışmanın ana materyalini Adıyaman ilinde tavuk eti tüketen 270 tüketici ile yapılan anketten elde edilen veriler oluşturmaktadır. Çalışmada Türkiye İstatistik Kurumu (TÜİK) ve Beyaz Et Üreticileri Birliğinden (BESD-BİR) elde edilen istatistiki veriler ve önceden yapılan konu ile ilgili çalışmalardan elde edilen veriler ikincil verileri oluşturmaktadır. Veriler frekans tablolarıyla özetlenmiştir. Ayrıca, tüketicilerin gelir düzeyleri ile bazı sosyo-ekonomik değişkenler arasındaki ilişkiler incelenirken Ki-kare (χ^2) bağımsızlık testi uygulanmıştır. Bazı verilerin analizinde 5’li Likert ölçeği kullanılmıştır. Elde edilen bulgulara göre; Adıyaman ilinde kişi başı tüketilen tavuk eti miktarı yıllık ortalama 12,7 kg’dır. Tüketicilerin üçte birinin tükettiği toplam et miktarının yarısı tavuk etidir. Tüketicilerin yarısından fazlası o anki ihtiyaca göre tavuk eti satın almaktadır. Tüketicilerin tavuk eti tercihinde; ürünün tazeliği, kalitesi, damak zevkine uygunluğu, imal tarihi, ambalajı, ürünün fiyatı ve üretici firma tüketicilerin dikkat ettiği önemli faktörlerdir. Adıyaman ilinde tavuk eti tüketimi yeterli düzeyde olmadığı söylenebilir. Tüketicilerin tavuk eti tercihini etkileyen faktörler dikkate alınarak tüketimi artırıcı çalışmaların yapılması gerekmektedir.

Anahtar kelimeler: Satın alma, Tavuk eti, Tercih, Tüketim

Abstract: Poultry meat is a protein source preferred by consumers because it is cheaper and more accessible than red meat. Low fat content makes poultry meat more attractive. Studies show that chicken meat is consumed the most among white meat varieties (fish, turkey, duck, goose, etc.). In this study, the purchasing and consumption preferences of consumers in Turkey were investigated in Adıyaman province in Turkey. The main material of the study is the data obtained from the survey conducted with 270 consumers consuming chicken meat in Adıyaman. In the study, the statistical data obtained from the Turkish Statistical Institute (TURKSTAT) and the White Meat Producers' Association (BESD-BİR) and the data obtained from previous studies on the subject constitute the secondary data. The data are summarized with frequency tables. In addition, the Chi-square (χ^2) independence test was applied while examining the relationships between the income levels of consumers and some socio-economic variables. A Likert Scale was used in the analysis of some data. According to the findings obtained; The annual average amount of chicken meat consumed per person in Adıyaman is 12.7 kg. Half of the total meat consumed by a third of consumers is chicken. More than half of the consumers buy chicken meat according to the current need. In consumers' preference for chicken meat; The freshness, quality, suitability of the product, date of manufacture, packaging, price of the product and the manufacturer are the important factors that consumers pay attention to. It can be said that the amount of chicken meat consumption in Adıyaman is not at a sufficient level compared to the Turkey average.. Considering the factors affecting the consumers' choice of chicken meat, it is necessary to carry out studies to increase consumption.

Key words: Chicken meat, Consumption, Preference, Purchasing

1. INTRODUCTION

With the increase in income in Turkey, the awareness of healthy diet has also developed in most of the consumers. Chicken meat is a low-fat, high protein, rich in vitamins and minerals, easy to prepare, can be used in many dishes, and its prices are much more affordable than red meat. Such reasons have increased the consumption of chicken meat. The animal protein deficit, which has arisen due to the cost problems and crises in red meat production in Turkey, has been tried to be balanced with the increase in chicken and turkey meat production (Hekimoğlu and Altindeğer 2009; Dokuzlu et al. 2013: 84)

The annual per capita consumption of chicken meat in Turkey was 20.7 kg in 2021 and 20.5 kg in 2019. Poultry meat consumption amount was 25.4 kg in EU-28 countries, 50.1 kg in the USA, 40.3 kg in Brazil, 30.6 kg in Russia, 14 kg in China, and 21 kg in Turkey, according to 2019 data (Anonymous, 2022b: 1). The average consumption of poultry meat in Turkey is higher than in China, compared to the European Union, the United States, Brazil and Russia, this amount is quite low.

Consumer behavior change is affected by many factors such as cultural, socio-economic factors (age, gender, education level, origin, degree of knowledge, nutrition and price) (Pirvutoiu and Popescu 2013: 389).

Research on consumer behavior and trends is important both for businesses to develop new strategies and for revealing the welfare and spending levels of people living in a particular place or region. Increasing population and difficult living conditions have made it necessary to use the resources used in nutrition more efficiently. For this reason, these issues should be planned and policies should be created by the decision makers on a sectoral basis. (Kızılaslan and Nalinci 2013:2).

Studies of examining the socio-economic characteristics and preferences of consumers; It can offer important ideas to the manufacturer for the production of products, their introduction to the market, strengthening their position in the market, and developing new products by diversifying their products. The aim of this study is to examine the chicken meat consumption and purchasing preferences of consumers living in the central district of Adıyaman.

2. MATERIAL and METHODS

The primary material of this study consists of data obtained by survey method from 270 consumers in Adıyaman. In the study, articles, reports and statistics prepared on the subject were used as secondary material. Frequency tables, percentage calculations and chi-square analysis were used as methods. Some questions were evaluated with a Likert scale. The following formula was used to determine the number of consumers to be surveyed (Güneş and Arıkan, 1988; Çiçek and Erkan, 1996: 72).

$$n = \frac{N(pq)}{(N - 1) D^2 + (pq)}$$

In equality; n= sample size, N= population size, p= prediction rate, q=1-p (table value 1.65 at 90% confidence interval and 5% margin of error to reach maximum sample size). The sample volume was calculated as 272 households and the sampled consumers were determined randomly. A survey was conducted with 272 consumers, but 2 survey forms with missing data were excluded from the evaluation and the data of 270 surveys were evaluated.

Table 1. Consumer Groups by Income Levels

Income Range (TL)	Income level	Income Groups	Number	%
<2500	Low	I	107	39.6
2501-5000	Medium	II	116	43.0
>5000	High	III	47	17.4
Toplam			270	100.0

While analyzing the data, consumers were divided into 3 groups according to their income levels. Those with an income level of less than 2500 TL were in the 1st group, those with an income level of 2501-5000 TL were in the 2nd group, and those with an income level of more than 5000 TL were in the 3rd group. The answers given to the questions were evaluated according to these three groups and the total number of consumers (Table 1).

3. RESULT and DISCUSSION

In the study, in order to reveal the profile of the consumers participating in the survey, their demographic characteristics were examined; their gender, age, educational status, the number of individuals in the family and their occupations are summarized in Table 2.

It is seen that the gender distribution of the consumers participating in the survey is balanced. 47.4% of consumers are women and 52.6% are men. The average age of the respondents was 38.4, and the median value was 38 years. In other words, half of them are over 38 years old, while the other half are under 38 years old. However, nearly half (42.6%) are between the ages of 18-35. It can be said that a significant part of the respondents are young consumers. When the number of individuals in the family is examined, it is seen that 39.3% of the respondents are members of a family consisting of 4-5 people and 38.1% of them are members of a family consisting of six or more. It is understood from the number of individuals in the family that the families are larger than the elementary family.

Table 2. Characteristics of The Surveyed Group of Consumers

Demographic Characteristics	Groups	Number	(%)
Gender	Woman	128	47.4
	Man	142	52.6
Age	18-25	37	13.7
	26-35	78	28.9
	36-45	91	33.7
	45+	64	23.7
	Mean	38.4	
	Median	38	
Education	Primary	38	14.1
	Secondary	21	7.8
	High	92	34.1
	University	119	44.0
Number of Individuals in the Family	1-3	61	22.6
	4-5	106	39.3
	6+	103	38.1
	Mean	5.05	
occupation	Officer	93	34.4
	Self-employment	50	18.5
	Housewife	36	13.3
	Small business	24	8.9
	Student	21	7.8
	Employee	15	5.6
	Farmer	14	5.2
	Retired	14	5.2
	Unemployed	3	1.1

According to TURKSTAT data, the population of Adıyaman province in 2019 is 626 465. 49.5% of the population is female and 50.5% is male. However, the population of the city center is 431 758, with 49.8% women and 50.2% men (Anonymous, 2022a). When the education levels of the respondents are examined, it is seen that almost half (44.0%) are university graduates (Table 2). Consumers with higher education levels are expected to make more conscious choices. In a study on consumer behavior in Adıyaman, it was determined that 49.2% of consumers were between the ages of 18-35 and 56.1% were university graduates (Bilir, 2021: 78).

According to the findings, it is understood that the gender distribution of the consumers participating in the survey in Adıyaman province is balanced, and a middle-aged, educated, and a consumer profile with a large family has emerged. From the resulting profile, it is expected that the consumers in Adıyaman will be a conscious consumer group.

The share of consumed chicken meat in the total amount of meat consumed has been examined and given in Table 3. Chicken constitutes half of the meat consumed by 32.2% of consumers. It is expected that the share of chicken meat in the meat consumed by high-income consumers is less than that of middle- and low-income people. The results obtained support this idea. When analyzed according to income levels; The share of chicken meat in meat consumed by more than half (55.3%) of high-income consumers is one-fourth. Half of the total meat consumed by approximately 35% of middle and low-income consumers is chicken (Table 3). As expected, the share of chicken meat in the total amount of meat consumed by high-income consumers is lower. The chi-square test is significant at the 1% level.

Table 3. The Share of Chicken Meat in The Total Amount of Meat Consumed

Gruplar	One-fourth		One-third		One Half		All		Total	
	Kişi	%	Kişi	%	Kişi	%	Kişi	%	Kişi	%
I	24	22.4	32	29.9	38	35.5	13	12.1	107	100.00
II	30	25.9	35	30.2	41	35.3	10	8.6	116	100.00
III	26	55.3	10	21.3	8	17.0	3	6.4	47	100.00

Toplam	80	29.6	77	28.5	87	32.2	26	9.6	270	100.00
$\chi^2 = 19.368$	Sd = 6		P = 0.004							

The monthly consumption of chicken meat by consumers has been examined and presented in Table 4. It is seen that 41.5% of the consumers consume less than 3 kg, and 35.6% consume 3-5 kg of chicken meat. From the calculations made, the average annual chicken meat consumption per person was found to be approximately 12.7 kg. This value is below the Turkey average (20.5 kg in 2019 Turkey average) (Anonymous, 2022b:1). In a similar study, İkikat Tümer et al., (2016: 435) determined the average annual chicken meat consumption per capita in Kahramanmaraş province as 12 kg.

Table 4. Consumption of chicken meat by income level (kg/month)

Groups	< 3 kg		3.00-4.99 kg		5.00-9.99 kg		10.00-20.00 kg		Total	
	Kişi	%	Kişi	%	Kişi	%	Kişi	%	Kişi	%
I	36	33.6	40	37.4	24	22.4	7	6.5	107	100.00
II	46	39.7	44	37.9	17	14.7	9	7.8	116	100.00
III	30	63.8	12	25.5	4	8.5	7	2.1	47	100.00
Total	112	41.5	96	35,6	45	16.7	17	6.3	270	100.00
$\chi^2 = 14.940$	Sd = 6		P = 0. 021							

The reasons for the consumption of chicken meat by the consumers are given in Table 5. When the reason for consumption of chicken meat is examined; 34.1% of consumers say it suits their taste, 32.6% of them have low price compared to other meats, 14.8% of them are easy to cook, 14.4% of them are easily available in the market, 10.7% of them are healthy, 0.7% are from other reasons. They reported that they preferred chicken meat because of this. There were consumers who gave more than one answer to this question.

Table 5. Reasons for Consumption of Chicken Meat*

Reasons	I	II	III	Total Answer	%	Total Consumer
Suits my taste	33	34	25	92	34.1	270
Low price compared to other meats	41	38	9	88	32.6	270
Easy to cook	8	20	12	40	14.8	270
Easy to find in the market	17	15	7	39	14.4	270
to be healthy	14	13	2	29	10.7	270
Other**	0	2	0	2	0.7	270

*More than one answer was given to this question. **Other (Variety, all, etc.)

It is thought that consumers can affect the consumption of chicken meat; Factors such as the freshness of the product, the quality of the product, the taste of the consumer, the date of manufacture of the product, the packaging of the product, the price of the product, the manufacturer, and the advertisement were examined using a 5-point Likert scale and given in Table 6.

Table 6. Factors Affecting Chicken Meat Consumption Preference*

Factors	%					Score	Std. Deviation
	1	2	3	4	5		
Freshness of the Product	0.0	0.3	0.4	13.3	86.3	4.86	0.36
Product Quality	2.2	1.5	5.2	20.7	70.4	4.56	0.84
Consumer's Taste	0.7	3.0	5.6	28.9	61.9	4.48	0.79
Production Date of the Product	0.7	3.0	7.0	26.3	63.0	4.48	0.81
Product Packaging	1.9	5.6	13.7	29.3	49.6	4.19	0.99
Product Price	2.2	7.0	11.9	33.0	45.9	4.13	1.02
Manufacturer	1.9	5.9	17.4	27.8	47.0	4.12	1.02
Advertisement	7.4	18.5	26.3	16.7	31.1	3.46	1.30

1. Unimportant, 2.Less Important, 3. Satisfactory, 4. Important, 5. Very Important

Among these factors, the freshness of the product, the quality of the product, the taste of the consumer and the date of manufacture of the product are among the factors that score the most. The reasons for the preferences of the consumers participating in the survey according to the points given; the freshness of the

product (4.86), the quality of the product (4.56), the taste of the consumer (4.48), the date of manufacture of the product (4.48), the packaging of the product (4.19), the price of the product (4.13), the manufacturer (4.12), the advertisement (3.46). (Table 6). In similar studies conducted in the province of Hatay; Tapkı and Demetgül (2021: 1785) stated that freshness (4.7) and the place of purchase (4.4) are the two most important factors when purchasing meat and meat products; Çopur et al (2006: 80) place quality (47.52%) and producer companies (15.49%) in the first place in chicken meat preference, while İnci et al (2014:23) place freshness (96.6%) and packaging (95.9%) in the first place in chicken meat preference. they have determined.

Table 7. Chicken Meat Purchase Frequency

Groups	According to current need		Daily		Weekly		Monthly		Other		Total	
	Freq..	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
I	53	49.5	11	10.3	23	21.5	16	15.0	4	3.7	107	100
II	65	56.0	8	6.9	21	18.1	20	17.2	2	1.7	116	100
III	29	61.7	3	6.4	5	10.6	9	19.1	1	2.1	47	100
Total	147	54.4	22	8.1	49	18.1	45	16.7	7	2.6	270	100
$\chi^2 = 5.407$		Sd = 8		P = 0.713								

The frequency of consumers purchasing chicken meat is given in Table 7. 54.4% of the consumers buy chicken meat according to the current need, 18.1% weekly, 16.7% monthly. It can be said that these findings show that consumers buy chicken meat when they will consume more than a certain frequency. There is no significant relationship between the income levels of consumers and the frequency of purchasing chicken meat. In a similar study, İnci et al. (2014: 20) stated that 31.3% of consumers buy chicken meat once a week, 20.8% buy chicken twice a week, and 15% buy chicken once every two weeks, in another study Duru and Parlakay (2006: 549) determined that 52.9% of consumers buy chicken meat according to the current need, and 26.1% buy weekly chicken meat.

Table 8. Chicken Meat Consumption Frequency

Groups	2-3 times a week		Once a week		Every 15 days		Once a month		Total	
	Kişi	%	Kişi	%	Kişi	%	Kişi	%	Kişi	%
I	35	32.7	36	33.6	23	21.5	13	12.1	107	100
II	21	18.1	45	38.8	40	34.5	10	8.6	116	100
III	3	6.4	20	42.6	17	36.2	7	14.9	47	100
Total	59	21.9	101	37.4	80	29.6	30	11.1	270	100
$\chi^2 = 17.810$		Sd = 6		P = 0.007						

Chicken meat consumption frequency of consumers is examined in Table 8. It has been determined that 37.4% of the consumers consume chicken meat once a week, 29.6% once every 15 days, and 21.9% 2-3 times a week. There is a significant relationship at the level of 1% between the income levels of consumers and the frequency of chicken meat consumption. It can be said that the frequency of consumption of chicken meat varies according to the income level. Pirvutoiu and Popescu (2013: 390), in a similar study conducted in Romania, determined that 56% of consumers consume poultry meat 2-3 times a week, 20% daily, and 16% once a week.

4. CONCLUSIONS

The conclusions that can be drawn based on the findings obtained in the study on the purchasing and consumption preferences of consumers in Adıyaman province are summarized below.

A middle-aged and educated consumer profile emerges with a balanced gender distribution. From the resulting profile, it is expected that the consumers in Adıyaman will be a conscious consumer group. One of the leading reasons for consumers to consume chicken meat is that it suits the taste of the consumer, and the other is that the price is cheaper than other meats. Factors such as the freshness of the product, the quality of the product, the taste of the consumer, the date of manufacture of the product, the packaging of the product, the price of the product, the manufacturer, advertising are important factors that can affect the consumption of chicken meat. With market strategies that can be developed by taking these factors into account, the producer can increase his profit by making more sales, and the consumer can increase his quality of life with a healthier diet. In order to increase the consumption of chicken meat, product types that will appeal more to the taste of the

consumer can be developed. In addition, the increase in chicken products dealers who sell chicken products by breaking up according to the consumption preferences of consumers may increase the consumption of chicken meat by consumers. In order to increase the consumption of chicken meat, which has an important place in human nutrition both in terms of health and economy, it is necessary to carry out studies that reveal its importance.

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İşletmelerin Firma Performansı ve Sermaye Yapısı ile Sürdürülebilirlik İlkeleri Çevresel Göstergeleri Kapsamındaki İlişkisi: Sürdürülebilirlik Endeksinde Yer Alan İmalat İşletmeleri Üzerine Araştırma

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Özet: işletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinin finansal performansı ve sermaye yapısını nasıl etkilediğini tespit etmektir. Bu kapsamda sürdürülebilirlik endeksinde yer alan toplam 11 adet imalat işletmelerinin 2017-2021 yılları arasındaki verileri incelenmiştir. Bu işletmelerden çevresel göstergelerin 2017-2021 yılları arasında yer aldığı 8 adet işletme tespit edilmiştir. Dolayısı ile çalışmaya toplam 8 adet işletme ile devam edilmiştir. Çalışmada Stata 14.2 programı ile panel veri analizi yapılmıştır. Modeli oluştururken bağımlı değişken olarak sermaye yapısı ile karlılık oranı ele alınmıştır. Bağımsız değişkenler olarak da çevresel göstergeler kapsamında enerji tasarrufu, sera gazı emisyonu, tehlikeli atıklar ve tehlikesiz atıklar ile ilgili veriler ele alınmıştır. Ulaşılan sonuçlara göre;

- Net kar/Öz Kaynak (ROE) ile tehlikeli atıklar arasında %1 anlamlı,
- Sermaye Yapısı (Borç/Öz Kaynak) ile sera gazı emisyonu arasında %5 anlamlı
- Sermaye Yapısı (Borç/Öz Kaynak) ile tehlikesiz atıklar arasında %10 anlamlı düzeyinde pozitif bir ilişki bulunduğu tespit edilmiştir.

Diğer değişkenler ile sermaye yapısı ve firma performansı arasında bir ilişki tespit edilmemiştir.

Anahtar Kelimeler: Çevresel Göstergeler, Sermaye Yapısı, Firma Performansı.

Abstract: The sustainability principles of enterprises are to determine how environmental indicators affect financial performance and capital structure. In this context, the data of a total of 11 manufacturing enterprises included in the sustainability index between the years 2017-2021 were examined. Among these enterprises, 8 enterprises with environmental indicators between the years 2017-2021 have been identified. Therefore, the study continued with a total of 8 enterprises. In the paper, panel data analysis was performed with Stata 14.2 program. While creating the model, capital structure and profitability ratio were considered as dependent variables. As independent variables, data related to energy savings, greenhouse gas emissions, hazardous wastes and non-hazardous wastes are considered within the scope of environmental indicators. According to the obtained results;

- 1% significant between net profit/Equity (ROE) and hazardous waste,
- 5% significant difference between Capital Structure (Debt/Equity) and greenhouse gas emissions
- It has been determined that there is a 10% significant positive relationship between Capital Structure (Debt/Equity) and non-hazardous waste.

Key Words: Environmental Indicators, Capital Structure, Firm Performance.

1. Giriş

Sürdürülebilirlik kavramı, işletmelerde uzun vadeli değer yaratmak için kurumsal yönetim ilkeleri ile birlikte ekonomik, çevresel ve sosyal faktörlerin işletme faaliyetlerinde uygulanması ile literatürde yaygın bir hal almıştır.

Küresel gelişmeler çerçevesinde işletmelerin finansal ve finansal olmayan bilgilerinin de raporlanması ile entegre raporlamalar ve sürdürülebilir raporlamaların önemi artmaktadır. Ülkemizde 2014 yılında kurulan BIST sürdürülebilirlik endeksinden sonra, işletmelerin sürdürülebilirlik raporlarına önemi artmıştır. Sürdürülebilirlik tanımında yer alan çevresel, sosyal ve ekonomik boyutun birtakım göstergeleri yayınlanmaktadır. Sürdürülebilirlik raporlarının alt başlıklarından çevre faktörünün amacı işletmelerin çevreye en az zararı vererek faaliyetlerini yapması ve gelecek nesillere yaşanır bir yeryüzü bırakarak bu farkındalığın gelecek nesillere de bırakılmasıdır.

İşletmeler faaliyet performanslarını ekonomik, finansal, sosyal ve çevresel olarak da değerlendirilmektedir. Dolayısı ile işletmeler hem finansal hem de finansal olmayan bilgilerin sunulduğu raporları yayınlamaktadır. Sürdürülebilirlik raporlaması küresel düzeyde en yaygın olarak kullanılan “Küresel Raporlama Enstitüsü (Global Reporting Initiative (GRI))” tarafından oluşturulan standartlardır. GRI standartları işletmeler ve ülkeler

açısından önemli bir rehberdir. GRI 1997 yılında Çevreye Duyarlı Ekonomiler Koalisyonu ve Birleşmiş Milletler Çevre Programı tarafından ortak bir proje ile kurularak işletmelerin, ekonomik, sosyal ve çevresel göstergeleri yer almaktadır. GRI ilk rehberi olan G1'i 2000 yılında yayınlamıştır. İlerleyen yıllarda rehber güncellenerek tekrardan yayınlanmıştır. G2 2001, G3 2006, G4 2013 yılında yayınlanmıştır. 2016 yılında "GRI Standartları" olarak yayınlanmıştır. GRI standartları genel ve özel olmak üzere iki standarttan oluşmaktadır (Sultanoğlu 2021:34). Özel standartların içerisinde yer alan GRI 301-308 arasında yer alan çevresel standartlar yer almaktadır. Sürdürülebilirlik kapsamında çevresel göstergeleri; enerji, su, biyolojik çeşitlilik, emisyon, atık su, katı atık, ürün/hizmetler ve uyum olarak ayrılmaktadır. (White 2005:41).

2. Sürdürülebilirlik Kapsamında Çevresel Göstergeler

Sürdürülebilirlik kavramı, toplumdaki insanların yaşam kalitesini değiştirmeden evrensel dayanışma ile yeryüzünün devamlılığı için çevresel, sosyal ve ekonomik sorunları gidermek üzere toplanmıştır.

Birleşmiş Milletler Sürdürülebilir Kalkınma Komisyonu (UNCSD) tarafından geliştirilen sürdürülebilirlik için çevresel göstergeler aşağıdaki gibidir.

Tablo 1: UNCSD Tarafından Geliştirilen Sürdürülebilirlik için Çevresel Göstergeler

ÇEVRESEL GÖSTERGELER		
Gösterge	Alt tema	Gösterge
ATMOSFER	İklim değişikliği	Sera gazı emisyonu
	Ozon tabakasının bozulması	Ozona zarar veren maddelerin tüketimi
	Hava kalitesi	Şehirlerde hava kirliliğinin yoğunlaşması
TOPRAK	Tarım	Ekilebilir alanlar Gübre kullanımı Tarım kimyasallarının kullanımı
	Ormanlar	Ormanlık arazi yüzdesi Ağaç kesme yoğunluğu
	Çölleşme	Çölleşmeden etkilenen alanlar
	Şehirleşme	Şehir yerleşim alanlarının genişliği
	Kıyı bölgeleri	Kıyılarda alglerin yoğunlaşma oranı Kıyı bölgelerinde yaşayan nüfusun oranı
OKYANUS, DENİZLER ve KIYILAR	Balıkçılık	Önemli türlerin yıllık avlanma oranı
	Su miktarı	Yeraltı sularının yıllık kullanım oranı
	Su kalitesi	Sudaki organik materyal düzeyi
BİYOLOJİK ÇEŞİTLİLİK	Ekosistem	Önemli ekosistemlerin alanı Koruma altına alınan alanların oranı
	Türler	Önemli türlerin varlığı

(Kaynak: UN, 1996^a)

Yine dünyada en önemli sürdürülebilir rapor çerçevesi olarak Küresel Raporlama Girişimi (GRI) rehberi işletmeler ve ülkeler açısından önemlidir. Bu rehberin en son 2016 yılında "GRI Standartları" olarak yayınlanmış ve GRI 301-308 arasında yer alan çevresel standartlar yer almaktadır. Çevresel standartlarda yer alan çevresel göstergeler malzemeler, enerji, su ve atıklar, biyoçeşitlilik, emisyonlar, atıklar, çevresel uyum, tedarikçi çevresel değerlendirme şeklinde belirtilmiştir. (Sultanoğlu 2021:36):

Çevresel Sürdürülebilirlik doğal kaynakların devamlılığını sağlamalı, çevreye en az zarar vererek işletmelerin faaliyetlerini yapmalarını sağlamalıdır.

3. Literatür Taraması

Sürdürülebilirlik raporları, işletmelerin yürüttükleri faaliyet sonuçlarının çevresel, sosyal ve kurumsal yönetime ilişkin etkilerinin detaylı bir şekilde açıklandığı sonuçlar olarak karşımıza çıkmaktadır. İşletmelerin yayınladıkları sürdürülebilirlik raporları ile ilgili yapılan literatürde ele alınmış pek çok çalışma yer almaktadır.

Tanç ve Gümrah (2015) sürdürülebilirlik raporları kapsamında Borsa İstanbul imalat sanayii sektöründe faaliyet gösteren işletmelerin çevresel performanslarını tespit etmek amacı ile 2013 yılı sürdürülebilirlik raporlarından çevresel performans göstergeleri olarak geri dönüştürülen su miktarı, verimlilik çalışmalarıyla elde edilen enerji tasarruf miktarı, verimlilik çalışmalarıyla elde edilen emisyon azaltım miktarı, bertaraf edilen tehlikeli atık miktarı, bertaraf edilen tehlikesiz atık miktarı ve çevre koruma ve harcama yatırım tutarları seçilmiştir. Çok kriterli karar verme yöntemlerinden olan TOPSIS yöntemiyle analiz yapılarak, çevresel performansı en yüksek olan işletme AKÇANSA işletmesi, çevresel performansı en düşük olan işletmenin ise BRİSA işletmesi olduğu tespit edilmiştir.

Özkan ve Özcan (2018) OECD ülkelerinin çevre performansları -seçilmiş çevresel göstergeler üzerinden ve hedef bir yıl temel alınarak- VZA (veri zarflama analizi) ile değerlendirilmekte ve bu ülkelerin göreceli etkinlikleri mevcut ölçütler dâhilinde yorumlanmaktadır. Çalışmada Çevre Performans İndeksi (EPI-Environmental Performance Index) sınıflaması temel alınarak belirlenen girdiler ve çıktılar arasındaki ilişkiye dayalı bir “verimlilik” değerlendirmesi yapılmaktadır.

Şişman vd (2016), tedarik zinciri yönetimi boyutuyla kurumsal sürdürülebilirlik ve finansal performans ilişkisini ölçen bir çalışma yapmışlardır. Borsa İstanbul (BİST)’da işlem gören ve Sürdürülebilirlik Endeksinde yer alan 50 işletmenin Kurumsal Sosyal Sorumluluk ya da Sürdürülebilirlik Raporları incelenerek 2013 yılına ait sürdürülebilir tedarik zinciri faaliyetlerinin 2014 yılında finansal performansına etkisi analiz edilmiş ve ekonomik tedarik zinciri yönetimi faaliyetleri ile varlık karlılığı ve özsermaye karlılığı arasında pozitif yönlü ve anlamlı ilişkinin varlığı, çevresel ve sosyal tedarik zinciri yönetimi faaliyetleri ile varlık karlılığı ve özsermaye karlılığı arasında ise anlamlı ilişkinin olmadığını tespit etmişlerdir.

Gürnlü (2019) sürdürülebilirlik ve finansal performans arasındaki ilişkiyi Bist şirketleri üzerine bir araştırma yaparak tespit etmiştir. Araştırma sonucunda, sürdürülebilirlik alanındaki yüksek performansla, finansal başarı arasında zayıf bir ilişki bulunmuştur.

Şişman ve Çankaya (2021), çevresel, sosyal ve kurumsal yönetim (esg) verilerinin firmaların finansal performansına etkisini hava yolu sektörü üzerine bir çalışma ile tespit etmişlerdir. Havayolu sektöründeki firmalardan 2010-2017 yılları arasında yıllık ESG verilerine ve finansal verilerine ulaşılan 26 havayolu firması araştırmaya dâhil edilmiştir. Çalışmada analiz yöntemi olarak panel regresyon modeli kullanılmıştır. Çalışma sonucunda, ESG skorlarının Havayolu sektöründeki firmaların finansal performansı üzerinde istatistiksel olarak anlamlı bir etkisinin olmadığı, sadece ESG genel skoru ile aktif karlılığı (ROA) arasında istatistiksel olarak anlamlı bir ilişkinin olduğu tespit edilmiştir.

İşseveroğlu (2021), finansal sürdürülebilirlik göstergeleri üzerinde entegre raporlamanın etkisine Bist çimento şirketlerinde analiz yapılmıştır. Bu amaçla, entegre rapor yayınlama öncesi ve sonrası olmak üzere ikili bir ölçüm yapılmıştır. Entegre rapor sunan ve sunmayan şirketlerin 2012-2019 yıllarına ait finansal verileri Gray İlişkisel Analiz yöntemiyle analiz edilmiştir. Çalışma sonunda, 2016-2019 yılları arasında entegre raporlama sunan şirketlerin finansal güç sıralamasında önemli bir kazanım sağladıkları tespit edilmiştir.

Literatür incelendiğinde sürdürülebilirlik kapsamında çevre faktörleri esasında çalışmaların bazılarının yukarıda değinilmiştir. Çalışmanın ilerleyen kısmında ise literatüre katkı olması için çevresel göstergelerinin, finansal performansı ve sermaye yapısı kapsamında incelenmesi yapılacaktır.

4. Veri, Yöntem ve Bulgular

Çalışmada 2017-2021 yıllarında Kamu aydınlatma Platformundan (KAP) tarafından yayınlanan BIST Sürdürülebilirlik endeksinde yer alan 11 adet imalat işletmesinde işletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinin, finansal performansı ve sermaye yapısını nasıl etkilediğini tespit etmektir. Bu işletmelerden çevresel göstergelerin 2017-2021 yılları arasında yer aldığı 8 adet işletme tespit edilmiştir. Dolayısı ile çalışmaya toplam 8 adet işletme ile devam edilmiştir. Çalışmada Stata 14.2 programı ile panel veri yöntemiyle analiz yapılmıştır.

Panel veri, birden çok birime ait zaman serilerinin bir arada bulunduğu veri seti ya da zaman boyutuna sahip kesit verileri olarak da tanımlanabilir. Panel veri setleri her bir kesit için eşit uzunlukta zaman serisi içeriyorsa bu tür panel verilerine “dengeli panel veri (balanced panel data)”, farklı uzunluklarda zaman serisi içeriyorsa da “dengesiz panel veri (unbalanced panel data)” adı verilir. Panel verilerin basit fonksiyonel gösterimi aşağıdaki eşitlikteki gibidir;

Panel veri, birden çok birime ait zaman serilerinin bir arada bulunduğu veri seti ya da zaman boyutuna sahip kesit verileri olarak da tanımlanabilir. Panel veri setleri her bir kesit için eşit uzunlukta zaman serisi içeriyorsa bu tür panel verilerine “dengeli panel veri (balanced panel data)”, farklı uzunluklarda zaman serisi içeriyorsa da “dengesiz panel veri (unbalanced panel data)” adı verilir (Çemrek, 2014, s.48). Buna göre çalışmanın ampirik boyutunun dengeli panel analizi ile yapılması uygun görülmüştür.

Panel verilerin basit formül ile gösterimi aşağıdaki gibidir (Yılmaz, 2008:99).

$$Y_{it} = \beta_0 + \beta_{lit} X_{lit} + \dots + \beta_{kit} X_{kit} + e_{it} \quad i = 1, 2, \dots, N \quad t = 1, 2, \dots, T$$

i= kesit

t= zaman

Y= her bir birimin her bir zaman periyodunda aldığı farklı değerler

Bu çalışmanın amacı, işletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinin finansal performansı ve sermaye yapısını nasıl etkilediğini tespit etmektir.

Bu kapsamda aşağıdaki hipotezler oluşturulmuştur.

Hipotez 1: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden enerji tasarrufu özkaynak karlılığını etkiler.

Hipotez 2: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden sera gazı emisyonları özkaynak karlılığını etkiler.

Hipotez 3: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikeli atıklar özkaynak karlılığını etkiler.

Hipotez 4: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikesiz atıklar özkaynak karlılığını etkiler.

Hipotez 5: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden enerji tasarrufu sermaye yapısını etkiler.

Hipotez 6: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden sera gazı emisyonları sermaye yapısını etkiler.

Hipotez 7: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikeli atıklar sermaye yapısını etkiler.

Hipotez 8: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikesiz atıklar sermaye yapısını etkiler.

Hipotez 9: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden enerji tasarrufu aktif karlılığını etkiler.

Hipotez 10: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden sera gazı emisyonları aktif karlılığını etkiler.

Hipotez 11: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikeli atıklar aktif karlılığını etkiler.

Hipotez 12: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikesiz atıklar aktif karlılığını etkiler.

Tablo 2: Değişken Tanımları

Değişken Tanımı	Değişken Kısaltması	Tanımı	KAYNAK
Özkaynak Karlılığı	ROE	Yönetimin şirketin varlıklarını kar elde etmek için ne kadar verimli kullandığının bir ölçüsüdür. Net kar/Öz Kaynak	KAP
Aktif Karlılık	ROA	Şirketin varlıklarını kâr sağlama yeteneğini analiz etmek için kullanılır. Net Kâr / Toplam Varlıklar	KAP
Sermaye Yapısı	b/özk	Borç/Özkaynak	KAP

Enerji Tasarrufu	enj	Şirketlerin hesapladıkları göstergeler	Sürdürülebilirlik Raporları
Sera gazı emisyonları	sgs	Şirketlerin hesapladıkları göstergeler	Sürdürülebilirlik Raporları
Tehlikeli Atıklar	tlia	Şirketlerin hesapladıkları göstergeler	Sürdürülebilirlik Raporları
Tehlikesiz Atıklar	tksza	Şirketlerin hesapladıkları göstergeler	Sürdürülebilirlik Raporları

Değişkenlerin durağanlık düzeylerini tespit etmek için birim kök sınaması yapılmıştır. Yapılan birim kök testleri sonucunda tüm testlere göre bütün değişkenler gerek sabitli gerekse de sabitli ve trendli durumlardaki düzeyde durağan çıkmıştır. Değişkenlerin bu sonuçlara göre de bütün değişkenlerin durağan olduğu anlaşılmıştır. Bu aşamadan sonra her iki modelimiz de aşağıdaki gibi oluşturulmuştur.

$$ROE_{it} = \alpha + \beta_1 enj_{it} + \beta_2 sgs_{it} + \beta_3 tlia_{it} + \beta_4 tksza_{it} + uit$$

$$b/\ddot{oz}k_{it} = \alpha + \beta_1 enj_{it} + \beta_2 sgs_{it} + \beta_3 tlia_{it} + \beta_4 tksza_{it} + uit$$

$$ROA_{it} = \alpha + \beta_1 enj_{it} + \beta_2 sgs_{it} + \beta_3 tlia_{it} + \beta_4 tksza_{it} + uit$$

Birim kök sorunu bulunmadığı tespit edildikten sonraki aşamada yukarıda oluşturulan modellerde uygulanacak panel analizi uygulanacağı yöntemlerden sabit etkiler modeli ya da rassal etkiler modelinin uygunluğu, Hausman testiyle araştırılmış ve sonuçlar Tablo 'de gösterilmiştir. Hausman testinde sıfır hipotezi rassal etkiler modelinin geçerli olduğunu, alternatif hipotez ise sabit etkiler modelinin geçerli olduğunu göstermektedir (Erer ve Erer, 2014:29). Başka bir ifadeyle, bireysel etkilerle açıklayıcı değişkenler arasında korelasyon yoksa rassal etkiler modeli, korelasyon varsa sabit etkiler modeli uygun olmaktadır. Hausman testi sonucunda bireysel etkilerle açıklayıcı değişkenler arasında korelasyon yoktur ve rassal etkiler modeli kullanılmalıdır.

Hausmann testine göre prob değeri %10'un altında ise sabit etkiler modeli, %10'un üstünde ise rassal etkiler modelinin uygun olduğu sonucuna varılır. Çalışma da

Model 1 de Hausman Testi Prob>chi2 = 0.000 olduğundan sabit etkiler modeli,

Model 2 de Hausman Testi Prob>chi2 0.2410 olduğundan rassal etkiler modeli kullanılması uygundur. Bu sonuçlara göre ulaşılan sonuçlar aşağıda sunulmaktadır.

Tablo 3: Araştırma Sonuçları

Gözlem Yıl Aralığı: 2017 - 2021

Gözlem Sayısı: 40

Yöntem: Sabit Etkiler Modeli

DEĞİŞKENLER					
Bağımlı	Değişken	Bağımsız Değişkenler	Katsayı	İstatistik	Prob
ROE		enj	.0000466	0.00	0.999
		sgs	1.259088	0.30	0.763
		tlia	-1184.945	-2.76	0.010*
		tksza	42.57368	1.54	0.134

Prob > F = 0.012

Hausman Testi Prob>chi2 = 0.000

Yöntem: Rassal Etkiler

Bağımlı	Değişken	Bağımsız Değişkenler	Katsayı	İstatistik	Prob
b/özk		enj	-1.96e-09	-1.29	0.198
		sgs	-3.03e-07	-2.96	0.003**
		tlia	-.0000149	-0.59	0.556
		tksza	-2.48e-06	-1.66	0.097***

Prob > F = 0.0222

Hausman Testi Prob>chi2 = 0.2410

* 0.01, ** 0.05, *** 0.10, anlamlılık düzeyleri (Bağımlı Değişken: ROA ve Sermaye Yapısı).

Model 1 de bütünüyle istatistiksel olarak anlamlı olup olmadığını saptamak için uygulanan F testinin sonucu incelediğinde, istatistik değerinin anlamlılık düzeyini gösteren olasılık değerinin 0.012 olduğu görülmüştür.

Buna göre aşağıdaki sonuçlar tespit edilmiştir: Buna göre aşağıdaki sonuçlar tespit edilmiştir:

- Net kar/Öz Kaynak (ROE) %1, %5 ve % 10 anlamlılık düzeyinde bakıldığında ROE ile tehlikeli atıklar arasında %1 anlamlılık düzeyinde anlamlı ve pozitif bir ilişki bulunmaktadır.
- Diğer değişkenler arasında %1, %5 ve % 10 anlamlılık düzeyinde bir ilişki tespit edilmemiştir.

Model 2 de bütünüyle istatistiksel olarak anlamlı olup olmadığını saptamak için uygulanan F testinin sonucu incelendiğinde, istatistik değerinin anlamlılık düzeyini gösteren olasılık değerinin 0.022 olduğu görülmüştür.

- Sermaye Yapısı (Borç/Öz Kaynak) %1, %5 ve % 10 anlamlılık düzeyinde bakıldığında Borç/Öz Kaynak sera gazı emisyonu arasında %5 anlamlı ve tehlikesiz atıklar arasında %10 anlamlı düzeyinde pozitif bir ilişki bulunmaktadır.
- Diğer değişkenler arasında %1, %5 ve % 10 anlamlılık düzeyinde bir ilişki tespit edilmemiştir.

Model 3 de ise

- Net kar/Öz Kaynak (ROA) %1, %5 ve % 10 anlamlılık düzeyinde bakıldığında hiçbir bağımsız değişken ile anlamlı bir sonuç tespit edilememiştir.

Çalışmanın hipotez sonuçları ise aşağıdaki tabloda çalışmaya sunulmuştur.

Tablo 4: Hipotez Sonuçları

Hipotez 1 : İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden enerji tasarrufu özkaynak karlılığını etkiler.	RED
Hipotez 2 : İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden sera gazı emisyonları özkaynak karlılığını etkiler.	RED
Hipotez 3 : İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikeli atıklar özkaynak karlılığını etkiler.	KABUL
Hipotez 4 : İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikesiz atıklar özkaynak karlılığını etkiler.	RED
Hipotez 5 : İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden enerji tasarrufu sermaye yapısını etkiler.	RED
Hipotez 6: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden sera gazı emisyonları sermaye yapısını etkiler.	KABUL
Hipotez 7: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikeli atıklar sermaye yapısını etkiler.	RED
Hipotez 8: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikesiz atıkları sermaye yapısını etkiler.	KABUL
Hipotez 9 : İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden enerji tasarrufu aktif karlılığını etkiler.	RED
Hipotez 10 : İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden sera gazı emisyonları aktif karlılığını etkiler.	RED
Hipotez 11: İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikeli atıklar aktif karlılığını etkiler.	RED
Hipotez 12 : İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikesiz atıklar aktif karlılığını etkiler.	RED

Yukarıdaki tabloya göre hipotez sonuçlarına bakıldığında İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikeli atıklar özkaynak karlılığını; tehlikesiz atıkların ve sera gazı emisyonların ise sermaye yapısını olumlu etkilediği tespit edilmiştir.

5. SONUÇ

Bu çalışmada, sürdürülebilirlik endeksine dahil olan imalat işletmelerinin finansal performansı ve sermaye yapısı ile sürdürülebilirlik ilkeleri çevresel göstergeleri kapsamındaki ilişkisi incelenmiştir. Bu bağlamda, Borsa İstanbul Sürdürülebilirlik endeksine tabi işlem gören imalat firmalarının 2017-2021 yıllarında 8 adet işletme için panel veri yöntemiyle analiz yapılmıştır.

Sürdürülebilirlik raporlarında çevresel göstergeler arasında alınan ve raporların hepsinde yer alan 4 temel çevresel gösterge tespit edilmiştir. Bu çevresel göstergeler Enerji tasarrufu, sera gazı emisyonları, tehlikeli atıklar ve tehlikesiz atıklardır. Bu göstergeler ile öz kaynak karlılığı, aktif karlılık ve sermaye yapısı ilişkisine bakıldığında;

Net kar/Öz Kaynak (ROE) ile tehlikeli atıklar arasında %1 anlamlılık düzeyinde anlamlı ve pozitif bir ilişki bulunduğu ve Sermaye Yapısı (Borç/Öz Kaynak) ile sera gazı emisyonu arasında %5 anlamlı ve tehlikesiz atıklar arasında %10 anlamlı düzeyinde pozitif bir ilişki bulunduğu tespit edilmiştir. dolayısı ile çalışmada sunulan hipotezlerden

- “- İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikeli atıklar özkaynak karlılığını etkiler.
 - İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden sera gazı emisyonları sermaye yapısını etkiler.
 - İşletmelerin sürdürülebilirlik ilkeleri çevresel göstergelerinden tehlikesiz atıkları sermaye yapısını etkiler”
- hipotezleri kabul edilmiştir.

İlerleyen süreç de işletmelerin sürdürülebilirlik raporlarında yer alan çevresel gösterge sonuçlarına daha çok yer vereceği ve bu göstergelerin işletmelerin karlılık ve sermaye yapısı açısından da öneminin daha çok artacağı düşünülmektedir.

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İklim Değişikliğinin Su Kaynakları Üzerine Etkisi: Aşağı Gediz Havzası Örneği

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Özet: Doğal kaynaklar içinde yer alan su, tarımsal üretim açısından büyük önem arz eden üretim faktörlerinden birisidir. Sürdürülebilir su kullanımı ve yönetimi ekosistem açısından, insani tüketim amacıyla, tarımsal üretim ve enerji gibi sektörler için oldukça önemlidir. Son zamanlarda yaşanan iklim krizi, küresel ısınma ve çevre sorunları sürdürülebilir tarım, su ve çevre konularının daha fazla gündeme gelmesine sebep olmuştur. Tarımsal sulamada havzalardaki su kaynaklarının önemi büyüktür. Bu çalışmada, Türkiye'nin tarımsal üretiminde önemli bir yere sahip olan Gediz Havzasının bir alt havzası olan Aşağı Gediz havzası incelenmiştir. Bu kapsamda Aşağı Gediz havzasında yeraltı suyu kaynakları, bitkisel üretim deseni, yıllara göre yağış ortalamaları, sıcaklık değişimleri, sulama randımanları ve sulama oranları incelenerek, yıllar içerisinde değişim ortaya konulmuş ve iklim değişikliğinin etkisi gösterilmeye çalışılmıştır. Sonuçlar incelendiğinde son 10 yılda havzada yer alan yeraltı su kuyularının seviyelerinin en az 15 metre aşağı indiği dikkat çekmiştir. Bu çalışma ile iklim değişikliği sürecinde karar alıcıların sulama yönetimi ve geliştirilmesi ile kaynakların sürdürülebilir şekilde kullanılması gibi konularda karar almalarında bir veri kaynağı oluşturacağı düşünülmektedir.

Anahtar Kelimeler: İklim Değişikliği, Küresel Isınma, Kuraklık, Aşağı Gediz Havzası

Impact of Climate Change on Water Resources: A case of Aşağı Gediz Basin

Abstract: Water, as a natural resource, is one of the most important production factors in agricultural production. Sustainable water use and management is critical for ecosystems, human consumption, agricultural production and energy sectors. The recent climate crisis, global warming, and environmental problems have brought sustainable agriculture, water, and the environment to the agenda. Water resources in basins are of great importance in agricultural irrigation. In this study, Aşağı Gediz basin, a sub-basin of the Gediz Basin, which has an important place in Turkey's agricultural production, was analyzed. In this context, groundwater resources, crop production pattern, precipitation averages over the years, temperature changes, irrigation efficiencies, and irrigation rates in Aşağı Gediz basin were analyzed, and the change over the years was revealed and the effect of climate change was tried to be shown. When the data are analyzed, it is notable that groundwater well levels in the basin have dropped by at least 15 meters in the last ten years. With this study, it is thought that it will constitute a data source for decision makers to make decisions on issues such as irrigation management and development and sustainable use of resources in the process of climate change.

Key Words: Climate Change, Global Warming, Drought, Aşağı Gediz Basin

1. GİRİŞ

Tarım sektörü beslenme ve gıda güvenliği açısından stratejik öneminin yanı sıra diğer sektörlerle hammadde sağlama işleviyle de çok önemli bir konumda bulunmaktadır. Bitkisel üretimde iklim koşullarına bağımlılığın azaltılarak verimlilik artışı sağlanması ve katma değerın yükseltilmesi konusunda sulamanın önemi büyüktür (Tokatlıoğlu ve ark., 2018).

Küresel iklim değişikliği sürecinde Türkiye'nin su stresi yaşayan ülkeler listesinde yer alması, su kaynaklarının planlanması ve yönetimi konusunu gündeme getirmektedir. Tarımsal açıdan toprak ve su kaynaklarının korunarak sürdürülebilir bir şekilde kullanılması ve sulama tesislerinin üretime katkısı yönünden etkin bir şekilde kullanılması bu süreçte büyük önem kazanmaktadır. Bu açıdan tarımsal sulamada en önemli husus, suyun iletimi ve dağıtımında kayıpların önlenmesi ve sulanan tarım alanlarında fazla su talebinin azaltılarak suyun etkin kullanılmasıdır.

Tarım sektörünün en büyük su kullanıcı grubu olması nedeniyle suyun yönetimi ve işletilmesi, sulama sistemleri, verimlilikleri, fiyatlandırılması, su kaynaklarının korunması ve geliştirilmesi açısından oldukça önemli bir konu olduğu ifade edilmektedir (Aydoğdu ve ark., 2015). Türkiye'de su kaynaklarının planlanması, yönetimi,

geliştirilmesi ve işletilmesinden sorumlu ana yatırımcı kuruluş Devlet Su İşleri Genel Müdürlüğüdür. Türkiye'nin yüzölçümü 78 milyon hektar olup bunun 28 milyon hektarı tarım alanıdır. 28 milyon hektarlık tarım alanının ise 25,9 milyon hektarı sulanabilir alandır. Günümüz teknolojik şartları dikkate alındığında sulanabilir tarım arazisinden ancak 8,50 milyon hektarının teknik ve ekonomik olarak sulanabileceği ifade edilmektedir (Bozkurt, 2018). Türkiye'de 2020 yılı sonu verilerine göre sulamaya açılan toplam alan 6,69 milyon hektar olup, bunun ise 4,40 milyon hektarı DSİ tarafından inşa edilerek hizmete açılan sulama tesisleri ile sulanmakta ve sulamaya açılmayan 1,81 milyon hektar tarım arazinin geliştirilerek, ekonomik olarak sulanabilir olan 8,50 milyon hektar tarım arazisinin tamamının sulanmasının hedeflendiği belirtilmektedir (DSİ, 2021a).

Bu çalışmanın amacı, Türkiye'nin tarımsal üretiminde önemli bir yere sahip olan Gediz Havzasının bir alt havzası olan Aşağı Gediz havzası örneği ile iklim değişikliğinin su kaynakları üzerindeki etkisini incelemektir. Bu kapsamda Aşağı Gediz havzasında yeraltı suyu kaynakları, bitkisel üretim deseni, yıllara göre yağış ortalamaları, sıcaklık değişimleri, sulama randımanları ve sulama oranları incelenerek, yıllar içerisinde değişim ortaya konulmuş ve iklim değişikliğinin etkisi gösterilmeye çalışılmıştır.

2. İKLİM DEĞİŞİKLİĞİ VE SU KAYNAKLARI

İklim değişikliği su kaynaklarının önemini artırmakta olup, dünyanın pek çok bölgesi çölleşme tehlikesi ile karşı karşıya geleceğinden gelecek senaryolarında su, petrol gibi değerli olacaktır. İklim değişikliği nedeni ile su kaynaklarında meydana gelen azalma, yangınlar ve bunlara bağlı ekolojik bozulmalar olacaktır. Akarsu havzalarındaki kayıplarla beraber kentlerde de su problemleri olacak, su ihtiyacı artacaktır. Kurak ve yarı kurak alanlardaki artış beraberinde çölleşme, tuzlanma ve erozyonu da getirecektir (Koyuncu, 2017). Mevsimlik kar ve kar örtüsü azalacak, karla örtülü periyot kısalmaktadır. Karların erimesi ile beraber meydana gelen akış zamanı ve hacmindeki değişim su kaynakları, tarım, ulaşım ve enerji sektörlerini negatif etkileyecektir. İklim değişikliği; buzulların erimesi, deniz seviyesinin yükselmesi ve iklim kuşaklarının kayması gibi değişimlere de sebep olacaktır (Ateş, 2008).

Küresel iklim değişimi, hidrolojik döngüdeki sistemler ve süreçler arasındaki mevcut dengeyi etkilemektedir. Hidrolojik döngünün en önemli sistemlerinden birinin atmosfer olması sebebi ile iklim değişikliğinin atmosferik koşullarda meydana getireceği değişikliklerin havzaların yağış, evapotranspirasyon ve akış gibi hidrolojik süreçleri üzerinde hem alan hem de zaman ölçeğinde önemli farklılıklar yaratacağı açıktır. Bu farklılıklar sadece mevcut uzun dönem ortalamaları ile sınırlı kalmayıp, ekstrem olayların sıklık büyüklük ve alansal dağılımlarında da gözlenecektir. Küresel ısınma üzerine yapılan birçok çalışma, iklim değişikliğinin su kaynaklarını kısıtlayıcı bir etkiye sahip olduğunu ortaya koymuştur (Karaman ve Gökalp, 2010).

İklim değişikliğinin su kaynakları üzerine olan etkileri (havzaların bulunduğu yerlere bağlı olmak koşulu ile) şöyle sıralanabilir (Fistikoğlu ve ark., 2008);

- Yüzeysel su potansiyellerinde azalma ya da artış,
- Yeraltı akiferlerinin beslenmelerinde dolayısı ile boşalmalarında değişim,
- Ekstrem akım (Taşkın- kuraklık gibi) sıklığı, görülme mevsimleri, büyüklüğünde değişim,
- Değişen yağış rejimi,
- Bitki örtüsü ve arazi kullanımlarının sebep olduğu erozyon problemleri,
- Kar suları ile beslenen akarsuların rejimlerinde değişim,
- Tarımsal su gereksinimlerinde artış.

İklim değişikliği ile birlikte sıcaklıkların artışı ve yağışların azalması eğilimi, beraberinde su kaynaklarında azalmayı getireceğinden su sorunu ve kuraklık meydana gelecektir. Yağışların mevcut durumundan geriye gitmesi arazi ve su kaynakları üzerine olumsuz etkiler yaratıp hidrolojik dengenin bozulmasına sebep olacaktır. Düzensiz yağışlarla ve yararlı yağışların azalması ile seller, taşkınlar, kasırgalar meydana gelecek kimi yerlerde ise dönemsel kuraklıklar artacaktır. İklim değişikliği sadece su miktarını değil aynı zamanda su kalitesini de etkilemektedir. Kurak aylarda akarsularda ve göllerde azalacak su miktarları özellikle bazı kirletici konsantrasyonlarının artmasına neden olacaktır. Bu da su kalitesinin düşmesine neden olacaktır. Suların ısınması ile çözünmüş oksijen düzeyleri düşmekte olup, bu da beraberinde ciddi kirlilik sorunlarını getirmektedir. Artan yağışlar ile meydana gelen sel baskınları ile baraja kirleticiler dolabilmektedir. Değişen iklim koşullarının beraberinde su kalitesinde bozulmalar yaratacağı, bunun da insan sağlığını ciddi boyutta

etkileyeceği düşünülmektedir. Suların azalması tarım alanlarında tuzlanmayı, çoraklaşmayı artıracak kullanılan aşırı gübre ve pestisitler de su ve toprak kirlenmesi miktarını artıracaktır (Karaman ve Gökalep, 2010).

Türkiye'nin de tüm dünya gibi iklim değişikliğinin olumsuz etkilerinden etkileneceği öngörülmektedir. Bu çevresel ve sosyoekonomik etkiler literatürde şu şekilde sıralanmıştır (Türkeş, 1998):

- Sıcak ve kurak devre uzunluğunda ve şiddetinde yaşanan artışa bağlı orman yangınlarının frekansı, etki alanı ve süresinde artış yaşanabilir,
- Tarımsal ürün potansiyelinde değişim meydana gelebilir (türler göre artış ya da azalış biçiminde)
- İklim kuşaklarında kayma meydana gelip, bunun sonucunda Türkiye sıcak ve kurak bir iklim kuşağı etkisinde kalabilir. Buna uyum gösteremeyen fauna ve flora yok olabilir,
- Doğal karasal ekosistemler ve tarımsal üretim sistemleri, zararlılardan ve hastalık artışından zarar görebilir,
- Hassas dağ ve vadi-kanyon ekosistemleri üzerindeki insan baskısı artacaktır.
- Su sorunu yaşanacaktır (tarımsal ve içme suyu)
- Kurak ve yarı kurak alanlardaki artışa ek olarak, yaz kuraklığı süresi ve şiddetindeki artışlar, çölleşme süreçlerini, tuzlanma ve erozyonu destekleyecektir.
- İstatistiki dağılımın yüksek değerler yönündeki ve özellikle sayılı sıcak günlerin (tropikal günlerin) frekansındaki artışlar, insan sağlığını ve biyolojik üretkenliği etkileyebilir.
- Su varlığındaki değişiklikten, ısı stresinden kaynaklanan enfeksiyonlar, özellikle büyük kentlerde sağlık sorunlarına neden olabilir.
- Denizlerin ısınması ile beraber denizel ekosistemlerde ve balıkçılık alanında hem biyolojik hem de sosyoekonomik sorunlar doğurabilecek değişimler olabilir.
- Kar ile örtülü devrenin uzunluğu azalabilir ani kar erimeleri ve kar çığları artabilir.

İklim değişikliğinin tarımsal üretime etkileri dolaylı ve doğrudan olarak etkisi çok fazla olmaktadır. Tarımın iklim değişikliğinden etkilenen yönlerini maddeler halinde sıralayacak olursak (Bayraç ve Doğan, 2016);

- Bitkisel ürün miktarı ve verimliliğinde olumsuz değişimler,
- Toprak yapısı pH dengesi bozulması,
- Hayvansal üretim ve verimde düşüş,
- Su kaynakları üzerine olumsuz etkiler,
- Diğer etkiler (buzulların erimesiyle yükselen sular, sel baskınları vs.)dir.

3. AŞAĞI GEDİZ HAVZASI

Aşağı Gediz Alt Havzası Gediz Nehri'nin Manisa-Merkez ilçesinden itibaren Foça'dan Ege Denizi'ne döküldüğü noktaya kadar yer alan su toplama havzasını içine alacak şekilde Manisa-Merkez, Kemalpaşa, Çiğli, Menemen ve Foça ilçelerinden oluşmaktadır. Aşağı Gediz Alt Havzası Gediz Havzasının alansal olarak yaklaşık %16'sını oluşturmaktadır. Söz konusu havzada sanayi dağılımı da yoğun olarak görülmektedir (Kıymaz, 2018). Aşağı Gediz havzasının özellikle batı kesimi sanayileşmenin en yoğun olduğu kısımdır (Gediz HKEP, 2013)

3.1. Aşağı Gediz Havzasındaki Sulama Birliklerinin İncelenmesi

Araştırma kapsamında incelenen sulama birlikleri, Aşağı Gediz Havzasında doğu – batı doğrultusunda uzanan sulama tesislerinin etrafında yerleşmiş olup, Şekil 1'de gösterilmiştir.

Şekil 1: Aşağı Gediz Havzasındaki Sulama Birlikleri



Kaynak: Menemen Sulama Birliği İnternet Sitesi, 2022.

Aşağı Gediz Havzasında yedi adet sulama birliği bulunmaktadır. Bunlar, Menemen Sulama Birliği, Sarıkız Sulama Birliği, Mesir Sulama Birliği, Gediz Sulama Birliği, Turgutlu Sulama Birliği, Salihli Sulama Birliği ve Ahmetli Sulama Birliği olup, toplam 109.359 hektar alanı sulamaktadırlar. Sulama alanı en geniş olan sulama birliği Menemen, en az olan sulama birliği ise Ahmetli'dir (Tablo 1).

Tablo 1: Aşağı Gediz Havzasındaki Sulama Birlikleri'nin Sulama Alanları (hektar)

Sıra No	Sulama Birliğinin Adı	Birliğin Sulama Alanı (hektar)
1	Menemen Sulama Birliği	26.628
2	Sarıkız Sulama Birliği	17.192
3	Mesir Sulama Birliği	13.679
4	Gediz Sulama Birliği	13.974
5	Turgutlu Sulama Birliği	15.112
6	Salihli Sulama Birliği	19.862
7	Ahmetli Sulama Birliği	2.912
TOPLAM		109.359

Kaynak: DSİ 2. Bölge Müdürlüğü, 2022

3.2. Aşağı Gediz Havzasındaki Sulama Birliklerinin Su Kaynakları

Aşağı Gediz Havzasının su kaynakları Demirköprü Barajı ve Gölarmara'dan karşılanmaktadır. Su kaynaklarının doluluk oranları 2021 yılında, 2020 yılına göre oldukça düşüş göstermiştir. 2021 yılı itibarıyla doluluk oranlarına bakıldığında, sulamanın kısıntılı ve yetersiz bir şekilde sağlandığı görülmektedir (Tablo 2).

Tablo 2: Aşağı Gediz Havzası Su Kaynaklarının Doluluk Oranları

No	Ad	Depolama (Milyon m ³)	23.03.2021 İtibarıyla Kullanılabilir Su Miktarı (hm3)	2020 yılı doluluk oranı (%)	2021 yılı doluluk oranı (%)
1	Marmara Gölü	305,780	3,388	9	1
2	Demirköprü Barajı	764,459	49,233	17	6

Kaynak: DSİ 2. Bölge Müdürlüğü, 2022

2021 yılı içerisinde yaşanan kuraklıktan dolayı Demirköprü Barajında hidroelektrik tesisleri çalışmayacak duruma gelmiştir ve su seviyesi kritik bir durumdadır. Gölarmara için de aynı durum geçerli olup, gölün oluşturulma şekli de göz önüne alındığında; yeraltı suyu kaynaklarından beslenemeyen gölün su seviyesinin gittikçe düştüğü görülmektedir. Bu sebeple tarım sezonu içerisinde su verilemeyen periyotlar gerçekleşmektedir.

Yıl içerisindeki potansiyel yağışlar ve kaynaklar ile birlikte 183,68 milyon metreküp suyun karşılanabileceği görülmektedir. Bu da beklenen en iyi koşullara göre bile havzadaki toplam su ihtiyacının %61'inin ancak karşılanabileceği anlamına gelmektedir (Toplam İhtiyaç: 300 hm3 / Karşılanabilen: 14,07+169,61=183,68 hm3) (Tablo 3).

Demirköprü Barajının ve Gölarmara'nın doluluk oranlarına bakıldığında su ihtiyacını karşılayamayacağı açıkça görülmektedir. İklim değişikliği nedeniyle oluşan su kıtlığı, sıcaklık artışından kaynaklanan su kayıpları ve yeraltı suyunun aşırı kullanımı havzayı su stresine sokmaktadır. Çiftçilere 2. ya da 3. sulamanın verilemediği de düşünüldüğünde sulama birliklerine bağlı çiftçilerin verim kaybına uğradığı değerlendirilmelidir.

Tablo 3: Aşağı Gediz Havzasındaki Sulama Birlikleri'nin Sulama Alanları (hektar)

Rezervuar Adı	Gölmarmara
	Demirköprü
Sulamalar	Adala Sulaması
	Ahmetli Sulaması
	Menemen Sulaması
Net Sulama Alanı (hektar)	95.894
2021 Yılında Toplam Sulanacak Alan hektar)	40.000
2021 Sulama Mevsiminde Toplam İhtiyaç Miktarı (hm ³)	300.00
Uzun Yıllar Akımlara Göre 01 Nisan 2021'de Mevcut Aktif Su Miktarı (hm ³)	Gölmarmara 3.82
	Demirköprü 49.73
01.04-30.09 2021 Sulama Mevsiminde Toplam Sulama Suyu Potansiyeli (hm ³)	Gölmarmara 14.07
	Demirköprü 169.61
İhtiyaç Karşılama Oranı (%)	1
Açıklamalar	Kısıtlı

Kaynak: DSİ 2. Bölge Müdürlüğü, 2022

3.3. Aşağı Gediz Havzasındaki Sulama Birliklerinin Sulama Oranları

Aşağı Gediz Havzasındaki sulama birliklerinin sulama oranları, su tüketimi ve toplam su kullanıcı sayısına göre birliğe üye olma oranları Tablo 4'te incelenmiştir. Sulama oranlarının 2021 yılında bir önceki yıla göre azaldığı görülmüştür ve 2022 yılında ise bu oranın artırılması hedeflenmiştir.

Türkiye'de sulama birliklerinin sulama oranı ortalamasının %79 olduğu düşünüldüğünde, Aşağı Gediz Havzasındaki sulama birliklerinin sulama oranlarının %41 ile ülke ortalamasının altında olduğu ve aynı zamanda hektar başına 7.500 m³ sulama ortalaması gerekmesine karşın, havzada hektar başına 5.214 m³'lük bir sulama gerçekleştiği görülmektedir (Tablo 4).

Tablo 4: Aşağı Gediz Havzasındaki Sulama Birliklerinin Sulama Oranları

Değerlendirme Kriterleri (Bölge toplamı ve/veya ortalamasına göre)	2020	2021	2022 Hedef
Sulama Oranı (%)	42	41	48
Su Tüketimi (m ³ /ha)	5.876	5.214	5.990
Toplam Su Kullanıcı Sayısına Göre Birliğe Üye Olma Oranı (%)	89	79	90

Kaynak: DSİ, 2022

3.4. Aşağı Gediz Havzasındaki Sulama Birliklerinin Sulama Randımanları ve Dekara Su Kullanımları

Aşağı Gediz Havzasındaki sulama birliklerinin sulama randımanları, sulama oranları ve su kullanımları 2019, 2020 ve 2021 yılları için Tablo 5'te verilmiştir. Sulama randımanı en düşük olan sulama birliği Gediz Sulama Birliği'dir. Sulama oranı için durum incelendiğinde, Menemen Sulama Birliği'nin %77 sulama oranı ile diğer sulama birliklerine göre en yüksek sulama oranına sahip olduğu dikkat çekmektedir. Su kullanımı ise 8.907 m³/ha ile en yüksek Gediz Sulama Birliği'ndedir (Tablo 5).

Tablo 5: Sulama Birliklerinin Sulama Randımanı, Sulama Oranı ve Dekara Su Kullanımı

Sıra	Birliklerin Adları (Birleşmeden Önceki Duruma Göre)	Sulama Randımanı (%)			Sulama Oranı (%)			Su Kullanımı (m ³ /ha)		
		2019	2020	2021	2019	2020	2021	2019	2020	2021
1	Menemen Sol Sahil*	102	5	70.43	82	87	77	5.603	7.511	2.882
2	Menemen Sağ Sahil *	8	3		78	1		6.231	7.861	
3	Gediz	4	21	50.70	20	2	10	9.113	13.195	8.907
4	Sarıköz	5	23	118.75	48	2	31	9.113	8.686	5.885
5	Mesir	2	08	95.24	26	28	11	9.622	12.723	5.102
6	Turgutlu	1	68	85.90	25	2	21	8.612	7.535	5.441
7	Ahmetli	7	9	86.04	52	5	52	3.508	12.568	4.269
8	Salihli Sol Sahil*	0	8	84.36	48	5	41	7.770	10.243	5.137
9	Salihli Sağ Sahil*	0	8	103.41	37	1	29	7.765	12.276	6.194

*Menemen Sol Sahil ve Sağ Sahil Birlikleri birleşip Menemen Sulama Birliği, Salihli Sol Sahil ve Sağ Sahil Sulama Birlikleri

birleşip Salihli Sulama Birliği olmuştur.

Kaynak: DSİ 2. Bölge Müdürlüğü, 2022

Aşağı Gediz Havzasındaki sulama birliklerinin sulama oranlarını arttırabilmeleri için öncelikle su kaynaklarının yeterliliği sağlanmalı, sonrasında ise doğru yöntemler ile uygun ürün desenine su dağıtımı yapılarak birliğin faaliyet alanındaki tüm kullanıcıların yararlanması sağlanmalıdır.

3.5. Aşağı Gediz Havzasındaki Sulama Birliklerinin Yağış Ortalamaları

Gediz havzasının yağış miktarları ve değişimleri Tablo 6'da incelenmiştir. 1991-2020 yılları arasında Gediz havzasına düşen yağış miktarı ortalaması 459 mm'dir. Bu rakam 2021 yılında 438,7 mm'ye, 2022 yılında ise 401,3 mm'ye düşmüştür. Ekim 2021 – Nisan 2022 döneminde havzaya geçen yılın aynı dönemine göre %8,5, uzun yıllar ortalamasına göre ise %12,6 daha az miktarda yağış düştüğü görülmektedir (Tablo 6).

Tablo 6: Gediz Havzası Yağış Miktarları ve Değişimi

Havza Adı	Gediz
Normali (1991-2020) (mm)	459
2021 Su Yılı Yağış (mm)	438,7
2022 Su Yılı Yağış (mm)	401,3
Normale Göre Değişim (%)	-12,6 Azalma
2021 Su Yılına Göre Değişim (%)	-8,5 Azalma

Kaynak: TOB, Gediz Havzası Kuraklık Yönetim Planı, 2019

Meteoroloji Genel Müdürlüğünden alınan verilere göre son 30 yılda yağış miktarlarında azalma olduğu belirlenmiştir. Son 5 yıllık verilerde bir dalgalanma görülse de aylık yağış verileri incelendiğinde, yağışların sadece belli aylarda gerçekleştiği, yılın büyük bir bölümünde kuraklık yaşandığı görülmektedir. Bunun da havzada tarım yapan çiftçilerin suya olan gereksinimlerini arttırdığı değerlendirilmektedir (Tablo 7).

Tablo 7: Aşağı Gediz Havzasındaki Sulama Birliklerinin Yağış Ortalamaları

Sulama Birliği Adı	2017	2018	2019	2020	2021	Ortalama
Menemen	641	603,6	740,4	519,4	710,6	653,3
Sarıköz	627,4	610,2	711,5	617,3	622,3	647,2
Mesir	403	485,6	469,8	489,8	493,4	468,3
Turgutlu	450,6	444,8	735,7	513,9	578,8	593,3
Ahmetli	451,4	424,9	611,1	464,9	466,7	506,6
Salihli	421,6	440,8	458,6	481,8	467,4	465,5
Gediz	650,7	733,4	849,7	482,5	963	757,8

Kaynak: Meteoroloji 2. Bölge Müdürlüğü, 2022

3.6. Aşağı Gediz Havzasındaki Sulama Birliklerinin Sıcaklık Değişimleri

Aşağı Gediz Havzasındaki sulama birliklerinin sıcaklık değişimlerinin incelenmesinde Meteoroloji 2. Bölge Müdürlüğü verileri dikkate alınmıştır. Meteoroloji 2. Bölge Müdürlüğü verilerine göre sıcaklık ortalamalarının yıllar itibarıyla arttığı görülmektedir (Tablo 8). Sıcaklık artışlarının özellikle su kaynaklarındaki suyun daha çok buharlaşmasına ve buharlaşmadan dolayı kaynak ile sulama alanı arasında çok fazla kayıp yaşanmasına neden olduğu bilinmektedir.

Diğer yandan ani sıcaklık değişimleri ve mevsim kaymaları nedeniyle üretilen ürünlerin soğuklama ihtiyacı da tam karşılanamadığından dolayı verim kayıpları görülebilmekte, ani sıcaklık artışlarıyla oluşabilecek erken çiçeklenmeler sonrasında ilkbahar erken donlarıyla ürünlerin telef olduğu gözlemlenmektedir. Ürünlerin de aşırı ve ani sıcaklardan dolayı zarar gördüğü ifade edilmektedir.

Tablo 8: Aşağı Gediz Havzasındaki Sulama Birliklerinin Sıcaklık Değişimleri (°C)

Sulama Birliği Adı	2017	2018	2019	2020	2021	Ortalama
Menemen	17,4	18,5	18,1	18,2	18,3	18,1
Sarıköz	16,3	17,1	17,8	18,1	17,27	17,4
Mesir	16,3	17,4	17,2	17,0	17,2	17,1
Turgutlu	16,3	17,4	16,9	16,6	16,7	16,7
Ahmetli	16,2	17,3	16,9	16,6	16,8	16,7

Salihli	17,4	18,6	18,2	17,8	18,0	18,0
Gediz	17,2	18,2	17,8	19,0	18,1	18,2

Kaynak: Meteoroloji 2. Bölge Müdürlüğü, 2022

3.7. Aşağı Gediz Havzasındaki Sulama Birliklerinin Ürün Deseni

Aşağı Gediz Havzasındaki sulama birliklerinin ürün desenlerine bakıldığında üzümün birinci ürün olduğu, pamuk, zeytin ve buğdayın üzümü izledikleri görülmektedir (Tablo 9). Aşağı Gediz Havzasındaki ürün deseninin havza su kaynakları ile karşılaştırılması yapıldığında, ürünlerin su ihtiyaçlarının karşılanamadığı ve özellikle ikinci ve üçüncü sulamaların yapılmasında büyük engellerin yaşandığı ve çiftçilerin de daha çok su ihtiyacı az olan ürünlerin üretimine yönelmesi gerektiği ifade edilmektedir.

Tablo 9: Aşağı Gediz Havzası Sulama Birlikleri Ürün Deseni (2021)

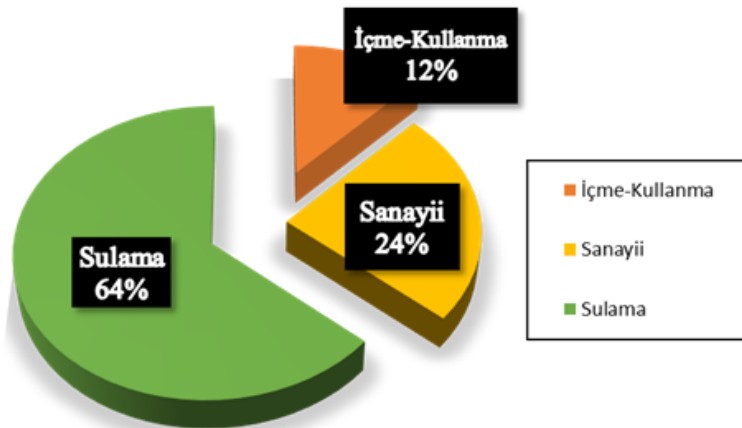
Sulama Birliği Adı	1. Ürün	2. Ürün	3. Ürün	4. Ürün	5. Ürün
Menemen	Pamuk (84.139 da)	Buğday (47.000 da)	Ayçiçeği (27.000 da)	Ispanak (24.500 da)	Üzüm (24.450 da)
Sarıköz	Üzüm (31.166 da)	Zeytin (17.532 da)	Pamuk (10.315 da)	Domates (7.750 da)	Tütün (6.429 da)
Mesir	Üzüm (79.430 da)	Mısır (77.575 da)	Buğday (36.990 da)	Pamuk (29.000 da)	Kiraz (17.000 da)
Turgutlu	Üzüm (75.500 da)	Mısır (29.000 da)	Buğday (19.950 da)	Domates (19.600 da)	Kiraz (13.500 da)
Ahmetli	Üzüm (41.000 da)	Zeytin (27.900 da)	Mısır (10.101 da)	Buğday (8.850 da)	Domates (5.744 da)
Salihli	Üzüm (115.000 da)	Zeytin (105.000 da)	Buğday (86.000 da)	Arpa (52.200 da)	Fiğ (18.500 da)
Gediz	Zeytin (122.500 da)	Üzüm (117.000 da)	Buğday (48.560 da)	Mısır (26.771 da)	Pamuk (23.000 da)

Kaynak: TOB, 2022

3.8. Aşağı Gediz Havzasındaki Sulama Birliklerinin Yeraltı suyu Kaynakları

Tarımsal sulamanın verimliliği ve su tasarrufunun sağlanması, yeraltı suyu kaynaklarının korunması için büyük önem arz etmektedir. Stratejik ve çok önemli bir kaynak olan yeraltı suyu kaynaklarının sürdürülebilirliği açısından kontrollü ve planlı kullanımının sağlanması gereklidir. Aşağı Gediz Havzasındaki sulama birliklerinin yeraltı suyu kaynakları incelenirken sektörel YAS raporları dikkate alınmıştır. Gediz Havzası sektörel YAS tahsis miktarları incelendiğinde, yeraltı suyu kullanımının büyük bir kısmının sulama suyu için ayrıldığı görülmektedir. Bununla birlikte, yeraltı suyunun %24'ü sanayii, %12'si ise içme kullanımına ayrılmıştır (Şekil 2).

Şekil 2: Gediz Havzası Sektörel YAS Tahsis Miktarları (2022)



Gediz Havzası alt havza bazlı YAS rezervleri ve fiili tüketim miktarları 2022 yılı verilerine göre incelendiğinde, %64'ü tarımsal sulamada kullanılmakta olan yeraltı suyu kaynaklarının, rezervlerinin çok daha üstünde kullanıldığı görülmektedir (Tablo 10). Bu durumun yeraltı suyu kaynaklarının sürekli olarak azalmasına ve

sonucunda tamamen yok olmasına sebep olduğu değerlendirilmektedir. Bu nedenle Gediz Havzasının %57,5'inin su tahsisine kapatıldığı belirtilmektedir.

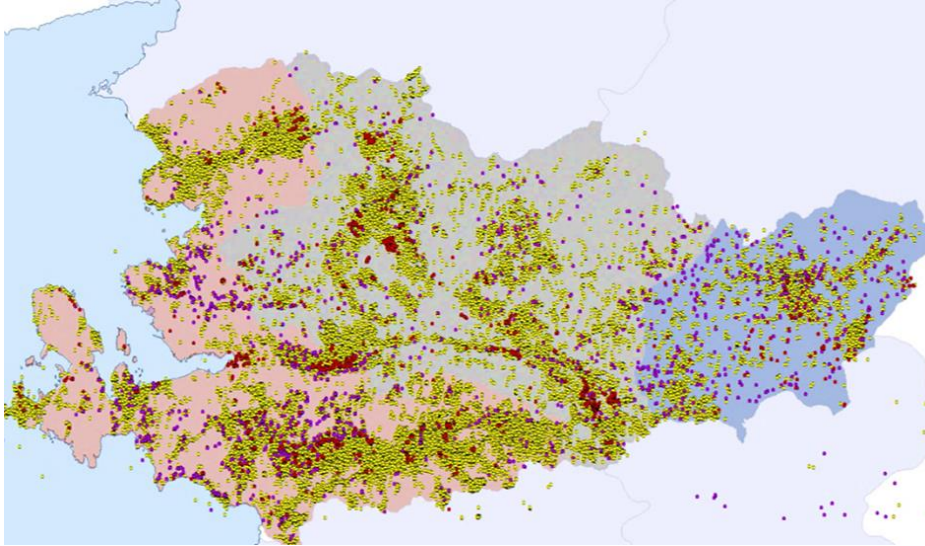
Tablo 10: Gediz Havzası Alt Havza Bazlı Yas Rezervleri ve Fiili Tüketim (2022)

Alt Havza Adı	Emniyetli İşletme Rezervi (hm ³ /yıl)	Fiili Tüketim (hm ³ /yıl)
Sarıgöl-Alaşehir-Salihli	86,10	223,02
Manisa-Saruhanlı	203,25	368,49
Kemalpaşa	165,00	237,15
Menemen	67,88	133,52
Gördes-Gölmarmara	59,48	75,14
Turgutlu-Ahmetli	78,75	99,40
Üst Havza	128,25	262,14
TOPLAM	789	1.399

Kaynak: DSİ 2. Bölge Müdürlüğü, 2022

Gediz havzasındaki YAS kuyularının dağılımı Şekil 3'te gösterilmiştir. Havzada yaklaşık 39.000 yasal kuyu olduğu belirtilmekle birlikte, yasal kuyu sayısından daha fazla da kaçak kuyu olduğu tahmin edilmektedir. Gediz Havzasında son 20 yılda iklim değişikliğinin olumsuz etkileri ve yeraltı suyunun orantısız kullanımından kaynaklı olarak yeraltı su seviyesinin 30 metreden fazla düştüğü ifade edilmektedir.

Şekil 3: Gediz Havzası YAS kuyularının Dağılımı

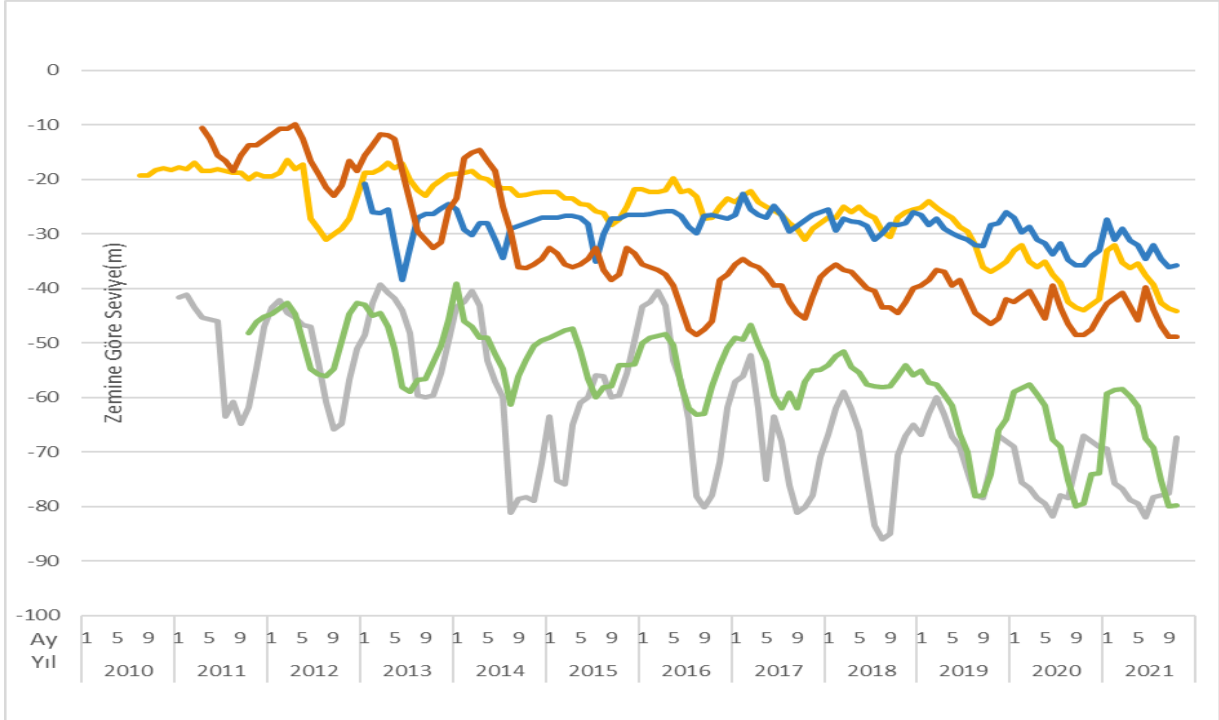


Kaynak: DSİ 2. Bölge Müdürlüğü, 2022

Şekil 4, 5 ve 6'da Gediz Havzasının alt havzalarındaki bazı YAS kuyularının seviyeleri görülmektedir. Her renk ayrı bir kuyuyu göstermektedir. Kuyuların seviyelerinin en az 15 metre düştüğü görülmektedir.

Alaşehir- Salihli- Sarıgöl Alt Havzası YAS grafiği incelendiğinde kuyu seviyelerinin yaklaşık 90 metreye kadar indiği dikkat çekmektedir (Şekil 4).

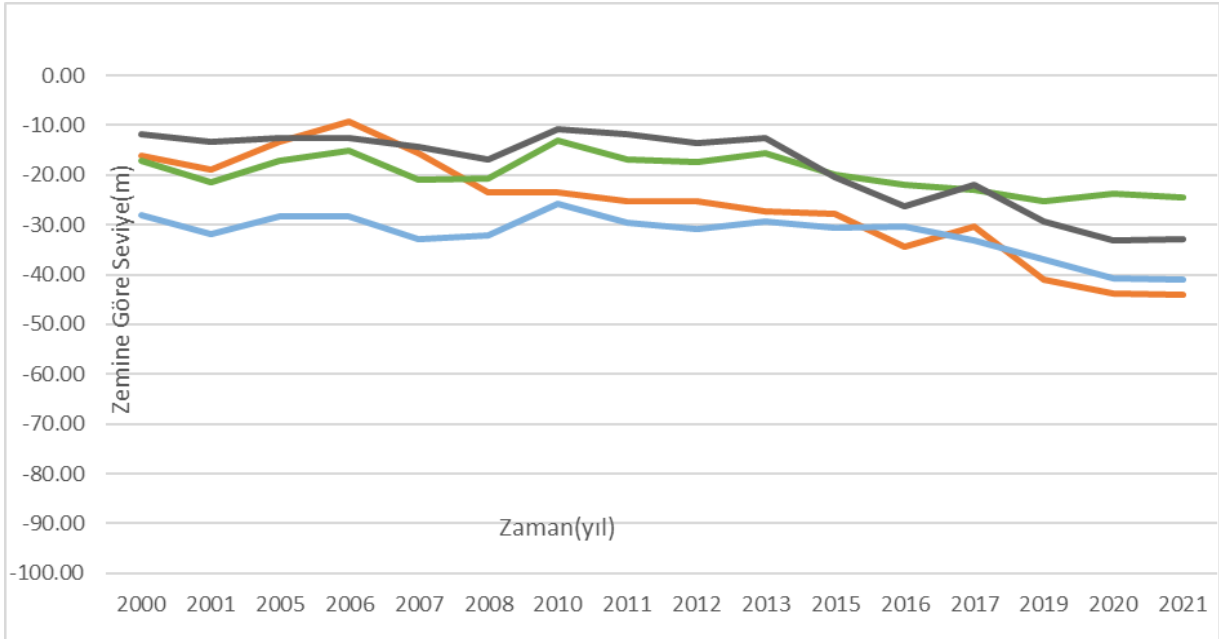
Şekil 4: Alaşehir- Salihli- Sarıgöl Alt Havzası YAS Grafiği (2010 - 2021)



Kaynak: DSİ 2. Bölge Müdürlüğü, 2022

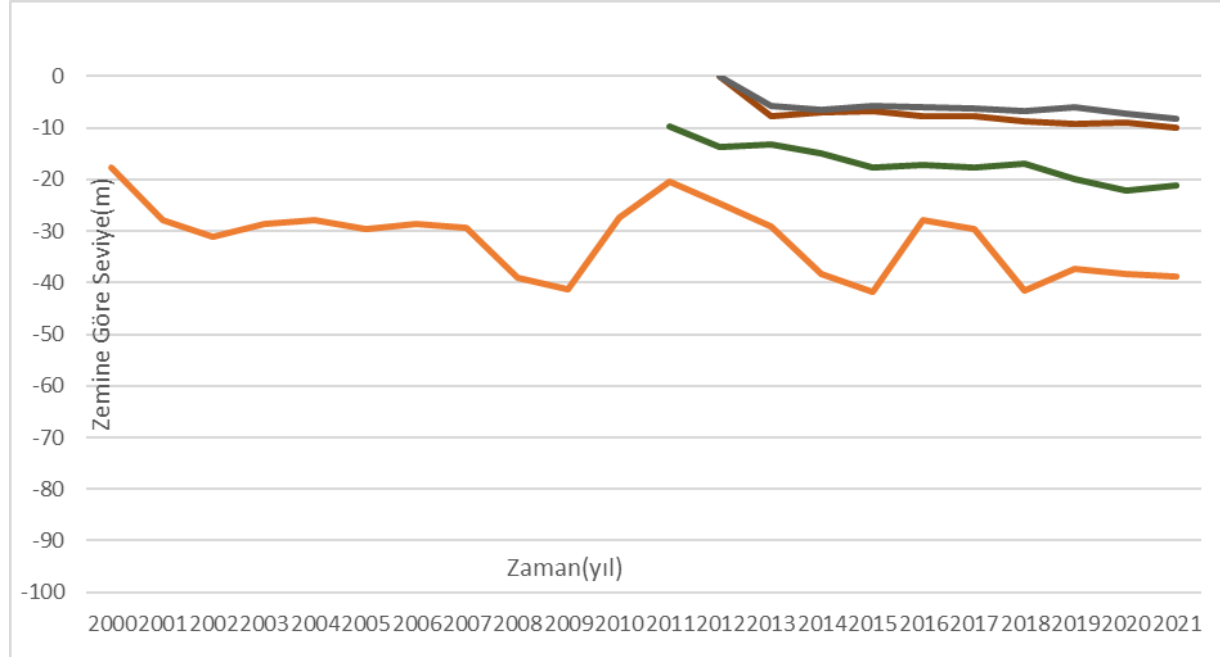
Gördes- Gölarmara- Turgutlu Alt Havzası YAS Seviyeleri grafiği incelendiğinde kuyu seviyelerinin yıllara göre düşüş gösterdiği görülmektedir (Şekil 5).

Şekil 5: Gördes- Gölarmara- Turgutlu Alt Havzası YAS Seviyeleri Grafiği (2000-2021)



Kaynak: DSİ 2. Bölge Müdürlüğü, 2022

Şekil 6: Menemen Alt Havzası YAS Seviyesi Grafiği (2000 -2021)



Kaynak: DSİ 2. Bölge Müdürlüğü, 2022

Gediz Havzasının çeşitli izleme kuyularından alınan verilere göre su seviyesinin neredeyse tüm izleme kuyularında düşmekte olduğu ve yeraltı suyu kaynaklarının hızla tükendiği açıkça görülmektedir. DSİ 2. Bölge Müdürlüğü yeraltı sularını korumak için zaman zaman periyotlar halinde su tahsisini durdurmakta ve yeraltı suyu kullanımını yasaklamaktadır. Fakat havzada kaçak ve ruhsatsız kuyu sayısının çok fazla olması kaynakların yenilenmesini engellemektedir.

4. SONUÇ

Tarımsal sulamada havzalardaki su kaynaklarının önemi büyüktür. Türkiye'nin tarımsal üretiminde önemli bir yere sahip olan Gediz Havzasının bir alt havzası olan Aşağı Gediz havzasının yeraltı suyu kaynakları, bitkisel üretim deseni, yıllara göre yağış ortalamaları, sıcaklık değişimleri, sulama randımanları ve sulama oranlarını incelemeyi amaçlayan bu çalışmada, yıllar içerisinde değişim ortaya konulmuş ve iklim değişikliğinin etkisi gösterilmeye çalışılmıştır.

Havzadaki barajların doluluk oranları ve yeraltı su kuyularındaki debilerin düşüklüğü dikkate alındığında bölgede su sıkıntısı yaşandığı görülmektedir. Bu durumda sulayıcılar yasal veya yasal olmayan bir şekilde kuyu açma yolunu seçmektedir. Özellikle son yıllarda kuraklık nedeniyle kaçak kuyularda büyük bir artış olduğu görülmektedir. Yeraltı suyu kuyularının gereksiz kullanımı ve belgesiz yer altı su kuyularından yapılan sulamalar hem yeraltı suyu rezervlerini etkilemekte hem de mevcut sulama projesini atıl bırakmaktadır. Sulama tesislerinin faaliyet gösterdiği alanlarda ve sulama ihtiyacının zaman ve miktar olarak karşılanabildiği sahalarda, halen kuyulardan sulama yapılmasına izin verilmesinin, su kullanım hizmet bedeli alınıyor olsa da çok doğru bir yaklaşım olmadığı düşünülmektedir.

Projeli sulama sahaları içinde belgesiz olarak açılan yer altı su kuyuları vasıtasıyla yapılan halk sulamalarının, yer altı sularının stratejik bir kaynak olması nedeniyle kesinlikle engellenmesi gerekmektedir. Su kısıtı sebebiyle kullanılması zorunlu olan yerlerde ise, bu kuyular ilgili sulama birliği tarafından, DSİ'nin izni ile açılması ve işletilmesi gerekmektedir. Bu durumun kontrol altına alınabilmesi için, işletmede olan sahalar içerisindeki yeraltısuyu kuyularını kapatan veya sulama birliğine devreden çiftçiler için 2 yıl süreli bir teşvik ve destekleme programının hazırlanması, çiftçilerde davranış değişikliği yaratma konusunda başarılı olabilir.

Üreticiler, karlılığa ve pazar bulma şansının yüksek olduğuna inandığı ürüne kolaylıkla yönelebilmektedir. Sulama tesisi işletmeye açıldıktan sonra çiftçi tarafından uygulanmasını sağlayacak, etkili ve yaptırım gücü olan bir üretim planlaması uygulanmadığından, pazar-fiyat koşullarında yaşanan gelişmelerin de etkisiyle sulanan sahada gerçekleşmesi beklenen ve planlanan ürün deseni hedeflerinden gittikçe uzaklaşıldığı görülmektedir. Bu kapsamda, havza bazında belirlenen su bütçesi ve su kısıtları esas alınarak yöre koşullarına uygun optimum bitki

deseni tespit edilmeli, tespit edilen bu desenin fiilen gerçekleştirenlere özellikle sulama tariflerinde destekleme, teşvik, ödüllendirme ve yaptırım sistemi uygulanması büyük önem taşımaktadır.

Sulama birlikleri, Tarım ve Orman Bakanlığının taşra teşkilatı ile daha etkin çalışmalar yürüterek sulama sahası içerisindeki sezonluk ürün desenini, su bütçesi ve üretim planlamasına göre ortaklaşa belirlemelidir. Bunun gerçekleştirilmesiyle hem tesisin optimum düzeyde kullanımının sağlanarak sulama oranlarının arttırılabileceği, hem de suyun daha verimli kullanılarak sulama randımanının yükseltilebileceği düşünülmektedir.

Gediz Havzasındaki iklim değişikliğinden kaynaklanan kuraklık nedeniyle sulama birliklerinin üyelerine yeterli su sağlayamadıkları görülmektedir. Bu da sulama birliklerinin su kullanım ücretlerinden mahrum kalmasına ve sabit işletme giderleri karşısında ezilmesine sebep olmaktadır. Su sağlanamadığı sürece sulama birlikleri zarar etmekte ve bu süreçten ekonomik olarak ağır yara almaktadır.

Sulama birlikleri hayatlarını sürdürebilmeleri için gelir sağlamak zorundadır. İklim değişikliğinin olumsuz etkilerinden kaynaklı olan su kayıpları nedeniyle sulama birliklerinin çiftçiye ulaştırdığı su miktarı da azalmaktadır. Her ne kadar suyun korunması için çalışmalar yapılması gerekli ise de sulama birliklerinin sabit işletme giderlerini karşılayabilmesi için su rezervlerini adaletli bir şekilde dağıtması gerekmektedir. Sulama oranlarının da düşük olmasından kaynaklı olarak verimlilik düşmektedir. Bu sorunun çözümü için suyun korunması, dağıtımında yaşanan kayıpların giderilmesi ve sulama birliği üyelerinin su ihtiyaçlarını başka kaynaklar yerine sulama birliklerinden temin etmesi zorunluluğunun olması gereklidir.

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Kalite Yönetiminde Yapay Zekâ Kullanımına Yönelik Bir Değerlendirme

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Özet: Kalite yönetimi uygulamaları işletmelerin başarısı için büyük önem arz etmektedir. Kalitenin iyi yönetilememesi durumunda, işletmelerde yüksek düzeyde maliyetler ve müşteri kaybı gibi birçok olumsuz durum ortaya çıkabilmektedir. Bu bağlamda son yıllarda iş dünyasında ve teknolojiye meydana gelen değişim ve gelişmelerle birlikte özellikle COVID-19 küresel salgınından sonra kalite yönetiminde başarıyı sağlamak için kalite yönetiminin bazı aşamalarında yapay zekâ teknolojilerinden yararlanılmaya başlandığı görülmektedir. Yapay zekâ, insan yaşamını kolaylaştırmak için insanın zihinsel yapısından yola çıkılarak geliştirilmiş yeni dijital bir teknolojidir. Bu çalışmanın amacı, kalite yönetiminde yapay zekâ teknolojisi uygulamalarına yönelik bir değerlendirme yapmaktır. Bu amaç doğrultusunda çalışmada öncelikle yapay zekâ teknolojisi hakkında bilgi verildikten sonra ilgili araştırmalar ve örneklerden hareketle kalite yönetiminde yapay zekâ uygulamaları açıklanmaya çalışılmıştır. Araştırmada, üretimde hataları sıfırlamak, kaliteyi iyileştirmek ve kalite maliyetlerini azaltmak için kalite yönetiminin kalite kontrol aşamalarında yapay zekâ teknolojisini kullanıldığı sonucuna ulaşılmıştır.

Anahtar Kelimeler: Kalite, Kalite Yönetimi, Yapay Zekâ

Abstract: Quality management practices are of great importance for the success of enterprises. If the quality is not managed well, many negative situations such as high costs and loss of customers can occur in the enterprises. In this context, with the changes and developments in the business world and technology in recent years, it is seen that artificial intelligence technology has started to be used in some stages of quality management to ensure success in quality management, especially after the COVID-19 global pandemic. Artificial intelligence is a new digital technology developed based on the mental structure of human beings to facilitate human life. The aim of this study is to make an evaluation of artificial intelligence technology applications in quality management. For this purpose, in the study, firstly, after giving information about artificial intelligence technology, artificial intelligence applications in quality management were tried to be explained based on related researches and examples. In the research, it has been concluded that artificial intelligence technology is used in the quality control stages of quality management to eliminate errors in production, improve quality and reduce quality costs.

Key Words: Quality, Quality Management, Artificial Intelligence

1. GİRİŞ

Günümüzde iş dünyasında ve teknolojiye meydana gelen değişim ve gelişmelerle birlikte özellikle COVID-19 küresel salgınından sonra işletmelerin düşük maliyetle kaliteli üretim yaparak kazancı artırmak, müşteri taleplerini hızlı karşılamak ve rekabet avantajı elde etmek için kalite iyileştirme çalışmalarına ağırlık vermeye başladıkları görülmektedir. Bu kapsamda işletmelerin öncelikle kalite düzeylerini belirlemeleri ve sonrasında bu düzeyleri geliştirmeleri gerekmektedir. Kalite düzeyinin iyileştirilmesi sürecinde ise istatistiksel yöntemler kullanılmakla birlikte son yıllarda bu süreçte akıllı üretim teknolojilerinden yararlanıldığı görülmektedir. Akıllı üretim, endüstriyel operasyonların akıllı yeteneklerle donatılmış robotlar tarafından gerçekleştirilmesini öngören Endüstri 4.0 devrimi sonrası ortaya çıkan Toplum 5.0 felsefesi ile birlikte işletmeler için giderek daha çekici hale gelmiştir. Çünkü dijital dönüşüm her geçen gün artmakta ve imalat toplumları, yalnızca imalat sistemlerinin gelişim hızını artırmak için değil, aynı zamanda geliştirilen sistemin işlevselliğini, esnekliğini, kullanılabilirliğini ve birlikte çalışabilirliğini geliştirmek için de gerekli görülmektedir. Bu kapsamda gerçekleştirilen operasyonların doğası gereği zekâ düzeyini sürdürmek için her bir üretim fonksiyonu için farklı yöntemler geliştirilmektedir. Bu durum kalite yönetimi için de geçerli olup, yapay zekâ teknolojisinin kalite sistemlerine dâhil edilmesi uzun yıllardan beri düşünülen bir durum olmuştur. Yapay zekâ, insan yapısından yola çıkılarak geliştirilen insan gibi düşünebilen, üretebilen, yorum yapabilen ve karar verebilen akıllı dijital teknolojilerdir (Oztemel, 2020: 1; Kesici ve Yıldız, 2016: 307-308). Başka bir ifade ile yapay zekâ, problem çözme süreçlerini simüle etmek ve insan beyninin işlevlerini çoğaltmak için bilgisayar sistemlerinin geliştirilmesine odaklanan bilgisayar bilimi dalıdır (Madavi vd., 2012: 74).

Bu çalışmada, kalite yönetiminde yapay zekâ teknolojisi uygulamalarına yönelik bir değerlendirme yapılmaya çalışılmaktadır. Bu amaç doğrultusunda çalışmada öncelikle yapay zekâ teknolojisi hakkında bilgi verilmekte,

sonrasında ilgili araştırmalar ve güncel örneklerden hareketle kalite yönetiminde yapay zekâ uygulamaları açıklanmaktadır. İlgili literatürde kalite yönetiminde yapay zekâ uygulamalarına yönelik az sayıda araştırmaya ulaşılabildiğinden, bu bağlamda böyle bir çalışmanın yapılmasının literatüre katkı sağlama açısından önemli olduğu söylenebilmektedir.

2. YAPAY ZEKÂ

Yapay zekâ kavramı, makinelerin düşünebileceği fikrini geliştirmeye başlayan İngiliz matematikçi ve mantıkçı Alan Turing tarafından geliştirilmiştir. Yapay zekâ 1956 yılında Dartmouth konferanslarında bir grup bilgisayar mühendisi tarafından ortaya atıldığından beri akademik araştırmalarla gelişmiştir. John McCarthy, Marvin Minsk, Nathaniel Rochester ve Claude Shannon yapay zekanın öncülleri olarak kabul edilmekte olup, yapay zekanın temellerini büyük ölçüde şekillendirmişler kişilerdir. Yapay zekâ disiplinler arası bir kavramdır ve literatürde yapay zekaya ilişkin birçok tanım bulunmaktadır (Ever ve Demircioğlu, 2022: 60-61; Ongsulee, 2017: 1). Yapay zekâ insan işlerinin gerçekleştirilmesinde bilgisayar tabanlı çözümlerin tasarlanması ve inşa edilmesidir. Başka bir ifade ile yapay zekâ, makinelerin hareket etmesini, öğrenmesini, insan zekasının özelliklerini göstermesini ve anlamasını sağlayan bir dizi teknolojidir. Yapay zekanın kökeni felsefe, bilgisayar mühendisliği, matematik, ekonomi, psikoloji, nörolojik bilimler, sibernetik ve dilbilimine dayanmaktadır. Yapay zekâ; analitik yapay zekâ, insandan ilham alan yapay zekâ ve insanlaştırılmış yapay zekâ olmak üzere üçe ayrılmaktadır. *Analitik yapay zekâ*, yalnızca bilişsel zekâ ile tutarlı özelliklere sahiptir. Bu yapay zekâ sistemleri, dünyanın bilişsel bir temsili oluşturmakta ve gelecekteki kararları bildirmek için geçmiş deneyimlere dayalı öğrenmeyi kullanmaktadır. Günümüzde işletmeler tarafından kullanılan çoğu yapay zekâ sistemi bu gruba girmektedir ve örnekleri arasında finansal hizmetlerde, görüntü tanıma veya kendi kendine giden arabalarda dolandırıcılık tespiti için kullanılan sistemler yer almaktadır. *İnsandan ilham alan yapay zekâ*, bilişsel ve duygusal zekânın öğelerine sahiptir. Bu sistemler, bilişsel unsurlara ek olarak, insan duygularını anlayabilmekte ve karar verme süreçlerinde bunları dikkate alabilmektedir. Örneğin, sevinç, şaşkınlık ve öfke gibi duyguları insanlarla aynı düzeyde (ve genellikle daha iyi) tanımak için gelişmiş görüş sistemleri kullanılmaktadır. *İnsanlaştırılmış yapay zekâ* ise her tür yetkinliğin başka bir ifade ile bilişsel, duygusal ve sosyal zekâ özelliklerini göstermektedir. Başkalarıyla etkileşimlerinde bilinçli ve bilinçli olabilecek bu tür sistemler henüz mevcut geliştirilmemiştir. İnsan faaliyetlerini tanıma ve taklit etme konusunda ilerleme kaydedilmiş olsa da dünyayı gerçekten temel bir şekilde deneyimleyen yapay zekâ sistemleri oluşturmak geleceğe yönelik bir proje olarak görülebilmektedir. Yapay zekâ araçları farklı endüstrilerde kullanılmıştır. Örneğin, perakendecilik sektöründe Amazon, envanter yönetimini desteklemek için analitik yapay zekâyı kullanmıştır. Eğlence alanında, Los Angeles Times gibi gazeteler makale yazmak için analitik yapay zekâyı kullanmıştır. Müzelerde, katılımı artırmak için yapay zekâ tur rehberi robotları kullanılmıştır. İnsan kaynakları yönetiminde, analitik yapay zekâ, adayların taranmasına ve seçilmesine yardımcı olabilmek için kullanılmaktadır. Pazarlamada yapay zekâ, müşteri hizmetlerini iyileştirmek için yaygın olarak kullanılmaktadır. Örneğin, otel endüstrisinde analitik yapay zekâ uygulayan sohbet robotları, müşteri sorularına otomatik yanıtlar üretebilmektedir. Müşteri hizmetleri deneyimini geliştirmek için yapay zekâ iletişim merkezlerinde de konuşlandırılmıştır. İş dünyasında yaygın olarak kullanılmasına rağmen, yapay zekanın kuruluşlardaki rolü, işlerin türüne ve karmaşıklık düzeyine bağlıdır. Genel olarak yapay zekâ, sıradan ve düşük seviyeli görevleri otomatikleştirmek için kullanılmaktadır (Kaplan ve Haenlein, 2019: 15-21). Yapay zekanın arkasındaki amaç, insanları sıradan-tekrarlayan görevlerden kurtarmak ve daha ilginç, gelişen eylemlerle insan zekasını ve işlerini büyütmek için insana daha fazla zaman vermektir. Örneğin; Londra'da kendi kendini süren robotlar yiyecek dağıtmakta, California Pasadena'da Flippy adında bir robot yemek pişirebilmektedir. Yapay zeka en gelişmiş görevlerde bile insanların yerini alabilmektedir. Artan yapay zeka yetenekleriyle, insanlar tarafından gerçekleştirilen çoğu görevin yapay zekâ tarafından daha iyi ve daha verimli bir şekilde gerçekleştirileceği, böylece yapay zekanın sonunda insan emeği için büyük bir kısıtlama haline gelebileceği olasıdır. Yapay zekânın insan emeğinin yerini nasıl alacağına dair teorilerin çoğu, insan zekâsının yapay zekâ ile yer değiştirmesinin görevlerin gerektirdiği becerilere bağlı olabileceğini inceleyen "Hissetme Ekonomisi" üzerindeki çalışmalardan gelmektedir. Yapay zekanın kapasitesinde yıllar içinde kaydedilen ilerlemeye rağmen, yapay zekâ birçok görevde, özellikle de insan duygularını ve diğer kişilerarası ipuçlarını çözme, taklit etme ve bunlara yanıt verme veya hissetme gerektiren görevlerde hala insanlardan daha düşük performans göstermektedir (Vorobeva vd., 2022: 601-602).

3. KALİTE YÖNETİMİNDE YAPAY ZEKÂ

Geçmişte işletmeler, daha çok üretimle ilgili sorunlara odaklanmışlar, üretim sonrası ve satış sonrası hizmetlerle yeterince ilgilenmemişlerdir. Ancak daha sonra işletme sayısının artmasıyla birlikte rekabetin de artması, ekonomik iş birliklerinin kurulması, kıt kaynakların daha verimli kullanılma gerekliliğinin ortaya çıkması, müşteri bilincinin gelişmesi, çevresel duyarlılık gibi faktörler, dikkatlerin kalite kavramına çevrilmesine yol açmıştır

(Aydıntan, 2012: 4). Kalite, “müşteri istek ve beklentilerine uygunluk”, “üstünlük derecesi”, “mükemmellik derecesi”, “müşteri memnuniyeti”, “yaşam tarzı” olmak üzere birçok şekilde tanımlanmaktadır (Esmer ve Alan, 2018: 504). Kalite bağlamında daha çok üretim yönetimi konusu olarak istatistiksel kalite kontrolü 1920, 1930’lu yıllarda ABD’de geliştirilerek, 1960’lı yıllarda Japonya’da “toplam kalite “kontrolü” şeklinde daha ileri bir boyuta ulaşmıştır. 1980’li yıllara gelindiğinde ise başta üst yönetim olmak üzere tüm yönetim kademeleri ve çalışanların kaliteden sorumlu olduğunu ileri süren “Toplam Kalite Yönetimi (TKY)” anlayışı ortaya çıkmıştır. “TKY, mal ve hizmetlerin üstün kaliteli olması konusunda kesin bir taahhüdü, sürekli iyileştirmeyi ve kalite geliştirmeyi benimseyen bir yaklaşımdır” (Mucuk, 2014: 174, 175). Motivasyon, verimlilik, sürekli gelişme, sürekli eğitim, çalışanların katılımı, müşteri memnuniyeti, kalite maliyetleri, çevre, kalite çemberleri gibi birçok faktörü öngören TKY, tüm dünyaya yayılmış ve çok sayıda işletme tarafından benimsenen bir yönetim felsefesi olmuştur (Güler, 2012: 21).

Günümüzde, müşteri beklentilerinin artması, uluslararası olma tutkusu, teknolojinin hızlı gelişimi, kalite maliyetlerinin artması, uluslararası rekabetin artması, insana olan bakış açısının değişmesiyle birlikte insan faktörünün öneminin artması kalitenin etkin ve verimli bir şekilde yönetilmesini zorunlu hale getirmiştir. Bu nedenle insanlar tarafından, kaliteyi geliştiren araç, yöntem ve teknikler geliştirilmektedir (Aydıntan, 2012: 17). Bu bağlamda son yıllarda kaliteyi ileştirmek ve müşteri memnuniyetini sağlamak için kalite yönetiminde yeni dijital teknolojiler kullanılmaktadır. Bu teknolojilerin başında yapay zeka gelmektedir. Yapay zeka, robotların, makinelerin ya da bilgisayarların gerçek dünya ile ilgili konularda insan gibi düşünmesini sağlayan teknolojinin adıdır (Gezici, 2021: 88). Yapay zeka, kalite süreci boyunca uygulanabilecek yeni araçlar sunmaktadır. İşletmelerde yapay zeka kullanılarak, kalite artırılırken, toplam maliyet ise önemli ölçüde azaltılabilmektedir. Ayrıca yapay zeka bitmiş ürünlere de entegre edilebilmektedir. Bu yalnızca maliyetleri düşürmeye yardımcı olmakla kalmamakta, aynı zamanda işletmelere uzun vadeli garantiler ve diğer katma değerli hizmetler şeklinde yeni gelir fırsatları sunmaktadır (Kimmel, 2021:1). Yapay zekanın kullanılmasıyla, entegre edilmiş ve kurumsal çapta kalite yönetimi süreci çok daha verimli hale gelmektedir. Yapay zeka kullanılarak bütünsel bir kalite yönetiminin sağlanabilmesi için aşağıdaki adımların takip edilmesi gerekmektedir (Compliancequest, 2021: 1):

- Kalite sorunlarının ve operasyonel verimsizliklerin erken tespit edilmesi,
- Hataları ve uygunsuzlukları önceden tespit etmek için veri odaklı tahmine dayalı analizlerin yapılması,
- Şikayetler ve uygunsuzluklar gibi sorunları otomatik olarak önceliklendirmek için yapay zeka modellerini kullanarak daha iyi kaynakların tahsis edilmesi,
- Ekipman bakımı gibi çeşitli senaryolarda tahmine dayalı analizlerin yapılması,
- Risk yönetimine ve risk azaltma çabalarının planlanmasına yönelik proaktif yaklaşımın benimsenmesi,
- Denetim ve teftişlerde zaman tasarrufunun sağlanması,
- Kalite iyileştirme çabalarını yönlendirmek için daha iyi yönetim incelemeleri yürütmek için yapay zeka destekli araçların kullanılması.

Yapay zeka, üretim sorunlarının olası nedenlerini belirleme, arızalara yol açabilecek boşlukları tespit etme ve çok daha fazlası gibi kritik zorluklara karşı bütünsel bir yaklaşım oluşturarak kalite yönetimini daha az zaman alan bir süreç haline getirmektedir. Operasyonel mükemmelliği korurken kaynak ve zamandan tasarruf etmeye yardımcı olmaktadır. Yapay zeka tarafından yönlendirilen kalite yönetimi yazılımı, bir işletmenin süreç döngülerini düzene koymasına ve özellikle bilişim teknolojileri ile ilgili görevler için genel örgütsel verimliliği iyileştirmesine yardımcı olmaktadır. Kalite yönetimi süreçleri ve tüm temel yönleri için tahmine dayalı bir analiz yapılmasına yardımcı olmaktadır. Ayrıca işletmeler, iyileştirilmiş uygulamalar ve analizler yoluyla minimum veya manuel olmayan müdahale ile kalite hedeflerine ulaşmak için yapay zekadan en iyi şekilde yararlanabilmektedirler. Bu bağlamda yapay zekanın benimsenmesi, aşağıdaki özellikler bakımından işletmelerin kalite yönetim süreçlerini hızlandırmaktadır (Qualityze, 2022: 1):

- **Şablonları ve kontrol listelerini yeniden kullanma:** Yapay zeka tabanlı sistemler, standart bir formatı korurken ilgili bilgileri ve verileri daha kısa sürede toplamaya yardımcı olmaktadır.
- **Akıllı analitik:** Gelişmiş yapay zeka araçları, gelişmiş kurumsal üretkenlik için analitiği her zamankinden daha akıllı hale getirmiştir.
- **Basitleştirilmiş soruşturma:** Yapay zeka destekli araçlar, kuruluşların bilgi ve sisteme yetkisiz erişim girişimlerini kontrol etmelerine yardımcı olarak güvenliği sağlamaktadır.

- **Proaktif problem çözme:** İşletmeler, yapay zeka araçları aracılığıyla, erken eğilimleri izleyerek kalite sorunlarını ortaya çıkmadan önce belirlemek için çok büyük miktarda veri toplayabilmektedirler. Çıktılarında iyileştirilmiş kalite istatistikleri için proaktif bir problem çözme yaklaşımı yapabilmektedirler.
- **Geliştirilmiş görünürlük:** Yapay zeka odaklı araçlar ve metodolojiler, süreçler boyunca görünürlüğü önemli ölçüde artırmaktadır. İşletmelerin tedarik zinciri risklerini yönetmesine, risk analizi yapmasına ve yöntemlerin en iyi değerini belirlemesine olanak tanımaktadır.
- **Azaltılmış işlem döngüsü süresi:** Yapay zeka, daha kısa süreç döngüleri anlamına gelen süreçlerin ve iş akışlarının otomasyonu ile ilgilidir ve işletmelerin temel iş faaliyetlerine odaklanmaları için yeterli zaman kazandırmaktadır. Yapay zeka ile süreç zaman tüketimini önemli ölçüde azaltabilecek iyileştirme alanları da belirlenebilmektedir.
- **Daha hızlı ve daha akıllı karar verme süreci:** Yapay zeka, daha hızlı ve daha akıllı bir karar verme süreci için işletmenin operasyonları hakkında gelişmiş bir bağlamsal anlayış ve farkındalık için sezgisel bir kullanıcı arayüzü ile birlikte zengin veri görselleştirmelerinden yararlanmaktadır.

İlgili literatür incelendiğinde kalite yönetiminde yapay kullanımına yönelik araştırmaların olduğu görülmektedir. Kaya ve Engin (2005)'e göre, kalite ile ilgili sorunların çözümünde yapay zeka teknikleri kullanılmaktadır. Özellikle kalite kontrol ve kalite iyileştirme çalışmalarında yapay sinir ağları, bulanık mantık, genetik algoritmalar ve uzman sistemler gibi yapay zeka tekniklerinden yararlanıldığı görülmektedir. Kaya vd. (2005) kalite kontrolü ile ilgili sorunların çözümünde yapay sinir ağları tekniğinin kullanıldığı bulgusuna ulaşmışlardır. Kontrol diyagramlarında desen tanıma, ürünlerdeki yabancı maddelerin ayıklanması, tahmin ve sınıflandırma gibi birçok kalite kontrol işlemi yapay sinir ağları ile kolaylaşmakta, kalite maliyetleri ve muayene süreleri minimize edilmektedir. Yussupova vd. (2016) veri madenciliği ve makine öğrenimi gibi yapay zeka tekniklerinin kalite yönetiminin etkinliğini artırdığını ve müşteri memnuniyetini sağlama noktasında katkı sağladığını savunmuştur. Bu nedenle klasik teknikler yerine bunların kullanılması gerektiğini ileri sürmüştür. Kesici ve Yıldız (2016) bir otomotiv yan sanayisindeki üretim proseslerinde, operatörlerin karar verme mekanizmasındaki hataları minimum düzeye indirmek, daha istikrarlı ve hatasız bir üretim süreci tasarlamak amacıyla kalite kontrol işlemlerinde yapay zeka teknolojilerinden yararlanmışlardır. Yapay zekâ uygulaması ile müşteri memnuniyetsizliğe neden olan sorunlar üretim tesisinde belirlenerek müşteriye ulaşması engellenmiştir. Somasundaram vd. (2020)'ye göre, bir işletmedeki tarihi geçmiş ve mevcut veriler analiz edilerek performansın iyileştirilmesi için atılması gereken adımlarını önermek için yapay zeka kullanılabilmektedir. Bu nedenle pek çok işletme, ISO 9001 : 2015 standartları ve geçmiş veriler doğrultusunda iyi tanımlanmış bir Kalite Yönetim Sistemine (KYS) sahip olduğundan, bu yeni teknolojiyi benimseyebilmektedir. Wang vd. (2020) ürün geliştirme sürecinin erken aşamalarında bazı arızaları tespit etmenin zor olması nedeniyle potansiyel risklerin ortaya çıktığını ve bu nedenle kalite yönetiminin yapay zeka ile entegre edilmesinin müşteri gereksinimlerinin tanımlanması ve dağıtımı, otonom araçların performansının iyileştirilmesi ve nihayetinde müşteri memnuniyeti açısından önemli olduğunu vurgulamıştır. Ever ve Demircioğlu (2022) yapay zekanın kalite maliyetleri üzerindeki etkisini incelemişlerdir. Üretimde yapay zekâ kullanımının, kalite kontrol faaliyetleri ve kalite yönetimi açısından oldukça faydalı olduğu ve başarısızlık maliyetlerini azaltarak maliyet avantajı sağladığı sonucuna ulaşmışlardır.

4. SONUÇ VE DEĞERLENDİRME

Kalite, müşteri memnuniyetini sağlamanın en iyi yolu olup, aynı zamanda işletme başarısında önemli role sahip bir araçtır. Bu nedenle kalitenin iyi yönetilmesi gerekmektedir. Kalite yönetiminde başarıyı sağlamak için son yıllarda bilişim teknolojilerinden yararlanıldığı görülmektedir. Söz konusu bu teknolojilerin başında yapay zekâ gelmektedir. Yapay zekâ, insan yaşamını kolaylaştırmak için insanın zihinsel yapısından yola çıkılarak geliştirilmiş yeni ve dijital bir teknolojidir. Bu çalışmada kalite yönetiminde yapay zekâ uygulamaları teorik çerçevede incelenmiştir. İnceleme sonucunda kalite kontrol aşamalarında birçok problemin çözümünde yapay zekâ teknolojilerinden yararlanıldığı görülmektedir:

Kalite kontrol ve kalite iyileştirme çalışmalarında yapay sinir ağları, bulanık mantık, genetik algoritmalar ve uzman sistemler gibi yapay zekâ teknikleri kullanılmaktadır. Bu bağlamda kontrol diyagramlarında desen tanıma, ürünlerdeki yabancı maddelerin ayıklanması, tahmin ve sınıflandırma gibi birçok kalite kontrol işlemi yapay sinir ağları ile daha kolay hale gelerek, kalite maliyetleri ve muayene süreleri minimum düzeye indirilebilmektedir.

Veri madenciliği ve makine öğrenimi gibi yapay zeka teknikleri kalite yönetiminin etkinliğini artırmakta ve müşteri memnuniyetini sağlama noktasında katkı sağlamaktadır. Bu bağlamda üretim proseslerinde, operatörlerin karar verme mekanizmasındaki hataları minimum düzeye indirmek, daha istikrarlı ve hatasız bir üretim süreci tasarlamak amacıyla yapay zekâ teknolojisi kullanılmaktadır. Yapay zekâ ile müşteri memnuniyetsizliğe neden olan sorunlar yerinde belirlenerek müşteriye ulaşması engellenmektedir.

Sonuç olarak, müşteri gereksinimlerinin tanımlanması ve dağıtımı, otonom araçların performansının iyileştirilmesi ve müşteri memnuniyetinin sağlanması için kalite yönetiminin yapay zeka ile entegre edilmesi gerekmektedir. Dolayısıyla üretimde yapay zekânın kullanımı, kalite kontrol faaliyetleri ve kalite yönetimi açısından faydalı olup, başarısızlık maliyetlerini azaltarak maliyet avantajı sağlamaktadır.

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How Crude Birth Rate And Young Age Dependency Ratio are Related in the Long-run in Türkiye

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Abstract: In this study we attempt to determine the long-run relationship between crude birth rate and young age dependency ratio for Türkiye by employing a time series data for the period of 1960-2018 and by utilizing ARDL approach. Co- integration test results gathered from ARDL bounds test show that there is a co-integrating relationship between crude birth rate and young age dependency ratio and thus two series move together in the long-run in Türkiye. Also the long- run coefficient estimation findings point out that crude birth rate has a positive and statistically significant impact on young age dependency ratio. In other words, a rise in crude birth rate by %1 leads to a jump in young age dependency ratio by %0.847 in the long-run in Türkiye. Lastly the diagnostic test results of our estimated ARDL (2,0) model reveal that the model do not contain any problem in terms of autocorrelation, heteroscedasticity, non-normality, and misspecified model at %1 significance level.

Keywords: Crude Birth Rate, Young Age Dependency Ratio, Unit root, Co-integration, ARDL Analysis.

1. INTRODUCTION

According to the Turkish Language Institution, the concept of population is expressed as "the total number of people living in a country, a region, a house at a certain time, population". For this reason, population can be a concept that is shaped and meaningful on the axis of different settlements on the earth such as villages, towns, cities and even continents. People join the population by birth or migration; they are separated from the population by death or migration. In cases where environmental factors are stable, no serious changes are seen in the population and it can be said that there is a balance. Population increase or decrease can be seen with various changes (epidemic, disease, migration, war, etc.) in environmental factors (Aksu, 1998:219).

While the increasing population structure of the world in the historical process continues to increase in some regions, it tends to decrease in some regions. The serious population decline observed in Europe and East Asia (mainly Germany, Italy, Spain and South Korea) and the change in population age structure as a result of this decrease create serious economic development and financing difficulties at the urban and regional level (Carbonaro et al., 2016:212) .

The changing age structure of the population and the aging trend can have significant effects on macroeconomic indicators. For example, a possible fall in the fertility rate, a decrease in the number of people of working age, and an increase in the elderly population creates less workers to support the number of dependents. Since transfer expenditures for the elderly are financed by the taxes collected from the working population, an increase in the tax burden and the resulting decrease in savings may lead to a decrease in productivity and efficiency. The decrease in labor supply varies according to the degree of substitution of the observed progress in capital and technical progress (Goh et al, 2020:1-2).

The change in the population of a certain age group provides important data in affecting income inequality (Dong et al., 2018: 66-67). An increase in the share of the young people who have just entered the working life in the population can increase the income inequality between the groups, given that they have a low average income (Lam, 1997:1052).

According to the definition made by the OECD, the working age population is defined as the population between the ages of 15-64. This indicator measures the share of the working age population in the total population (OECD, 2022:1). The relative size of the working-age population is important in terms of providing support to the dependent population. The larger the size of this population, the greater its potential to lift the economic burden of the dependent population. Developed countries are often worried about their working-age population being too small or growing slowly. Developed countries have to accept international migration, often of a temporary nature, to meet unmet short-term labor demands. Developing countries, by contrast, are

typically concerned about the challenge of providing decent employment for all due to their large and rapidly growing workforce (United Nations, 2011:17).

When the population is evaluated according to age structures, the population called 0-14 age range is divided into two as young dependent population and population over 65 years old dependent population (Günaydın, 2018: 5). The dependent population represents a measure of the burden that the working-age population must bear. This burden consists of children, young people and people of retirement age. It is indirectly assumed that people in these age groups do not participate in production and are looked after by the rest of the population (Kleiman, 1967:877).

Therefore, in relation to the variability of the age index (the share of the population aged 15-64 in the total population); Due to fluctuations in local and economic conditions, the fact that employment opportunities do not increase despite the increase in the active population, the possibility of shrinking future job opportunities and the phenomenon of seasonal or cyclical unemployment are important in terms of differences between countries (Dayıoğlu, 2018: 214).

The growth or decrease of a population over a certain period of time is determined by births and deaths (United Nations, 1953: 47). The decrease or increase in birth and death rates is a turning point in demographic structures and has an impact on population growth rate, dependent population and working age population (Yoon et al., 2014:5).

In the first phase of the demographic transition, the increasing number of young people in need of care as a result of the high fertility rate and the falling rate of employment may reduce per capita income. As the transition continues, this situation takes a reverse shape and the youth dependency ratio decreases; there is an increase in the productive population. As a result, it is expected that there will be an increase in the welfare level. A simple view of this phenomenon is the rapid rise in welfare observed in East Asian countries after 1970. Increases in the elderly share in the future reduce the high increases observed in welfare over time (Bloom and Williamson, 1997:428-429; Ashraf et al., 2013:98).

Table 1: Analysis of WDI Türkiye Population by Young Dependent Population Rate, Birth Rate and Certain Age Groups (2011-2021)

Series Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Age dependency ratio, young (% of working-age population)	40,33 2336 98	39,85 0942 81	39,38 9978 53	38,94 0121 27	38,47 7785 65	38,00 9744 88	37,46 2066 18	36,86 3132 41	36,26 4218 29	35,69 3459 16	35,10 2421 07
Birth rate, crude (per 1,000 people)	17,65 1	17,40 2	17,16 6	16,94	16,71 8	16,49 4	16,26 4	16,02 7	15,78 2	15,53 1	..
Population ages 0-14 (% of total population)	26,63 6329 41	26,37 6825 24	26,12 3148 25	25,86 8406 66	25,59 9788 99	25,32 4268 01	25,00 2757 15	24,64 9410 14	24,29 0822 87	23,94 2057 6	23,56 9430 47
Population ages 15-64, total	4850 3480	4941 0565	5035 3211	5130 4360	5224 6676	5318 5895	5413 8362	5505 8658	5588 3565	5657 2012	5710 1728

Kaynak: WDI (2022)

Based on the WDI data, in the table prepared above; Young dependent population, birth rate, population aged 0-14 and age 15-64 in Türkiye are examined. In the data analyzed from the years 2011-2021, it is observed that there is a gradual decrease in the birth rate in Türkiye. In general, it is understood that the birth rate is closely related to the young dependent population. On the other hand, the population in the 15-64 age group, which constitutes the working segment, is gradually increasing.

This study attempts to explore long-run interaction between crude birth rate and young age dependency ratio for the case of Türkiye by using a data set for the period of 1960-2018 and ARDL estimation technique. We expect to see that crude birth rate enhances young age dependency ratio in Türkiye. The variable of birth rate (BIRTH) is crude birth rate for per 1,000 people and the variable of young age dependency (YOUNG) is young age dependency ratio (% of working-age population). The data on crude birth rate and young age dependency ratio are gathered from World Development Indicators (WDI) of the World Bank.

2. LITERATURE REVIEW

Yılmaz (2019: 153) examines the population characteristics of Beytüşşebap district of Şırnak province in his study. The data set of the study covers the years 1927-2017. In this study, which is a descriptive research,

mostly the data of the Turkish Statistical Institute were used. In the study examining the factors affecting the development of the population of Beytüşşebap district, the dependency ratio of the young population in Beytüşşebap district is calculated as 39.9%. It is stated that the reason for the low dependency ratio of the young population is the low share of the child population in the total population and the low ratio of the working age population.

Doğan and Bostan (2019:68) examine Türkiye's demographic transformation and population projections between the years 1927-2018 in their research. In the study, the characteristics of the population (age structure, gender status, education level, household size, distribution of employees by economic sector, rural-urban population ratios) are examined. Data from the Turkish Statistical Institute (TUIK) are used; Statistics are interpreted with tables and graphs created by transferring them to the computer environment. In this direction; It is stated that while crude birth rate was 20.3‰ in 2001, it decreased to 17.2‰ in 2010 and 15.3‰ in 2018. While the total fertility rate in Türkiye was 6.2% in 1960-65, it decreased to 3.41% in 1980. It is determined that it decreased to 2.65% in 1990, to 2.38% in 2001, and to 1.99% in 2018. Until 1980, while the average of 80 people for every 100 working population in Türkiye was the dependent population, it is stated that the total age dependency ratio decreased to 47.4% in 2018 by decreasing since 1985. This situation is interpreted as a decrease in the pressure on the working population, and a decrease in the population (ages 0-14 to 65+) that does not contribute to the national income.

Chen (2016:32), his study covers 87 developed and developing countries. The data set of the study is between 1972-1992. Fixed effects panel regression analysis is performed in the research. In the study; Data on young and old dependent ratio, interest rate, bond amount, tax revenue and government debt stock are used. While it is concluded that the increase in the ratio of the elderly and young dependent population causes budget deficits only in developing countries, it is stated that such a result has not been reached in developed countries.

Kaplan and Burgaz (2021:879) take the EU countries as a sample group in their study, which examines the relationship between demographic indicators and inflation. It is stated that the number of children per woman decreased rapidly after the “baby boom” in EU countries, and today this number is below the replacement level of the population. It is claimed that due to the decrease in the number of children per woman, the young dependent population and the structure of the working age population are also affected. In the study, which is based on the demographic indicators of the EU countries for the period 1996-2020, it is determined that the elderly dependent population, economic growth, unemployment and the working age population reduce inflation, while the young dependent population and the increase in the population growth rate increase inflation.

Bloom et al. (2009:79), in their study examining the relationship between population aging and economic growth, concludes that the decrease in fertility rate causes a decrease in youth dependency rates. However, since this situation will cause an increase in the elderly dependency ratio, it is found that the participation in the labor force will decrease. In addition, since the decrease in fertility will increase the participation of women in the labor force, it is determined that the ratio of the labor force to the population will be perceived as increased.

Savaş (2008:161), in his research; It examines the relations between population and per capita economic growth in Central Asian countries consisting of Kazakhstan, Tajikistan, Kyrgyzstan, Turkmenistan and Uzbekistan. In the study, cointegration analysis with ARDL method was conducted, there is a strong and positive relationship between population and economic growth in Central Asian countries. Population is one of the driving forces of economic growth.

Yılmaz (2017:162) examines the population change of Erzurum province between the years 1990-2015 in his study. It has been determined that the population of Erzurum province has decreased by -1,2% every year in the last 15 years. It is stated that while the share of the child population in the total population has decreased by approximately 14% over the years, the share of the working age population has increased by about 10% and the share of the elderly population by around 5%. The main reasons for the change in the age structure of the population of Erzurum province are the decrease in the birth rate and the prolongation of the average life expectancy. Due to the decrease in the birth rate, the share of the child population in the total population decreases, and the increase in the average life expectancy increases the share of the elderly population in the total population at a significant rate.

Koksall et al. (2016:205) compares EU countries and Türkiye in their studies from the perspective of population. Türkiye and other European Union countries are compared in terms of 15 basic health level indicators. Of the

basic health level indicators; life expectancy at birth, gross national product per capita, health expenditure per capita, health share from the general budget, population growth rate, literacy rate, infant mortality rate, under-five mortality rate, maternal mortality rate, crude birth rate, crude death rate, total fertility rate, number of physicians, nurses, midwives and beds per ten thousand people are evaluated. Based on the World Bank data for the years 1960-2013, the authors are in Türkiye; population growth rate, crude birth rate and fertility rate are found to be higher than European Union countries.

Matin (2012:1) examines the demographic dividend issue in his study. Demographic dividend is defined as the potential economic benefit offered by changes in the age structure of the population during the demographic transition, when there is an increase in the working-age population and a consequent decrease in the dependent age population. Important metrics such as fertility, mortality, dependency and support rates are analyzed in the Bangladesh sample. The level and trend of the demographic transition process in Bangladesh in the 1950-2011 period is discussed. In the study; The view that the working age population is increasing and the population dependency ratios are decreasing in this direction is supported. In addition, a relationship was found between the fertility rate and the young age dependency rate.

Bhagat and Unisa (2006:201), in the study examining the young and old dependent population in India based on the 1961-2001 data set, it is concluded that a significant portion of Indian adults are addicted. In the study, it is determined that a significant part of the elderly in India are also working. Therefore, this study uses a measure of the economic dependence of older people and also tries to measure their relative dependency relative to the adult population. It is among the findings that the young dependent population in India has decreased gradually over the years and this decrease is in parallel with the birth rates.

Mihrahmadizadeh et al. (2015:107), this study analyzes a 23-year trend of dependency ratio of rural population in Fars province of Iran and the effect of some fertility variables on it. Regression analysis method is used. In the study examining the data of 1990-2012, it is determined that the total dependency ratio decreased from 102.5% in 1990 to 41.4% in 2012. Much of this decrease is attributed to the decrease in the youth dependency ratio. It is stated that the elderly dependency ratio (population aged 65 and over) has grown significantly. The number of rural health homes, family planning coverage, total fertility rate and overall fertility rate were significantly associated with total dependency rate. As a result, it is found that the youth dependency ratio has decreased in Fars. However, it is stated that the elderly dependency ratio is gradually increasing.

Ahmad and Shah (2021: 563) stated in their study that the demographic transition from different channels significantly affects economic growth. While it is stated that the Malthusian view, which is put forward as the dependency ratio, negatively affects economic growth, Julian Simon's view is quite different, highlighting the long-term benefits on economic growth of the population between the ages of 5 and 15. This study examines the impact of the five most populous Asian countries (Bangladesh, China, Indonesia, India and Pakistan) on the dependency ratio and economic growth. The empirical findings of the study indicate that total dependency and younger dependency ratio have a positive and significant effect on economic growth in both short-term and long-term scenarios. It is determined that the elderly dependency ratio has a negative effect on economic growth in the long run, while it has a negative effect on economic growth in the short run.

3. DATA AND METODOLOGY

This study attempts to explore long-run interaction between crude birth rate and young age dependency ratio for the case of Türkiye by using a data set for the period of 1960-2018 and ARDL estimation technique. We expect to see that crude birth rate enhances young age dependency ratio in Türkiye. The variable of birth rate (BIRTH) is crude birth rate for per 1,000 people and the variable of young age dependency (YOUNG) is young age dependency ratio (% of working-age population). The data on crude birth rate and young age dependency ratio are gathered from World Development Indicators (WDI) of the World Bank.

We estimated the following model to conduct ARDL bounds test for co-integration analysis:

$$\Delta YOUNG_t = \beta_0 + \sum_{i=1}^p \delta_i \Delta YOUNG_{t-i} + \sum_{i=0}^q \phi_i \Delta BIRTH_{t-i} + \gamma_0 YOUNG_{t-1} + \gamma_1 BIRTH_{t-1} + \varepsilon_t \quad (1)$$

The meaning of notations utilized above equation is as follows: γ_0 and γ_1 terms show long-run coefficients; δ_i and ϕ_i terms display short-run coefficients; Δ term is first degree difference operator; β_0 term stands for constant term of the model, and ε_t term represents white noise error term of the model.

The null and alternative hypotheses of co-integration analysis are as following respectively:
 $H_0 : \gamma_0 = \gamma_1 = 0$ (i.e., asserts the non-existence of co-integration between BIRTH and YOUNG variables) and
 $H_1 : \gamma_0 \neq \gamma_1 \neq 0$ (i.e., claims the presence of co-integration between BIRTH and YOUNG variables). F-statistic value going beyond the upper critical value implies the validity of alternative hypothesis, falling below the lower critical value hints the validity of null hypothesis. Finally F-statistic value staying between the lower and upper critical values depicts indecisive zone.

We computed the error correction model given below in order to provide short-run and long-run coefficients:

$$YOUNG_t = \beta_0 + \sum_{i=1}^p \delta_i \Delta YOUNG_{t-i} + \sum_{i=0}^q \phi_i \Delta BIRTH_{t-i} + \eta EC_{t-1} + \varepsilon_t \quad (2)$$

The meaning of notations used in Equation 2 is as follows: δ_i and ϕ_i terms stand for the dynamic coefficients; EC term shows error correction term; η term displays the speed of adjustment at which the model return back to long run balance after a shock occurred in short term. The speed of adjustment term must have a negative and statistically significant coefficient.

4. AMPIRICAL RESULTS

Kwiatkowski-Phillips-Schmidt-Shin (KPSS) stationarity test was implemented for two different models (i.e., model with constant and model with constant linear trend) to check the stationarity status of each variable. In Table 2 and 3 we depicted the KPSS stationarity test findings for YOUNG and BIRTH variables respectively. The findings shown in Table 1 disclose that YOUNG variable is stationary at level for model with constant linear trend and YOUNG variable is stationary at first difference for model with constant at %1 significance level.

Table 2: KPSS Test for YOUNG Variable

Null Hypothesis: YOUNG is stationary		
Exogenous: Constant		
Bandwidth: 6 (Newey-West automatic) using Bartlett kernel		
		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		0.921085
Asymptotic critical values:	1% level	0.739000
	5% level	0.463000
	10% level	0.347000
Null Hypothesis: $\Delta YOUNG$ is stationary		
Exogenous: Constant		
Bandwidth: 5 (Newey-West automatic) using Bartlett kernel		
		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		0.634200
Asymptotic critical values:	1% level	0.739000
	5% level	0.463000
	10% level	0.347000
Null Hypothesis: YOUNG is stationary		
Exogenous: Constant, Linear Trend		
Bandwidth: 6 (Newey-West automatic) using Bartlett kernel		
		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		0.210868
Asymptotic critical values:	1% level	0.216000

	5% level	0.146000
	10% level	0.119000

As indicated by Table 3, BIRTH variable is stationary at level for model with constant linear trend and BIRTH variable is stationary at first difference for model with constant at %1 significance level.

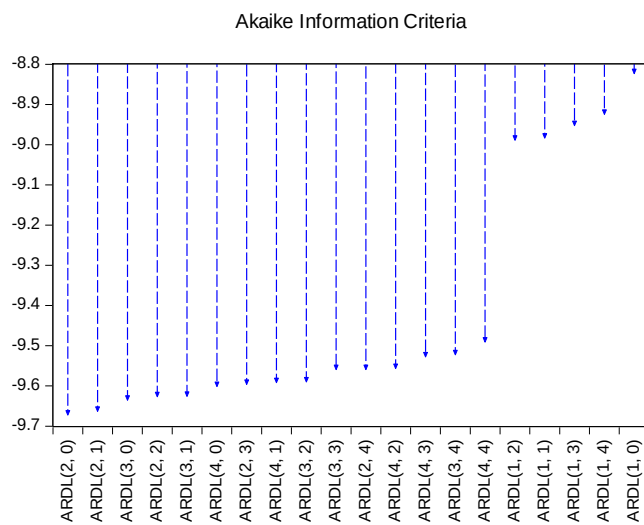
Table 3: KPSS Test for BIRTH Variable

Null Hypothesis: BIRTH is stationary		
Exogenous: Constant		
Bandwidth: 6 (Newey-West automatic) using Bartlett kernel		
		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		0.930905
Asymptotic critical values:	1% level	0.739000
	5% level	0.463000
	10% level	0.347000
Null Hypothesis: Δ BIRTH is stationary		
Exogenous: Constant		
Bandwidth: 6 (Newey-West automatic) using Bartlett kernel		
		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		0.167005
Asymptotic critical values:	1% level	0.739000
	5% level	0.463000
	10% level	0.347000
Null Hypothesis: BIRTH is stationary		
Exogenous: Constant, Linear Trend		
Bandwidth: 6 (Newey-West automatic) using Bartlett kernel		
		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		0.118737
Asymptotic critical values:	1% level	0.216000
	5% level	0.146000
	10% level	0.119000

KPSS stationarity test findings reported in Table 2 and 3 reveal that integration order of YOUNG and BIRTH variables are not more than one and hence we are eligible to employ ARDL bounds test for co-integration analysis, which requires series to be integrated at any order less than two (i.e., can be $I(0)$ or $I(1)$).

Next we choose the optimal lag lengths of the model via Akaike information criterion (AIC). As can be seen from Figure 1, the model with the lowest AIC value is ARDL(2,0) model and thus ARDL(2,0) model is selected as the optimal model for our analysis.

Figure 1: Optimal Leg Selection



As F-statistic value of 10.41283 in Table 4 depicting co-integration test results of ARDL(2,0) model exceeds the upper bound critical values at all significance levels, we deduce that YOUNG and BIRTH variables are co-integrated and therefore they have a co-movement in the long-run in Türkiye.

Table 4: ARDL Bounds Test for Co-integration

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	10.41283	10%	4.04	4.78
k	1	5%	4.94	5.73
		2.5%	5.77	6.68
		1%	6.84	7.84

In Table 5 we display long-run coefficient estimation and the result indicates that crude birth rate positively and significantly affects young age dependency ratio. In other words, an increase in crude birth rate by %1 causes to a rise in young age dependency ratio by %0.847 in the long-run in Türkiye.

Table 5: Long-run Coefficient Estimations for ARDL (2,0) Model

Dependent Variable: YOUNG			
Variable	Coefficient	t-statistic	Prob.
BIRTH	0.847577	39.84932	0.0000

Table 6 exhibits that short-run coefficient of YOUNG variable is positive and statistically significant. Also the EC coefficient estimation is, as anticipated, negative and statistically significant. By the way, diagnostic test findings point out that ARDL (2,0) model do not contain any problem in the context of autocorrelation, heteroscedasticity, non-normality, and misspecified model at %1 significance level.

Table 6: Error Correction Estimation Results for ARDL (2,0) Model

Dependent Variable: YOUNG			
	Coefficient	t-Statistic	Prob.
$\Delta YOUNG_{t-1}$	0.640431	10.12168	0.0000

CONSTANT	0.058867	4.473794	0.0000
EC_{t-1}	-0.050004	-4.607186	0.0000

$$EC = YOUNG - (0.8476 * BIRTH)$$

Diagnostic Test Results	
Tests	Test Value (Prob.)
Breusch-Godfrey Serial Correlation LM Test	0.232369 (0.7935)
Harvey Heteroskedasticity Test	4.140159 (0.0105)
Jarque-Bera Test	3.404028 (0.182316)
Ramsey RESET Test	0.299610 (0.5865)

5. CONCLUSION

In this study we try to find out how crude birth rate and young age dependency ratio are associated in the long-run for the case of Türkiye by utilizing a time series data for the years of 1960-2018 and by conducting all analyses via ARDL approach. Our hypothesis asserts that crude birth rate augments young age dependency ratio in Türkiye. Based on KPSS stationarity test findings, we saw that variables of crude birth rate and young age dependency ratio do not have integration order more than one, which is compatible with the condition of ARDL bounds test. Twenty distinct ARDL models were assessed via AIC criterion to pick up optimal lag length for ARDL model and ARDL(2,0) model was selected as the optimal model. Co-integration test results disclose that crude birth rate and young age dependency ratio are co-integrated and hence they move together in the long term in Türkiye. Moreover according to the long-run coefficient estimations, we identified a positive and statistically significant relationship between crude birth rate and young age dependency ratio. More specifically a jump in crude birth rate by %1 induces to an increase in young age dependency ratio by %0.847 in the long-run in Türkiye. Meanwhile, given the diagnostic test results, our estimated ARDL (2,0) model do not have any problem in terms of autocorrelation, heteroscedasticity, non-normality, and misspecified model at %1 significance level.

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Ege Üniversitesi Öğrencilerinin Bal Tüketme Eğilimini Etkileyen Faktörlerin Ortaya Konması Üzerine Bir Araştırma

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Özet: Bu araştırma, İzmir ilinde yer alan Ege Üniversitesinde eğitim gören lisans öğrencilerinin sosyo-ekonomik ve demografik özelliklerini belirlemek, bal ve diğer arı ürünleri tüketim durumu, tüketim tercihleri ile bal tüketme eğilimini etkileyen faktörleri ortaya koymak amacıyla gerçekleştirilmiştir. Araştırmada üniversiteye kayıtlı toplam öğrenci sayısı ana kitle olarak kabul edilmiş ve oransal örnekleme ile 380 öğrenci kapsama alınmış ve yüz yüze anket yapılmıştır. Öğrencilerin bal ve diğer arı ürünleri tüketim tercihleri, bu tercihleri etkileyen faktörler, tüketim miktarları, bal ve diğer arı ürünlerini satın alırken dikkat ettikleri kriterler incelenmiştir. Araştırmaya katılan Ege Üniversitesi öğrencilerinin yaş ortalaması 22,40'dır. Öğrencilerin %75,79'unun bal tüketirken, %24,21'inin bal tüketmediği belirlenmiştir. Öğrencilerin aylık ortalama bal tüketim miktarı ise 297 gram olarak bulunmuştur. Sıralı lojistik regresyon modelinde balın tüketilip tüketilmeme durumu bağımsız değişken olarak alınmıştır. Öğrencilerin bal tüketip tüketmeme durumuna etki eden faktörleri belirlemek için kullanılan bu logit modelde cinsiyet durumu, hane halkı geliri, hanede gıda alışverişini yapan bireyler, ambalaj tercihi ve apiterapi kavramından haberdar olmanın etkili olduğu bulunmuştur. Araştırmada üniversite öğrencilerinin bal tüketip tüketmeme durumuna ilişkin nedenler ortaya konmuştur. Öğrencilerin balı en fazla kahvaltılık olarak ve tadının güzel olmasından dolayı tükettikleri belirlenmiştir. Öğrencilerin balı tüketmeme nedenleri ise alışkanlıklarının olmaması ve bal fiyatını yüksek bulmaları olarak görülmüştür. Öğrencilerin bal ve diğer arı ürünlerinin yararları hakkında daha fazla bilgilendirilmeleri gerekmektedir.

Anahtar Kelimeler: Bal, Arı Ürünleri, Arıcılık, Tüketim Tercihleri, logit model

A Research on the Factors Affecting the Honey Consumption Tendency of Ege University Students

Abstract: The aim of this study is to determine the socio-economic and demographic characteristics of undergraduate students at different faculties of Ege University in the province of İzmir and to reveal the factors affecting the tendency to consume honey. In the research, the total number of students enrolled in the university was accepted as the main population and 380 students were included in the proportional sampling and face-to-face survey was conducted. Students' consumption preferences of honey and other bee products, factors affecting these preferences, consumption quantities, the criteria they take into consideration when buying honey and other bee products are investigated. The average age of Ege University students participating in the research is 22.40. It was determined that 75.79% of the students participating in the survey consumed honey, while 24.21% did not consume honey. The average monthly honey consumption of the students was found to be 297 grams. In the ordinal logistic regression model, whether honey is consumed or not was taken as an independent variable. In this logit model used to determine the factors affecting the honey consumption of students, it was found that gender status, household income, individuals shopping for food in the household, packaging preference and being aware of the concept of apitherapy were effective. In the research, the reasons for whether university students consume honey or not were revealed. It was determined that the students consumed honey mostly for breakfast and because of its good taste. The reasons why the students did not consume honey were seen as the lack of habits and the high price of honey. University students need to be more informed about the benefits of honey and other bee products

Keywords: honey, bee products, beekeeping, consumption preferences, logit model

1. GİRİŞ

Günümüzde arıcılık sektörü Dünyada olduğu gibi Türkiye'de de polinasyonu sağlayan ve katma değerli çeşitli arı ürünleri ile arıcılara ana gelir ya da yan gelir kaynağı sağlayan gelişmekte olan bir sektör durumundadır.

Türkiye, 2021 yılında 89361 işletmede 96.344 kg bal üretimi, 8.733 394 adet kovan varlığı ile Dünya arıcılığında Çin'den sonra ikinci sırada yer almaktadır (TÜİK, 2022; FAO, 2021). Toplam bal üretiminin 35-40 bin tonu çam balından sağlanmaktadır. Ancak kovan başına elde edilen verim düşüktür. 2019 yılı itibarıyla Türkiye'de kovan başına bal verimi 13-14 kg düzeyinde olup, dünya ortalamasının (20,06 kg) altındadır. 2020 yılında ise verim bir önceki yıla göre %5.4 oranında düşmüş ve 12.7 kg olmuştur (Burucu, 2022). Aynı yıl Dünyada kovan başına verimde 18,8 kilograma gerilemiştir. Türkiye'de kovan başına verim 2021 yılında 11 kg dolayında gerçekleşmiştir

(TÜİK, 2022) . Günümüzde pandemiyle birlikte sağlıklı arı ürünlerine olan tüketici talebi yükselmektedir. Türkiye’de de bazı bölgelerde arıcılar bal dışında balmumu, propolis, arı sütü, polen, perga (arı ekmeği), arı zehiri ve apilarnil üretmektedirler. Bu ürünlerin “arı ürünleri ile tedavi” olarak tanımlanan “Apiterapi”ye kadar geniş bir kullanım alanı bulunmaktadır.

Türkiye’de çok çeşitli monofloral ve polifloral ballar üretilmesine karşın gerek bal ve gerekse diğer arı ürünlerinin tüketiminde; diğer ülkelerle karşılaştırıldığında istenen düzeye gelinebilmemiştir. En sık satın alınan arı ürünü baldır. TÜİK’den elde edilen verilere göre yapılan hesaplamada 2019 yılı itibarıyla kişi başına bal tüketimi 1,25 kg ve kişi başına bal üretimi ise 1,31 kg olarak bulunmuştur. Üretimin tüketimi karşılama oranı %94,96’dır (Şengül, 2020). Türkiye’nin yıllık ortalama bal tüketimi Dünya ortalaması ve AB ortalamasından daha yüksektir (Onuç, 2020). Ancak bal dışındaki arı ürünlerinin tüketim sıklığı oldukça düşüktür (Saner vd., 2011; Niyaz & Demirbaş, 2017; Baki vd., 2017; Marangoz & Tayçu Dolu, 2019; Onuç, 2020; Karahan & Özbakır, 2020).

Arı ürünleri tüketiminin artması tüketicilerin farkındalığının sağlanmasıyla ilgilidir. Dolayısıyla bu alanda yapılacak çalışmalar arıcılık sektörünün geleceği ve sürdürülebilirliği açısından son derece önemlidir. Ancak talebi artan arı ürünleri için üretim ve tüketim istatistiklerine ilişkin bir veri tabanı olmayışı, böylesine önemli bir sektör için ciddi bir eksiklik oluşturmaktadır (Onuç vd., 2019). Türkiye’de arı ürünleri tüketimine, tüketici davranışlarına yönelik daha fazla sayıda araştırma yapılması gereklidir.

2. MATERYAL VE YÖNTEM

Araştırmamızın, birincil verilerini Ege Üniversitesi lisans öğrencileri ile 2019 yılı nisan-haziran ayları arasında yüz yüze yapılan anketlerden elde edilen veriler oluşturmıştır. Araştırmada ikincil veriler ise konu ile ilgili olarak yurtiçi ve yurt dışında daha önce hazırlanmış araştırma, makale, bildiri, inceleme ve tezlerden, ayrıca konu ile ilgili kurumların yayınladığı istatistiki verilerden yararlanılmıştır. Bu araştırmanın ana kitlesini Ege Üniversitesi lisans öğrencileri (Fakülte-Yüksekokul-Konservatuvar) oluşturmıştır. 2019 yılı itibarıyla Ege Üniversitesi’nden alınan verilere göre toplam lisans öğrenci sayısı (Fakülte-Yüksekokul ve Konservatuvar dâhil) 34914’dür. Araştırmada olası en büyük örnek hacmine ulaşılmak istenmiş ve bu amaçla p: 0,50 ve (1- p): 0,50 alınmıştır. Oransal örnek hacmi %95 güven aralığı, %5 hata payı dikkate alınarak hesaplanmıştır. Araştırmaya dâhil edilen öğrenci sayısı 380 olarak hesaplanmıştır. Oransal örnek hacmi yöntemine göre, N büyüklüğündeki sonlu bir ana kitle için belli bir özelliği taşıyanların bilinen veya tahmin edilen oranına (p) göre örnek hacmi formülü aşağıda belirtilmiştir (Newbold, 1995).

$$n = \frac{Np(1-p)}{(N-1)\sigma_{\hat{p}}^2 + p(1-p)}$$

Formülde;

n = Örnek hacmi.

N = Toplam öğrenci sayısı (34914)

p = Örneğe girecek üreticilerin oranı (Maksimum örnek hacmine ulaşmak için p = 0.50 alınmıştır).

$\sigma_{\hat{p}}^2$ = oranın varyansdır.

Üniversitede lisans öğrenimine devam eden öğrenci sayısının en yüksek olduğu 12 fakülte araştırma kapsamına alınmıştır. 12 fakültenin toplam öğrenci sayısı (27778), toplam lisans öğrenci sayısının (34914) %79,56’sını oluşturmıştır. Araştırma yapılan bu 12 fakülte-yüksekokul-konservatuardan örneğe giren öğrenci sayısı toplam üniversite öğrenci sayısı dikkate alınarak hesaplanmıştır.

Araştırmada verilerin analizinde, temel tanımlayıcı istatistik yöntemlerin yanı sıra, üniversite lisans öğrencilerinin arı ürünlerine ilişkin algıları ile farkındalıklarını ölçmek için likert ölçekli sorulara yer verilmiştir. Likert ölçekli sorulara verilen yanıtların ortalaması alınarak, tüketicilerin algılama düzeyleri hakkında bilgi sahibi olunmuştur. Ege Üniversitesi lisans öğrencilerinin arı ürünleri hakkındaki algıları ve tüketim tercihleri, gıda-ziraat,(52), sağlık bilimleri(81) ve sağlık dışı (diğer)(247) fakültelerin öğrencileri olarak 3 grup altında değerlendirilmiştir. Öğrencilerin hane halkı aylık gelir grupları ise. 1. Grup (0-2500 TL), 2. Grup (2501-3500 TL), 3. Grup (3501-5000 TL), 4. Grup (5001-7000 TL) gelir aralığında iken, 5. grubun gelir düzeyi ise 7001 TL üzeri olarak belirlenmiştir (Tablo 1).

Tablo 1: Hane Halkı Aylık Gelir Grupları

Hane Halkı Aylık Gelir Grupları	Gelir Düzeyleri (TL/Ay)	Sayı	%
1. Grup	0-2500	78	20,53
2. Grup	2501-3500	71	18,68
3. Grup	3501-5000	99	26,05
4. Grup	5001-7000	66	17,37
5. Grup	7001 ve üzeri	66	17,37
Toplam		380	100,00

Çalışmada üniversite öğrencilerinin bal ve diğer arı ürünlerini; tüketip-tüketmeme durumları, tükettikleri bal çeşitleri, monofloral ve polifloral bal ile diğer arı ürünleri tüketim miktarları, tüketim sıklıkları, tüketme nedenleri, marka tercihleri, ambalaj tipi tercihleri, ambalaj ağırlıkları, satın alma sıklığı, ailede arı ürünleri satın alan bireyler, balın orijinini bilme durumu, satın alma yeri tercihleri, arı ürünlerinin yararları hakkındaki bilgi durumları, arı ürünleri ile ilgili herhangi bir seminere/eğitime katılıp- katılmama durumu ortaya konulmuştur.

Araştırmada öğrencilerin sosyo-ekonomik özellikleri ortaya konulmuş ve tanımlayıcı istatistiklere yer verilmiştir. Değişkenlerin normal dağılışı gösterip göstermediği saptanmış ve normal dağılışı göstermeyen sürekli değişkenler için gruplar arasında fark olup olmadığının belirlenmesinde, iki değişken için Mann Whitney U testi, üç ve üzeri değişkenlerde ise Kruskal-Wallis testi uygulanmıştır.

3. ARAŞTIRMA BULGULARI

3.1. Üniversite Öğrencilerinin Sosyo-Ekonomik Özellikleri

EÜ Lisans öğrencilerinin %52,90'ının kız, %47,10'unun erkek olduğu ve öğrencilerin ortalama yaşının 22,40 olduğu belirlenmiştir. Öğrencilerin ailesinde ortalama 5 kişi bulunurken, kardeş sayısının yaklaşık 2 kişi olduğu belirlenmiştir. Öğrenci ailesinin ortalama hane halkı aylık geliri 4665,50 TL olarak bulunmuştur. Kız öğrencilerin %26,37'sinin ailesinin, erkek öğrencilerinde %25,70'inin ailesinin hane halkı aylık gelir grupları içerisinde 3. gelir grubunda yer aldığı belirlenmiştir. Genel ortalamaya göre öğrencilerin %26,05'inin hane halkı gelirinin 3. gelir grubunda yer aldığı hesaplanmıştır. Kız öğrencilerde bunu %23,98 ile 1. gelir grubu, erkek öğrencilerde ise %19,55 ile 4. gelir grubu izlemektedir (Tablo 2).

Tablo 2: Üniversite Öğrencilerinin Hane Halkı Aylık Gelir Grupları (TL)

Hane Halkı Aylık Gelir Grupları (TL)	Kız		Erkek		Genel	
	Sayı	%	Sayı	%	Sayı	%
1. Grup (0-2500)	47	23,38	31	17,32	78	20,53
2. Grup (2501-3500)	38	18,91	33	18,44	71	18,68
3. Grup (3501-5000)	53	26,37	46	25,70	99	26,05
4. Grup (5001-7000)	31	15,42	35	19,55	66	17,37
5. Grup (7001 ve üzeri)	32	15,92	34	18,99	66	17,37
Toplam	201	100,00	179	100,00	380	100,00

Öğrencilerin kendilerinin aylık gelir / harçlık grupları incelendiğinde kız öğrencilerin %42,29'unun, erkek öğrencilerin ise %34,08'inin 501-1000 TL arasındaki grupta yer aldıkları belirlenmiştir, Genel olarak öğrencilerin en fazla %38,42 ile 501-1000 TL arasındaki grupta yer aldığı belirlenmiştir, Bunu %20,26 ile 500 TL'nin altında harçlık alan grup izlemektedir (Tablo 3).

Tablo 3: Üniversite Öğrencilerinin Aylık Gelir / Harçlık Grupları (TL)

Öğrencilerin Gelir / Harçlık Grupları (TL)	Kız		Erkek		Genel	
	Sayı	%	Sayı	%	Sayı	%
500 ve altı	46	22,89	31	17,32	77	20,26
501-1000	85	42,29	61	34,08	146	38,42
1001-1500	40	19,90	48	26,82	88	23,16
1501-3000	23	11,44	33	18,44	56	14,74
3001 ve üzeri	7	3,48	6	3,35	13	3,42
Toplam	201	100,00	179	100,00	380	100,00

Öğrencilere eğitimleri süresince nerede kaldıkları sorusu yöneltildiğinde, genel ortalamaya göre öğrencilerin %30,00'unun ailesi ile, %29,21'inin yurttan kaldıkları ve %27,37'sinin arkadaşları ile kaldıkları belirlenmiştir (Tablo 4). Tek başına evde kalanların oranı ise %11,05'dir.

Tablo 4: Üniversite Öğrencilerinin Kaldıkları Yerler

Kalınan Yerler	Kız	%	Erkek	%	Genel	%
Ailesi ile	64	31,84	50	27,93	114	30,00
Yurtta	77	38,31	34	18,99	111	29,21
Arkadaşları ile	40	19,90	64	35,75	104	27,37
Tek başına	17	8,46	25	13,97	42	11,05
Bir akrabasının yanında	3	1,49	6	3,35	9	2,37
Toplam	201	100,00	179	100,00	380	100,00

3.2. Üniversite Öğrencilerinin Bal ve Diğer Arı Ürünlerini Tüketme Durumuna İlişkin Bulgular

Aylık gıda harcamaları içerisinde genel olarak öğrencilerin %64,74'ü aylık gıda harcamaları içerisinde bal ve diğer arı ürünlerine 20 TL ve altında pay ayırırken, %5,00'ünün ise 81 TL ve üzerinde pay ayırdıkları belirlenmiştir (Tablo 5).

Tablo 5: Üniversite Öğrencilerinin Aylık Gıda Harcamalarında Bal ve Diğer Arı Ürünlerine Ayırdıkları Oran

Bal ve Diğer Arı Ürünlerinin Payı	Kız		Erkek		Genel	
	Sayı	%	Sayı	%	Sayı	%
20 TL ve altı	125	62,19	121	67,60	246	64,74
21-40 TL	33	16,42	31	17,32	64	16,84
41-60 TL	20	9,95	12	6,70	32	8,42
61-80 TL	13	6,47	6	3,35	19	5,00
81 TL ve üzeri	10	4,98	9	5,03	19	5,00
Toplam	201	100,00	179	100,00	380	100,00

Araştırmaya katılan öğrencilerin %75,79'u bal tüketirken, %24,21'inin bal tüketmediği belirlenmiştir. Öğrencilerin cinsiyetine göre bal tüketme durumları incelendiğinde kız öğrencilerin %82,59'u bal tüketirken, erkek öğrencilerin %68,16'sının bal tükettiği belirlenmiştir (Tablo 6). Ankete katılan öğrencilerin cinsiyete göre bal tüketim durumu istatistiksel olarak anlamlı bulunmuştur. Kızların, erkeklere kıyasla daha fazla miktar bal tükettiği belirlenmiştir. Saral ve Yılmaz Yavuz(2020) tarafından yapılan bir çalışmada arı ürünlerinden en fazla balın (%30.0) tanındığı, sağlık için öneminden dolayı tüketmeyi tercih ettikleri(%48.4), aile/arkadaş/komşu/yakınların önerisi ile tükettikleri (%61.1) ve arı ürünlerini satın alırken arı yetiştiricilerinden/arıcılardan almayı tercih ettikleri (%39.8) belirlenmiştir.

Tablo 6: Ege Üniversite Öğrencilerinin Bal Tüketme Durumu

Cinsiyet	Bal Tüketme Durumu				Khi-Kare	
	Tüketiyor	%	Tüketmiyor	%	Değeri	P
Kız	166	82,59	35	17,41	9,944	0,002*
Erkek	122	68,16	57	31,84		
Toplam	288	75,79	92	24,21		

*P<0,01 anlamlıdır.

Ankete katılan lisans öğrencilerinin %16,32'sinin polen, %13,16'sının propolis, %10,79'unun arı sütü tükettikleri belirlenmiştir (Tablo 7). Bal tüketen öğrencilerin tercih ettikleri bal çeşitleri arasında ilk sırayı çiçek balı (%32,73) almaktadır. Kız öğrencilerin %35,16'sı ve erkek öğrencilerin ise %29,46'sı çiçek balını tercih etmektedir. Bunu genel olarak %25,45 ile petek balı, %20,50 ile çam balı, %14,88 ile organik bal, %5,79 ile karakovan balı ve %0,66 ile krem bal izlemektedir. Kız öğrencilerin krem balı tercih etmedikleri belirlenmiştir (Tablo 8).

Tablo 7: Üniversite Öğrencilerinin Diğer Arı Ürünlerini Tüketme Durumu

Diğer Arı Ürünleri	Tüketiyor		Tüketmiyor	
	Sayı	%	Sayı	%
Polen	62	16,32	318	83,68
Propolis	50	13,16	330	86,84
Arı Sütü	41	10,79	339	89,21
Arı Zehiri (krem olarak)	16	4,21	364	95,79
Arı Ekmeği	11	2,89	369	97,11

Tablo 8: Öğrencilerin Tükettikleri Bal Çeşitleri

Bal Çeşitleri	Kız		Erkek		Genel	
	Sayı	%	Sayı	%	Sayı	%
Çiçek Balı	122	35,16	76	29,46	198	32,73
Petek Bal	87	25,07	67	25,97	154	25,45
Çam Balı	73	21,04	51	19,77	124	20,50
Organik Bal	51	14,70	39	15,12	90	14,88
Karakovan Balı	14	4,03	21	8,14	35	5,79
Krem Bal**	-		4	1,55	4	0,66
Toplam*	347	100,00	258	100,00	605	100,00

*Birden çok yanıt alınmıştır.

Öğrencilerin balı en fazla kahvaltılık (4,24) olarak tükettikleri belirlenmiştir. Öğrencilerin bal tüketme nedeni olarak en az önemli gördükleri nedenin balın kilo vermeye yardımcı (2,58) olduğunu düşünmeleridir. Bu faktörler ile cinsiyet değişkeni arasında anlamlı bir farklılık bulunamamıştır (Tablo 9). Akdemir ve Dağdemir (2021) tarafından yapılan çalışmada tüketicilerin %33.00'ünün sadece kahvaltılık amacıyla bal tükettiği, %62.50'si balı sağlık için ve %4.50'si de çocukların zihinsel ve bedensel gelişiminde kullanılışı belirlenmiştir.. Tüketiciler öncelikli olarak balı bağışıklık sistemini güçlendirici ve direnç artırıcı olarak tercih etmektedirler. Bal, Erzurum ilinde kış aylarında havanın soğuk olması nedeniyle, hastalıklara karşı vücut savunmasını artırdığından dolayı tercih edilmektedir.

Tablo 9: Üniversite Öğrencilerinin Bal Tüketme Nedenleri

Bal Tüketme Nedenleri	1	2	3	4	5	Kız Öğrenciler	Erkek Öğrenciler	Ölçek Ortalaması	Standart Sapması
Kahvaltılık	23	6	6	98	155	4,31	4,14	4,24	1,145
Tadı güzel	24	9	21	124	110	3,95	4,07	4,00	1,155
Sağlık amaçlı	42	15	30	116	85	3,72	3,55	3,65	1,343
Ailesinin alması	44	30	34	104	76	3,42	3,57	3,48	1,382
Enerjiyi arttırması	53	22	40	105	68	3,30	3,52	3,39	1,405
Antioksidan özelliği	44	26	60	95	63	3,40	3,34	3,37	1,332
Tatlandırıcı olarak	57	31	33	104	63	3,30	3,30	3,30	1,434
Cilde iyi gelmesi	58	26	53	90	61	3,47	2,93	3,24	1,415
Kanser önleyici	48	33	73	74	60	3,27	3,16	3,23	1,352
Mide rahatsızlığını önleyici	56	35	73	68	56	3,16	3,06	3,11	1,381
Alışkanlık	61	49	48	74	56	2,99	3,13	3,05	1,434
Kozmetik amaçlı	93	39	39	61	56	3,10	2,44	2,82	1,547
Kilo vermeye yardımcı	94	59	48	49	38	2,56	2,60	2,58	1,427

(1=Kesinlikle Katılmıyorum, 2=Katılmıyorum, 3=Kararsızım, 4=Katılıyorum, 5=Kesinlikle Katılıyorum)

Öğrencilere neden bal tüketmedikleri hakkında sorular yönelttiğinde balı alışkanlık kazanmadıklarından dolayı (3,99) tüketmedikleri belirlenmiştir. Bunu ikinci sırada 3,64 ile bal fiyatını yüksek bulmaları izlemiştir. Ayrıca bu nedenler arasında cinsiyete göre de farklılık bulunmamıştır (Tablo 10).

Tablo 10: Üniversite Öğrencilerinin Bal Tüketmeme Nedenleri

Bal Tüketmeme Nedenleri	1	2	3	4	5	Kız Öğrenciler	Erkek Öğrenciler	Ölçek Ortalaması	Standart Sapması
Alışkanlığı yok	8	5	8	30	41	4,06	3,95	3,99	1,245
Pahalı buluyor	14	3	15	30	30	3,34	3,82	3,64	1,371
Kaliteli ürün bulamama	19	5	14	31	23	3,49	3,30	3,37	1,450
Firmalara güveninin olmaması	19	7	12	29	25	3,49	3,30	3,37	1,480
Tadı hoşuna gitmiyor	24	12	9	24	23	3,40	2,93	3,11	1,565
Kokusu rahatsız ediyor	37	16	8	18	13	2,66	2,40	2,50	1,523
Midesine rahatsızlık veriyor	44	15	6	12	15	2,69	2,12	2,34	1,564

Uzmanlar tarafından önerilmiyor	44	15	17	8	8	2,06	2,19	2,14	1,339
Alerjisi var	59	6	5	10	13	2,29	1,91	2,05	1,549

(1=Kesinlikle Katılmıyorum, 2=Katılmıyorum, 3=Kararsızım, 4=Katılıyorum, 5=Kesinlikle Katılıyorum)

Öğrencilerin bal ve diğer arı ürünlerini tüketme sıklıkları Tablo 11’de verilmiştir. Öğrencilerin %2,11’i çam balını her gün tüketirken %57,11’i hiç tüketmediklerini belirtmişlerdir. Çiçek balını her gün tüketenlerin oranı %5,53 iken, hiç tüketmeyenlerin oranı %40,00’dir. Niyaz & Demirbaş (2017), tarafından yapılan çalışmada da Çanakkale ilindeki tüketicilerin %82,90’nının polen, %89,10’unun propolis, %95,40’ının arı sütü tükettikleri belirlenmiştir.

Tablo 11: Üniversite Öğrencilerinin Bal ve Diğer Arı Ürünlerini Tüketme Sıklığı (%)

Ürünler	Hiç Tüketmem		Her Gün		Haftada 1-2		15 Günde Bir		Ayda Birkaç Kez		Ayda Bir		6 Ayda Bir		Yılda Bir		Sadece Hafta Sonu	
	Sayı	%	Sayı	%	Sayı	%	Sayı	%	Sayı	%	Sayı	%	Sayı	%	Sayı	%	Sayı	%
Çam Balı	217	57,11	8	2,11	48	12,63	17	4,47	28	7,37	16	4,21	24	6,32	18	4,74	4	1,05
Çiçek Balı	152	40,00	21	5,53	81	21,32	26	6,84	39	10,26	27	7,11	16	4,21	13	3,42	5	1,32
Petek Balı	176	46,32	7	1,84	47	12,37	21	5,53	43	11,32	24	6,32	35	9,21	24	6,32	3	0,79
Organik Bal	243	63,95	13	3,42	39	10,26	7	1,84	28	7,37	11	2,89	15	3,95	19	5,00	5	1,32
Krem Balı	354	93,16	-	-	2	0,53	1	0,26	5	1,32	4	1,05	7	1,84	6	1,58	1	0,26
Polen	318	83,68	-	-	10	2,63	5	1,32	7	1,84	6	1,58	13	3,42	21	5,53	-	-
Propolis	330	86,84	4	1,05	5	1,32	3	0,79	7	1,84	7	1,84	7	1,84	17	4,47	-	-
Arı Sütü	339	89,21	3	0,79	4	1,05	2	0,53	4	1,05	2	0,53	12	3,16	14	3,68	-	-
Arı Zehiri	364	95,79	1	0,26	2	0,53	1	0,26	1	0,26	1	0,26	3	0,79	7	1,84	-	-
Arı Ekmeği	369	97,11	-	-	1	0,26	-	-	1	0,26	1	0,26	3	0,79	5	1,32	-	-

Öğrencilerin ailelerinin aylık ortalama bal tüketim miktarı 830 gram, kendilerinin aylık ortalama bal tüketim miktarı ise 297 gramdır. Kız öğrencilerin aylık ortalama bal tüketim miktarı 256 gram, erkek öğrencilerin ise 344 gramdır (Tablo 12). Erkek öğrencilerin aylık ortalama bal tüketim miktarları kız öğrencilerin bal tüketiminden daha yüksektir. Öğrencilerin aylık ortalama bal tüketim miktarları fakülte gruplarına göre incelendiğinde en fazla 370 gram bal ile Gıda-Ziraat grubu gelmektedir. Bu grubu sağlık fakülte grubu (325 gram) ve diğer fakülte grubu (273 gram) izlemektedir. Öğrencilerin hane halkı aylık gelir gruplarına göre bal tüketim miktarlarına bakıldığında ise en fazla 392 gram ile 4. grup gelmektedir (Tablo 12). Öğrencilerin cinsiyetlerine göre aylık ortalama bal tüketim miktarlarını karşılaştırırken Mann Whitney U testi uygulanmıştır. Test sonucunda öğrencilerin cinsiyetlerine göre aylık ortalama bal tüketim miktarları arasında istatistiki olarak anlamlı bir fark bulunmamıştır. Öğrencilerin aylık bal tüketimi incelenirken fakülte grupları ve hane halkı aylık gelir grupları için Kruskal-Wallis testi uygulanmıştır. Test sonucunda gerek fakülte grupları gerekse hane halkı aylık gelir gruplarına göre bal tüketim miktarları açısından istatistiki açıdan bir fark bulunmamıştır.

Tablo 12: Aylık Ortalama Bal Tüketim Miktarları

Cinsiyet	Aylık Ortalama Bal Tüketim Miktarı (g)	Fakülte Grupları	Aylık Ortalama Bal Tüketim Miktarı (g)
Kız	256	Gıda-Ziraat	370
Erkek	344	Sağlık	325
Genel		Diğer	273
			297
Hane Halkı Aylık Gelir Grupları (TL)	Gelir gruplarına göre aylık ortalama bal tüketim miktarı		

1, Grup (0-2500)	279
2, Grup (2501-3500)	230
3, Grup (3501-5000)	304
4, Grup (5001-7000)	392
5, Grup (7001 ve üzeri)	286

Genel olarak öğrencilerin %44,65'i diğer arı ürünlerini tüketme nedenleri olarak besin özelliğini, %30,21'i hastalıkların tedavisinde, %14,17'si tatlandırıcı olması nedeniyle, %10,96'sı alışkanlıklarından dolayı tükettiklerini belirtmişlerdir. Kayseri'de üniversite öğrencilerinin bal tüketimine yönelik yapılan bir diğer çalışmada da üniversite öğrencileri arasında balın tercih edilmesinin en önemli nedeni %54,8 ile besleyici özelliğinin olması olarak gösterilmiştir (Soylu ve Silici, 2018).

3.3. Üniversite Öğrencilerinin Bal ve Diğer Arı Ürünlerini Satın Almalarına İlişkin Bulgular

Öğrencilerin balı daha çok büyük süper marketlerden satın aldıkları belirlenmiştir. Online sipariş ve televizyon reklamından sipariş sayısı yok denecek kadar azdır. Uşak'ta yapılan bir çalışmada da günümüzde sıkça kullanılan internet alışverişine rağmen katılımcıların internetten arı ürünleri temin etmediği belirlenmiştir (Şahinler vd., 2021). Öğrencilerin %30,26'sı balı tadına bakarak satın aldıklarını, %69,74'ü ise balı tadına bakmadan satın aldıklarını belirtmişlerdir. Öğrencilerin bal alırken dikkat ettikleri kriterler incelendiğinde öğrencilerin %25,79'unun balın son kullanma tarihine dikkat ettikleri belirlenmiştir. En az dikkat edilen kriter ise %1,58 ile balın ambalajıdır.

Arı ürünü satın alırken; ürünün fiyatı, tadı, kokusu, görünümü, katkı maddeleri, alındığı yer ve ambalajı tüketiciler açısından çok önemlidir (Merdan & Durmuş, 2018; Şahinler vd., 2021). Ayrıca İzmir ilinde gerçekleşen bir çalışmada, tüketicilerin arı ürünleri tüketim tercihlerini ürünün güvenilirliği, lezzeti, son kullanma tarihi, orijin ve çeşidinin etkilediği belirlenmiştir (Baki vd., 2017).

Öğrencilerin bal ve diğer arı ürünlerini satın alma sıklıkları incelendiğinde öğrencilerin %12,63'ü çam balını ayda bir satın alırken %66,05'i hiç satın almadıklarını belirtmişlerdir. Öğrencilerin %19,47'si çiçek balını ayda bir aldıklarını, %47,63'ü ise hiç almadıklarını belirtmişlerdir. Petek balı ise öğrencilerin %10,53'ü ayda bir aldıklarını, %60,79'u ise hiç almadıklarını belirtmişlerdir. Öğrencilerin %74,21'i organik balı, %94,74'ü krem balı, %92,63'ü poleni, %91,68'i propolisi, %91,54'ü arı sütünü, %96,58'i arı zehirini ve %97,11'i arı ekmeğini hiç almadıklarını belirtmişlerdir.

3.4. Üniversite Öğrencilerinin Bal ve Diğer Arı Ürünleri Hakkında Bilgi Düzeyi ve Yeniliklerden Haberdar Olma Durumuna İlişkin Bulgular

Görüşülen lisans öğrencilerinin %62,63'ü bal ve diğer arı ürünlerinin yararları hakkında bilgi sahibi olduklarını, %37,37'si ise bilgi sahibi olmadıklarını belirtmişlerdir.

Ankete katılan öğrencilerin %78,68'i apiterapi (arı ürünleri ile tedavi) kavramını hiç duymadıklarını, %12,63'ü bu kavramı duyduklarını, ancak ne anlama geldiğini bilmediklerini, %8,68'i ise apiterapi kavramını duyduğunu ve ne anlama geldiğini bildiklerini belirtmişlerdir. Ankete katılan öğrencilerin cinsiyeti ile apiterapi kavramını duyup-duymama durumu arasında anlamlı bir farklılık bulunmuştur. Apiterapi kavramını ağırlıklı olarak erkek öğrencilerin duymadığı belirlenmiştir. (Tablo 17). Öğrencilerin %34,21'inin kovan yatakları, %28,68'inin arı sesi ve arı frekansını bildikleri, %27,63'ünün arı dansını, %12,37'sinin kovan havasını, %11,58'i de apiterizmden haberdar oldukları belirlenmiştir.

Öğrencilerin apiterapi kavramından haberdar olma durumu ile fakülte grupları arasında anlamlı bir ilişki bulunmuştur. Fakülte grupları arasında apiterapi kavramını duyan ve ne anlama geldiğini bilen öğrencilerin en fazla (%23,08) olduğu grup 1, grup olan gıda-ziraat fakülte grubudur. Apiterapi kavramını duyan ve ne anlama geldiğini bilen öğrencilerin olduğu diğer iki grup ise %12,35 ile sağlık fakülte grubu ve %4,45 ile diğer fakülte grubudur. Gıda-ziraat fakülte grubundaki öğrencilerin apiterapi kavramından haberdar olmaları, aldıkları eğitim ve bu konudaki bilinç düzeyleriyle açıklanabilir.

3.5. Üniversite Öğrencilerinin Bal ve Diğer Arı Ürünlerini Satın Alma ve Tüketimine İlişkin Bulguları

Öğrencilerin, bal ve diğer arı ürünlerini satın almasına ilişkin ifadelerin değerlendirilmesinde Beşli Likert Ölçeği kullanılmıştır. En yüksek ölçek ortalamasıyla (3,81), "Satın alınan balın kalitesi fiyattan daha önemlidir" yanıtı ilk

sırada yer almaktadır. Bunu, “Arı ürünleri alındığında yerli ürünleri seçmek önemlidir” (3,79), “Bal ve diğer arı ürünlerini sağlıklı olup, bağışıklık sistemini güçlendirmektedir” (3,78) yanıtı izlemektedir.

Arıcılık faaliyetleri ile elde edilen arı sütü, propolis, balmumu ve polen gibi arı ürünleri, beslenme ve insan sağlığı üzerinde önemli etkileri olduğu belirlenmiştir (Mutlu vd., 2017). Obisesan & Olasoji (2017), yaptıkları çalışmada bal satın alırken tüketicilerin balın kalitesine ve fiyatına dikkat ettiğini belirlemişlerdir. Tüketicilerin kalite ve fiyat arasında seçim yapılabildiği sonucuna varılmıştır. Öğrencilerin arı ürünleri tüketimine ilişkin ifadelerle bakıldığında en yüksek ölçek ortalaması (3,88) ile “Arı ürünleri düzenli ve sağlıklı beslenmede önemli bir besindir” gelmektedir. Bunu, “Bal ve diğer arı ürününün yetkili kurumlarca onaylanmış yüksek kalitede olması gerekir” (3,79) ve “Arı ürünleri vitamin ve mineral bakımından zengindir” (3,50) ifadesi izlemektedir (Tablo 13). Açıkçası bu ifadeler öğrencilerin arı ürünleri konusundaki farkındalıklarının arttığının da bir göstergesi olarak kabul edilebilir.

Tablo 13: Üniversite Öğrencilerinin Bal ve Diğer Arı Ürünleri Tüketimine İlişkin Tutumları

İfadeler	Ölçek Ortalaması	Standart Sapma
Arı ürünleri düzenli ve sağlıklı beslenmede önemli bir besindir	3,88	1,089
Bal ve diğer arı ürünlerinin yetkili kurumlarca onaylanmış yüksek kalitede olması gerekir	3,79	1,176
Arı ürünleri vitamin ve mineral bakımından zengindir	3,53	1,179
Arı ürünleri mükemmel bir enerji kaynağıdır	3,52	1,175
Arı ürünleri (Bal, polen, propolis) bağışıklığı artırır	3,39	1,272
Arı ürünleri gıda takviyesi olarak kullanılabilir	3,31	1,212

(1=Kesinlikle Katılmıyorum, 2=Katılmıyorum, 3=Kararsızım, 4=Katılıyorum, 5=Kesinlikle Katılıyorum)

3.6. Öğrencilerin Bal Tüketme Eğilimini Etkileyen Faktörler Ortaya Konması

Bu çalışmada, öğrencilerin bal tüketme durumlarına etki eden değişkenleri belirleyebilmek için logit model kullanılmıştır.

Modelin bağımlı değişkeni olarak bal tüketen öğrenciler veya bal tüketmeyen öğrenciler teması temel alınmıştır. Eğer öğrenciler bal tüketiyorlarsa 1, tüketmiyorlarsa 0 kukla değişkeni kullanılmıştır. Logit modelin bağımsız değişkeni olarak; cinsiyet, daha önce yöresel bal tüketme, balı tadım yaparak satın alma, bal ve diğer arı ürünlerinde markanın bilinir olması, plastik ambalaj tercih etmesi, burs alma, hane halkı aylık geliri, apiterapi kavramını duyma, bal ve diğer arı ürünlerinin yararları hakkında bilgi sahibi olma, gıda alışverişini kendisinin yapması gibi değişkenler dikkate alınmıştır (Tablo 14).

Modelin değerlendirmesi aşamasında ilk olarak likelihood ratio test (Chi-square) değerlerinin sonucuna bakılmıştır. Modelde; p değeri= 0.000<0.01 olduğu için seçilmiş olan bağımsız değişkenler, bağımlı değişkeni açıklayabilmektedir. Modelin uyum iyiliğini test etmek amacıyla Hosmer-Lemeshow testi uygulanmıştır. Elde edilen sonuçlara göre (Ki-kare: 10,535, sd:8, $p(0,229)>0,05$) model uyum iyiliği testini geçmiştir.

Model tarafından doğru olarak tahmin edilen birimlerin oranını gösteren Doğru Sınıflama Oranı (DSO) %78 olarak bulunmuştur. Bağımlı değişken ile bağımsız değişkenler arasında (Cox & Snell R Square=0,220) %22 oranında bir ilişki bulunmaktadır.

Cinsiyetin bal tüketip tüketmeme durumuna etkisi olup olmadığı araştırmak istenmiş ve modele dahil edilmiştir. Cinsiyet değişkeninin Odds oranı: 0,340’dır. Sıfıra yakın Odds oranı değerinde katsayı negatif değer almaktadır. Yorum yapabilmek için Odds oranını 1/Odds oranı olarak düzeltmek gerekir (Tüzüntürk, 2007). Cinsiyet değişkeninin Odds oranı 0,340, düzeltilmiş Odds oranı $1/0,340=2,94$ ’tür ve şu şekilde yorumlanabilir. Kadın öğrencilerin erkek öğrencilere göre bal tüketme olasılığı 2,94 kat daha fazladır. Romanya’da yapılan çalışmada yıllık bal tüketimi üzerine eğitim düzeyi, aylık gelir, ikamet yerinin etkisi yok iken tek etki katılımcıların cinsiyeti ile kanıtlanmıştır (Pocol et al., 2018).

Daha önce yöresel bal tüketme değişkeninin bal tüketme durumuna etkisi araştırılmak istenmiş ve modele dahil edilmiştir. Daha önce bal tüketme Odds oranı 0,029’dur ve düzeltme yapmak gerekir. Bu değişken için düzeltilmiş Odds oranı $1/0,029=34,48$ ’dir. Daha önce yöresel bal tüketmeyi deneyen öğrencilerin hiç yöresel bal tüketmeyen öğrencilere göre 34,48 kat fazla bal tüketme olasılığı vardır.

Balı tadım yaparak satın alma değişkeninin Odds oranı 0,371’dir ve düzeltilmesi gerekir. Bu değişkenin düzeltilmiş Odds oranı $1/0,371=2,7$ ’dir. Balı tadım yaparak satın almayı deneyen öğrencilerin balı hiç tadım yapmayan öğrencilere göre 2,7 kat fazla bal tüketme olasılığı vardır. Bal ve diğer arı ürünlerinde markanın bilinir

olması değişkeninin Odds oranı 0,445'dir. Bu değişkenin düzeltilmiş Odds oranı $1/0,445=2,25$ 'dir. Bal ve diğer arı ürünlerinde markanın bilinir olması bilinir olmamasına göre 2,25 kat daha fazla bal tüketme olasılığı ortaya çıkarmaktadır.

Plastik ambalaj tercih etme, burs alma, hane halkı aylık geliri, apiterapi kavramını duyma, gıda alışverişini kendisinin yapması değişkenleri bal tüketimini pozitif yönde etkilemektedirler. Plastik ambalaj tercih etme, bal tüketme olasılığını 3,7 kat arttırmaktadır. Burs almak öğrencilerin bal tüketme olasılığını 1,85 kat arttırmaktadır. Hane halkı aylık geliri bal tüketme olasılığını 1,2 kat arttırmaktadır. Apiterapi kavramını duyma bal tüketme olasılığını 1,67 kat arttırmaktadır. Gıda alışverişlerini kendisi yapanlar bal tüketme olasılığını 1,66 kat arttırmaktadır.

Bal ve diğer arı ürünlerinin yararları hakkında bilgi sahibi olma değişkeninin Odds oranı 0,625'tir. Bu oranın düzeltilmiş hali $1/0,625=1,6$ 'dır ve şu şekilde yorumlanabilir; bal ve diğer arı ürünlerinin yararları hakkında bilgi sahibi olan öğrencilerin bilgi sahibi olmayan öğrencilere göre bal tüketme olasılığı 1,6 kat daha fazladır.

Tablo 14: Öğrencilerin Bal Tüketimine İlişkin Logit Model Sonuçları

Bağımsız Değişkenler	Katsayı	Standart Hata	Wald	P Değeri	Odds Oranı
Cinsiyet	-1,078	0,284	14,358	0,000***	0,340
Daha önce yöresel bal tüketme	-3,552	1,029	11,905	0,001***	0,029
Balı tadım yaparak satın alma	-0,991	0,349	8,052	0,005***	0,371
Bal ve diğer arı ürünlerinde markanın bilinir olması	-0,809	0,322	6,308	0,012**	0,445
Plastik ambalaj tercih etmesi	1,310	0,521	6,332	0,012**	3,707
Burs alma	0,616	0,298	4,264	0,039**	1,852
Hane halkı aylık geliri	0,193	0,105	3,381	0,066*	1,213
Apiterapi kavramını duyma	0,513	0,288	3,171	0,075*	1,670
Bal ve diğer arı ürünlerinin yararları hakkında bilgi sahibi olma	-0,470	0,284	2,742	0,098*	0,625
Gıda alışverişini kendisinin yapması	0,508	0,307	2,741	0,098*	1,663

*P<0.10 anlamlıdır. **P<0.05 anlamlıdır. ***P<0.01 anlamlıdır.

4. SONUÇ VE ÖNERİLER

Türkiye'de pandemi sonrasında özellikle monofloral balları ile diğer arı ürünlerine olan talep artmıştır. TÜİK 2019 yılı verilerine göre hesaplanan kişi başına bal tüketimi 1,25 kg'dır. Türkiye'de bal üretimi talebi karşılamaktadır. Bu çalışmada Ege Üniversitesi lisans öğrencilerinin arı ürünlerine yönelik farkındalığı ve tüketim tercihleri ile bal tüketme eğilimini etkileyen faktörlerin ortaya konması amaçlanmıştır.

Öğrencilerin bal dahil gıda alışverişlerini daha çok anne ve babalarının yaptığı, öğrencilerin %64,74'ünün aylık gıda harcamaları içerisinde bal ve diğer arı ürünlerine ayırdıkları miktarın 20 TL ve altında olduğu belirlenmiştir. Öğrencilerin balı en fazla sofralık (kahvaltılık) olarak tükettiği ve kişi başına aylık ortalama bal tüketim miktarının ise 297 gram olduğu bulunmuştur.

Bal ve diğer arı ürünlerinin üretim ve tüketimine yönelik yapılan bilimsel çalışma sayısının artması gerek sektör açısından gerekse tüketiciler açısından olumlu sonuçlar ortaya çıkaracaktır. Tüm arı ürünlerinin tüketim tercihlerinin belirlenmesi arıcılık sektörüne katkı sağlaması açısından son derece önemlidir.

Türkiye'nin bal ve diğer arı ürünlerinin yurt içinde ve yurt dışında bal festivalleri ve bal ya da arıcılık fuarları aracılığıyla tanıtımına ve ihracatının artmasına katkı sağlayacaktır. 2020 yılında Türk Gıda Kodeksi Yönetmeliği Bal Tebliği'nin (2020/7), 31044 sayılı T.C. Resmî Gazetede yayınlanması ile bu tebliğdeki doğru tanımlamalar ile Türk Çam Balının da Dünyada tanıtımına katkı sağlanacaktır.

Üniversite gençliğinin bal ve diğer arı ürünlerinin yararları hakkında daha fazla bilgilendirilmeleri ve farkındalıklarının artırılması, öğrencilere bal ve diğer arı ürünleri gibi bazı temel konularda seminer, konferanslar, webinarlar ve sertifika programları düzenlenmesi yoluyla sağlanabilecektir. Bu anlamda gençlerin beslenme alışkanlıkları ile arı ürünlerine yönelik farkındalıklarını ortaya koyan çalışmaların yapılmasının da bu yönüyle de literatüre katkı sağlayacağı düşünülmektedir.

Sonuç olarak; öğrencilerin bal ve diğer arı ürünleri hakkında daha fazla bilgi sahibi olmaları gerekmektedir. Bu konuda farkındalık sahibi olmaları ile tüketim tercihleri değişebilecektir. Özellikle bal dışındaki diğer arı ürünleri ile ilgili farkındalığın artırılması tüketimi doğrudan etkileyecektir. Yaşanılan Covid salgını sonrası tüketicilerin doğal ürünlere olan ilgisi de artmıştır. Bal ve diğer arı ürünlerinin tüketiciler tarafından daha fazla tercih

edilmesi bu salgın ile doğru orantılıdır. Tüketicilerin özellikle sağlık amaçlı kendilerini korumak ve metabolizmalarını güçlendirmek adına bu ürünleri tükettikleri gözlemlenmektedir. Tüketicilerin sağlıklı ve markalı arı ürünlerine ürünlere yönelik olarak gerek internet üzerinden gerekse farklı kanallar kullanılarak bu konudaki farkındalığı arttırılabilir. Hatta online pazar yerlerinde bu ürünlerin satışı artmakla birlikte, tüketicilerin ürünü alırken, satıcıların aldıkları puan ve yorumlara dikkat ettiği gözlenmektedir. Böylelikle gerek üreticiler gerekse paketleyen/ambalajlayan firmalar ve kooperatifler tüketicinin talebi doğrultusunda üretimin kalitesi ve sunumu konusunda kendisine yön verebilecektir. Sürdürülebilir bal tüketim davranışı geliştirme de tüm paydaşlar üzerine düşen görevi yerine getirilmelidir.

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Arıcılıkta Risk Yönetim Stratejisi Olarak Sözleşmeli Üretim

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Özet: Arıcılık Türkiye’de son yıllarda önemli gelişme kaydederek, doğal denge ve tarımsal üretimin sürdürülebilirliğini ve verimliliğini sağlayan bir sektör durumuna gelmiştir. Bal dışında balmumu, polen, propolis, arı sütü, arı ekmeği ve arı zehiri gibi ürünler arıcılığın son derece değerli ürünleri arasında yer almaktadır. Tohum ve gıda üretimi de büyük ölçüde arı tozlaşmasına dayanmaktadır. Ancak tarımın diğer kollarında olduğu gibi, üretim, pazarlama, finansal ve insan kaynaklı riskler arıcılık işletmelerinde de risk ve belirsizliğe dolayısıyla arıcıların gelirinde istikrarsızlığa neden olmaktadır. Arıcılık sektörünün sürdürülebilirliğinin sağlanması için bu risklerin; üretim çeşitlendirmesi, kovan sigortası, satışın zamana yayılması vb gibi uygun risk yönetim araçları ile kontrol edilmesi zorunlu duruma gelmektedir. Sözleşmeli üretim ise arıcıların karşılaştıkları pazarlama riskinin yönetiminde etkin bir araç olarak görülmektedir. Sözleşmeli arıcılık, firmalar ve arıcılar arasında belli bir arı ürününün üretim ve hasadını kapsayan, üreticinin üretimi gerçekleştirme yükümlülüğü karşısında firmanın da ürünü belli koşullarda satın almayı taahhüt ettiği bir üretim ve pazarlama şekli olarak ifade edilmektedir. Bu çalışma literatür taramasına dayanarak sözleşmeli arıcılık modelinin çerçevesini oluşturmak amacıyla yapılmıştır. Böylece arıcılık sektörü ve gelecekte yapılacak araştırmalar için yol gösterici nitelikte olabilecektir.

Anahtar Kelimeler: Arıcılıkta risk, Risk yönetimi, Sözleşmeli arıcılık

Contract Production as a Risk Management Strategy in Beekeeping

Abstract: Beekeeping has made significant progress in Turkey in recent years and has become a sector that ensures the sustainability and efficiency of agricultural production and the balance of nature. Beeswax, pollen, propolis, royal jelly, bee bread, apilarnil and bee venom are some of the most valuable products of beekeeping along with honey. Seed and food production also depend largely on pollination by bees. However, as in other branches of agriculture, risks and uncertainties associated with production, marketing, finances, and human-related risk factors in beekeeping lead to instability in beekeepers' income. To ensure the sustainability of the beekeeping sector, these risk factors must be controlled through appropriate risk management tools such as product diversification, beekeeping insurance, spreading sales over time, etc. On the other hand, contract production is considered an effective tool to manage beekeepers' marketing risk. Contract beekeeping is a form of production and marketing between companies and beekeepers, which refers to the production and harvesting of a specific beekeeping product, where the company agrees to buy the product under certain conditions, while the producer must carry out the production. This study was conducted to provide a framework for the contract apiculture model based on the literature review. Thus, it is a guide for the beekeeping sector and future research

Key Words: Risk in beekeeping, Risk management, Contract beekeeping

1. GİRİŞ

Arıcılık Türkiye’de son yıllarda önemli gelişme kaydederek, doğal denge ve tarımsal üretimin sürdürülebilirliğini ve verimliliğini sağlayan bir sektör durumuna gelmiştir (Şengül, 2020). Türkiye zengin flora kaynakları ile gerek monofloral ve gerekse polifloral bal üretimi açısından uygun koşullara sahip bir ülke olmakla birlikte, dünya çam balı üretiminin de %93’ünü sağlamaktadır (Saner, 2021). Türkiye’de arıcılık faaliyeti; 2021 yılı verilerine göre 89.361 arıcılık işletmesinde 8.73 milyon kovan ile sürdürülmektedir. Kovan başına verim 11.03 kg düzeyinde gerçekleşmiştir (TÜİK, 2022). Bal dışında balmumu, polen, propolis, arı sütü, arı ekmeği (perga) ve arı zehiri gibi ürünler arıcılığın son derece değerli ürünleri arasında yer almaktadır. Bunların yanında tohum ve gıda üretimi de büyük ölçüde arı tozlaşmasına dayanmaktadır.

Ancak, arıcılık diğer tarımsal üretim kollarında olduğu gibi büyük ölçüde doğal koşullara bağlı olması, değişen piyasa koşulları, hükümetin piyasa koşullarını etkileyen kararları ve çeşitli hastalıklar gibi birçok doğal, ekonomik, sosyal, siyasal, teknolojik ve kişisel risklerle karşı karşıya kalmaktadır (Şengül ve Saner, 2022). Arıcılık sektörünün sürdürülebilirliğinin sağlanması için bu risklerin; üretim çeşitlendirmesi, kovan sigortası, satışın zamana yayılması vb gibi uygun risk yönetim araçları ile kontrol edilmesi zorunlu duruma gelmektedir. Sözleşmeli üretim ise arıcıların karşılaştıkları pazarlama riskinin yönetiminde etkin bir araç olarak görülmektedir.

Diğer taraftan gıda talebi, son altmış yılda temel olarak gelir seviyelerindeki artış, ticari serbestleşme ve kentleşme nedeniyle, farklılaştırılmamış ürünlere odaklanmaktan yüksek kaliteli ve çeşitlendirilmiş ürünlere doğru, önemli ölçüde değişim göstermiştir. Talepteki bu değişime yanıt olarak, süpermarket zincirleri ve gıda işleyicileri artık yeni standartlar ve gereklilikleri uygulamak için öncelikle sözleşmeler aracılığıyla gıda yetiştiricileri ile koordinasyon halinde çalışmak zorunda kalmaktadır (Khan et al., 2019).

Literatürde sözleşmeli üretimin çeşitli tanımları bulunmaktadır. Ancak özet olarak bir firma (yüklenici) ve bireysel bir üretici (sözleşmeli) arasında, genellikle hacim, kalite ve zamanlama ve teslimat gibi ürün özelliklerine ilişkin spesifikasyonlar içeren, yükümlülükleri ve yapılan işler için ücret miktarını içeren bir 'ileriye dönük anlaşma' şeklinde bağlayıcı bir düzenleme olarak tanımlanmaktadır (Catelo and Costales, 2008).

Sözleşmeli tarım, tarımsal değer zinciri boyunca farklı paydaşlar arasında entegrasyonu kolaylaştırmak için en uygun araçlardan biri olarak ortaya çıkmıştır. Başka bir ifadeyle sözleşmeli üretim, tarımsal ürün zincirleri içinde bir dikey bütünleşme biçimidir. Öyle ki firma üretim sürecinin yanı sıra üretilenin miktarı, kalitesi, özellikleri ve zamanlaması üzerinde daha fazla kontrole sahiptir. Dikey bütünleşmeye yönelik geleneksel yaklaşım, firmaların büyük ölçekli mülkler veya tarlalar yoluyla (özellikle çay, muz ve şeker kamışı gibi geleneksel tropikal ürünler için) doğrudan üretime yatırım yapmaları olmuştur. Sözleşmeli tarım yoluyla, firma doğrudan üretime girmeden üretim süreci ve ürün üzerinde kontrol sağlamaktadır (Prowse, 2012; Mishra et al., 2018).

Sözleşmeli tarımın firmalara tedarik miktarı ve kalitesinde artan güvenilirlik; birçok durumda üretim riskinin çiftçilere yüklenmesi; standartları ve güvenilirlik faktörlerini karşılamak için üretim süreci ve mahsul özellikleri üzerinde daha fazla kontrol; daha düzenli ve istikrarlı bir tedarik; üretimi genişletme veya azaltmada daha fazla esneklik (çünkü özellikle tam dikey entegrasyona kıyasla daha az sabit varlık vardır); tedarikte ölçek ekonomilerinden yararlanma gibi çeşitli faydalar sağlanabilmektedir. Buna karşılık, sözleşmeli tarım ayrıca çiftlikler için güvenilir bir pazara erişim; garantili ve istikrarlı fiyatlandırma yapıları; krediye, girdilere, üretim ve pazarlama hizmetlerine (tohum, gübre, eğitim, yayım, nakliye ve hatta arazi hazırlığı) erişim gibi faydalar sunabilmektedir. Daha geniş anlamda, sözleşmeli çiftçilik, bir çiftliğin ürünleri için yeni pazarlara kapı açabilir, teknoloji ve beceri transferini teşvik edebilir (özellikle, kaynakları kısıtlı çiftçilerin genellikle kaçınabileceği yüksek riskli ürünler için) ve bitki sağlığı standartlarını karşılamada çiftçileri destekleyebilir. Bunlarla beraber sözleşmeli tarım aynı zamanda pek çok ek fayda ve fırsat da sağlayabilir: Çiftlikte çeşitliliği artırabilir; teknik yardım ve bilgi transferi komşu tarlalara ve yakın köylere yayılabilir; sözleşmeli çiftçilikten elde edilen yan ürünler diğer çiftçilik faaliyetlerinde kullanılabilir; pazarlama kararlarını basitleştirebilir, böylece verimliliği artırabilir; küçük ölçekli çiftçiliğin daha geniş çapta ticarileştirilmesini teşvik edebilir ve son olarak, sözleşmeler kredi teminatı olarak kullanılabilir (Prowse, 2012).

Sözleşmeli tarım yaygın olarak, kırsal çiftçilerin ileri ve geri bağlantılar kurarak bir piyasa ekonomisine katılmalarını sağlayan, yoksul yanlısı bir düzenleme olarak algılanmaktadır. İleriye dönük bağlantılar, üreticileri veya tedarikçileri müşterilerle birleştiren dağıtım zincirlerini oluştururken, geriye doğru bağlantılar, bir yüklenici ile tedarikçileri arasında bilgi, malzeme, teknik destek ve kredi akışını sağlayan ve ekonomik karşılıklı bağımlılık ağına yol açan kanallar oluşturmaktadır (RIU, 2022).

Sözleşmeli tarım konusunda çeşitli çalışmalar bulunmaktadır. Bu çalışmaların bazısında sözleşmeli tarımın olumlu, bazısında ise olumsuz etkileri üzerine tartışılmıştır (Oya, 2012; Sivramkrishna and Jyotishi, 2008; Ağır ve Akbay, 2017; Soullier and Moustier, 2018; Ton et al., 2018; Bellemare and Lim, 2018; Ba et al., 2019; Arouna et al., 2021; Doğan ve Adanacioğlu, 2021). Örneğin Arouna et al. (2021) tarafından yapılan çalışmada sözleşmeli çiftçiliğin, ölçek, üretkenlik ve ticari yönelim gibi bir dizi farklı kırsal dönüşüm ölçütü üzerinde olumlu ve önemli bir etkisi olduğu belirlenmiştir. Sonuçlara göre, sözleşmeli çiftçilik, kontrol grubu ile karşılaştırıldığında, pirinç ekili alanları %23, verimi %29, pazarda satılan ürün payını iki kattan fazla ve kişi başına geliri yarı yarıya arttırmıştır (Arouna et al., 2021). Güneybatı Etiyopya'daki Sheka Bölgesinde organik bal üretimi üzerine sözleşmeli tarımın küçük ölçekli çiftçilerin hane geliri üzerindeki etkisinin araştırıldığı bir çalışmada elde edilen sonuçlara göre, sözleşmeli üretime katılımın bal üretiminden elde edilen yıllık hane geliri üzerinde önemli bir etkiye sahip olduğu ortaya çıkmıştır (Meshessa, 2011). Güneybatı Etiyopya'da gerçekleştirilen bir başka çalışmada (Girma and Gardebroke, 2015), sözleşmeli arıcılık modeli ormanların sürdürülebilir yönetimi açısından ele alınmıştır. Çalışmada ormanların sürdürülebilir yönetimi için sözleşmeli arıcılık modeli önemli bir fırsat ve potansiyel olarak değerlendirilmiştir. Nitekim, Güneybatı Etiyopya'da bal, birçok küçük çiftçiye gelir sağlayan odun dışı orman ürünü olarak görülmektedir. Çalışmada ormanlık alandaki arıcılardan bazılarının ürettikleri organik balları uluslararası düzeyde pazarlayan bir şirkete sözleşmeli olarak tedarik ettiği, böylelikle niş pazarlara erişme olanağı elde ettiklerinden söz edilmektedir. Çalışmadan elde edilen bulgular, sözleşmeli arzın teslim edilen balın kalitesini, arıcıların aldığı fiyatları ve hane başına düşen toplam bal gelirini iyileştirdiğini

göstermektedir. Bu çalışmada literatür taramasına dayanarak arıcılık işletmelerinde sözleşmeli üretim modelinin çerçevesini oluşturmak amaçlanmıştır. Çalışmada yapılan değerlendirmeler arıcılık sektörü ve gelecekte yapılacak araştırmalar için yol gösterici nitelikte olabilecektir.

2. SÖZLEŞMELİ TARIM/ARICILIK MODELLERİ VE SÖZLEŞME TİRLERİ

Sözleşmeli tarımın beş farklı tipi/modeli bulunmaktadır (Tablo 1). Birincisi, bir firmanın (genellikle büyük bir işleyici) çok sayıda çiftçi ile katı kalite gereklilikleri ve miktar hedefleri ile sözleşme yaptığı merkezi modeldir. Taboa bölgesinde The Honey King şirketi, Zambiya'da pamuk, Kenya ve Uganda'da kakao ve Vietnam'da tütün sözleşmeleri bu modele örnek verilebilir (Meshesha, 2011; Tutuba et al., 2019).

İkincisi, firmanın (genellikle bir işleyici) üretim zincirine bir mülk veya çiftlik yoluyla girdiği, ancak aynı zamanda bağımsız üreticiler ile (daha büyük hacimler için) sözleşme yaptığı çekirdek mülk modelidir. Bu model genellikle çok yıllık ürünler için kullanılmaktadır. Tanzanya'nın Iringa bölgesindeki Ruaha çiftlikleri bu modele örnek verilebilir (Tutuba et al., 2019). Üçüncüsü, bir ortak girişimin (bir kamu kuruluşu ile bir özel firma arasında) çiftçilerle bir sözleşme akdettiği üçlü modeldir. Bu model ulusal ve/veya yerel yönetimi kapsayabilir. Hükümetin müdahalesi nedeniyle, bu modele dayalı sözleşmeler potansiyel olarak politize edilebilir. Dördüncüsü, daha küçük firmaların veya tüccarların, sınırlı sayıda çiftçiyle, genellikle minimum işlem gerektiren meyve ve sebzeler için, genellikle sözlü olarak yıllık anlaşmalar yaptıkları resmi olmayan bir modeldir. Beşinci model ise firmanın çiftçilerle etkileşimini bir çiftçi komitesi veya bir tüccar gibi bir aracıya, taşeronla verdiği aracı modeldir. Bu modelde firma ile çiftlik arasındaki mesafenin artması firmanın süreç ve ürün üzerindeki kontrol derecesini azaltmaktadır.

Tablo 1: Sözleşmeli Tarım Modelleri

Sözleşme türü	Tanım	Tipik ürünler	Çiftlik büyüklüğü
Merkezi model	Bir firmanın (genellikle bir işleyici), katı kalite gereklilikleri, miktar hedefleri ve üretim süreci üzerindeki genel kontrole dayalı olarak çok sayıda çiftçiyle sözleşme yaptığı durumlar	Perakende satışa sunulmadan önce önemli miktarda işlem gerektiren ürünler (örneğin, şeker kamışı, çay, kahve, pamuk, süt ve kümes hayvanları)	Küçük, orta ve büyük ölçekli çiftlikler
Çekirdek mülk modeli	Firmanın (yine, genellikle bir işleyici) bir mülk veya çiftlik yoluyla üretim zincirine girdiği, ancak aynı zamanda bağımsız üreticilerle de sözleşme yaptığı (daha büyük hacimler için veya tohum için) durumlar	Çok yıllık mahsuller ve önemli ölçek ekonomileri sergileyen diğerleri (muz, şeker kamışı). Genellikle sürekli bir hammadde akışı gerektiren işleme tesisleri için kullanılır.	Küçük ve orta ölçekli çiftlikler
Üçlü model	Bir kamu kuruluşu ile özel bir firma, iki firma veya bir firma ile bir STK arasında çiftçilerle sözleşme yapan ortak girişimler	Kamu-özel sektör ortaklıkları, ulusal öneme sahip stratejik ürünlere (örneğin Batı Afrika'daki pamuk) odaklanma eğilimindedir.	Küçük çiftlikler
Resmi olmayan model	Daha küçük firmaların veya tüccarların, sınırlı sayıda çiftçi ile genellikle sözlü olarak yıllık anlaşmalar yaptığı durumlar	Minimum düzeyde işlem gerektiren veya çiftlikte işlenen meyve ve sebzeler	Çoğunlukla küçük çiftlikler
Aracı model	Bir firmanın çiftçilerle etkileşimini, çiftçiler için ana temas noktası durumuna getiren bir köy lideri, çiftçilik komitesi veya bir tüccar gibi bir aracıya devrettiği durumlar	Patates, pirinç gibi temel gıda ürünleri	Küçük, orta ve büyük çiftlikler

Kaynak: Meshesha, 2011; Prowse, 2012; Tutuba et al., 2019

Yukarıda tartışılan sözleşmeli tarım modelleri, pazarlama sözleşmeleri, kaynak sağlayan sözleşmeler ve üretim yönetimi sözleşmeleri olmak üzere üç farklı sözleşme türleri altında uygulanabilmektedir (Meshesha, 2011; Arouna et al., 2021).

Bir pazarlama sözleşmesi, bir çiftçi ile bir yüklenici arasında miktar, kalite, fiyat ve teslimat süresini belirten hasat öncesi sözlü veya yazılı bir anlaşmadır. Yönetim kararlarının çoğu, çiftçilik yaptığı dönemlerde ürün mülkiyetini elinde tutan çiftçiye kalmakta ve çiftçi, fiyat riskini yüklenici ile paylaşmaktadır. Bu tür bir sözleşme, talep, kalite, zamanlama ve fiyat hakkında bilgi toplama maliyetini azaltabilir. Böylece belirsizliği ve piyasa risklerini azaltabilir. Ayrıca, artan bilgi kullanılabilirliği, spot piyasaya kıyasla koordinasyon maliyetini azaltır. Bu tür sözleşmeler çoğunlukla resmi olmayan sözleşmeli çiftçilik modellerinde kullanılmaktadır.

Kaynak sağlayan sözleşmelerde yüklenici, ürün için yalnızca bir pazar sağlamakla kalmaz, aynı zamanda üreticilere üretimin çeşitli aşamalarında kredi bazında temel girdiler sağlar. Ürünler satıldığında kredinin geri ödenmesi gerekmektedir. Bu sözleşme, üretim kararlarının çoğunu ve riskin önemli bir bölümünü çiftçiye bırakmaktadır. Çiftçiler bu tür bir sözleşmede, daha düşük satış fiyatlarından ve doğru zamanda gerekli kalite ve miktarda güvenilir tedarikten yararlanır. Bu sözleşme türü genellikle resmi olmayan ve merkezi sözleşmeli çiftçilik modellerinde köklü girişimciler tarafından kullanılmaktadır. Girdilerin zamanında teslimi, bu sözleşme kapsamında başarının anahtarıdır. Bu sözleşme türü, ürün kalitesi kullanılan girdilere bağlı olduğunda uygulanır.

Üretim yönetimi sözleşmelerinde, üreticiler kesin üretim yöntemlerini, girdi kullanımını, özel yetiştirme ve hasat sistemlerini izlemeyi kabul ederler. Bu sözleşme, yükleniciye piyasa sözleşmesinden daha fazla kontrol sağlar. Üretici, ekim ve hasat uygulamaları üzerindeki karar haklarının çoğunu yüklenici ile paylaşır. Üretim aşamaları denetim altında olduğu için kaliteyi artırır ve üretim maliyetini düşürür. Aksine, verimsiz üreticiler yüklenici için bir risk oluşturabilir.

Bu sözleşme türlerinden herhangi birinin seçimi, ürünün türüne, alıcının özelliklerine ve pazar koşullarına bağlıdır. Ancak, yukarıdaki üç ana kategoriden üretilebilecek birçok alternatif sözleşmede bulunmaktadır.

3. DÜNYADA VE TÜRKİYE'DE SÖZLEŞMELİ TARIM

Sözleşmeli üretimde sözleşmeler, endüstriyel organizasyonun bir ara şekli olarak, spot piyasalar ve tam dikey entegrasyon arasında bir tür dikey koordinasyon mekanizması olup, dünya çapında gelişmiş ülkelerin tarımında yaygın olarak kullanılmaktadır (Bellemare and Lim, 2018).

Sözleşmeli üretim modeli ilk defa şeker üretimi için 1885 yılı sonrasında Japonlar tarafından Tayvan'da uygulanmıştır. Bunu 20. yüzyılda Orta Amerika'da muz üretimi için yapılan sözleşmeler izlemiştir. Esas olarak, tam anlamıyla tarımda 1940 yılı sonrasında uygulanmaya başlamıştır. 1950'li yıllarda sözleşmeli tarıma dayalı tohumculuğun ortaya çıktığı görülmektedir. Sonraki yıllarda çeşitli ülkelerde farklı ürünlerde uygulandığı dikkati çekmektedir (Özçelik vd., 1999).

Son yıllarda, sözleşmeli tarım gelişmiş ülkelerde ve bölgelerde giderek daha popüler duruma gelmiştir. Örneğin, ABD'deki büyük çiftliklerin %60'ından fazlası, tarım ürünlerinin yıllık değerinin yaklaşık %40'ını kapsayan sözleşmeler kullanmaktadır (Peng and Pang, 2019). 2017 yılında ABD'de sözleşmeler mısır, soya fasulyesi ve buğday üretiminin küçük bir bölümünü kapsamaktadır. ABD'de son dönemde kümes hayvancılığı (yumurta ve et) ağırlıklı olarak sözleşmeli üretim kapsamındadır. ABD'de hayvansal üretimde, süt ve sığırlarda pazarlama sözleşmeleri kullanılsa da, domuz ve kümes hayvanlarında üretim sözleşmeleri yaygın olarak kullanılmaktadır. ABD'de sözleşmeli üretim modeli daha çok küçük ölçekli aile işletmelerinde yaygın olup, ABD'de tarım işletmelerinin %8.1'i sözleşmeli üretim yapmaktadır (Burns and Mac Donald, 2018).

Avrupa Birliğinde ise tarım ürünlerinin sözleşmeli üretim modeli oranları ülkelere göre farklılık göstermektedir. Ülkelere göre dana etinin %3- 95'i, sütün %1-99'u, tavuk etinin %15-95'i, yumurtanın %10-70'i, şeker pancarının %100'ü, patatesin %2.5-71'i, bezelyenin %85-100'ü, sanayi tipi domatesin %100'ü sözleşmeli olarak yetiştirilmekte ve pazarlanmaktadır (Hekimoğlu ve Altındağ, 2012).

Türkiye'de ise tarımda sözleşmeli üretim şeker pancarı ile başlamıştır. Alpullu ve Uşak Şeker Fabrikası'nın açıldığı 1926 yılından bu yana şeker pancarı üretimi sözleşmeli üretim çerçevesinde yapılmaktadır. Şeker Yasası'nın yürürlüğe girdiği 2001 yılından bu yana da belirlenen kotalar çerçevesinde sözleşmeli üretim sürdürülmektedir (Anonim, 2022). Sözleşmeli tarım ilk defa 1996-2000 yıllarını kapsayan 7. Beş Yıllık Kalkınma Planında kendisine yer bulmuştur. Türkiye'de özel sektör kanalıyla sözleşmeli üretimin ilk uygulaması salçalık domatestede olmuştur (ZMO, 2020). Daha sonraları konserve sanayiine hammadde temini için bu model domates, salatalık üretiminde de yaygınlaşmış, ilerleyen yıllarda dondurulmuş gıda sektörü firmalarına ürün temini için meyve-sebze üreticileri ile de sözleşmeler yapılmış, bunun yanında hayvansal ürünlerden broiler (beyaz et), süt ve balda da sözleşmeli üretim gerçekleştirilmiştir. Sözleşmeli üretim, 26 Nisan 2008 tarih ve 26858 Sayılı Resmi Gazetede Yayımlanarak yürürlüğü girmiştir. Bu yönetmelik esasları doğrultusunda 2014-2015 döneminde teşvikler kapsamında yağlık üretimlerden Soya, Kanola, Aspir ve Ayçiçeği üretimleri sözleşmeli teşvikler kapsamına dâhil edilerek bir model yaratılması amaçlanmıştır. Bu model de kısa süreli uygulanmıştır

(Saner, 2021). Ayrıca 14.02.2019 tarihinde Tarım Kredi Kooperatifleri Birlik A.Ş Genel Müdürlüğü "(Salçalık) Sözleşmeli Domates Üretimi" anlaşması imzalamıştır (Anonim, 2019). Ayçiçeği, çeltik, silajlık mısır, dane mısır, salçalık domates ve ikinci ürün olarak yetiştiriciliği yapılan çeşitlerin sözleşme girişleri de halen devam etmektedir. Diğer taraftan Doğan ve Adanacioğlu (2022) tarafından Gümüşhane'de yapılan bir çalışmada Gümüşhane ilinde sözleşmeli tarım modeli ile karabuğday üretimi yapan çiftçilerin sözleşmeli tarıma bakış açısı değerlendirilmiş, sözleşme gereği çiftçilerin ürettiği karabuğdayın tamamı için ilgili firma tarafından alım ve fiyat garantisi verildiği belirlenmiştir. Bu bağlamda, her iki tarafın da haklarını gözetken sözleşmeli tarım ile ilgili küçük çiftçinin öngöremediği riskler kontrol altına alınabilmekte, yeni pazarlara erişim sağlayarak ve yeterince kullanılmayan istihdam için fırsatlar sunarak çiftçilere fayda sağlanabilmektedir.

Tarımsal üretim ve gıda güvenliğinin sağlanması noktasında pandemi döneminde öne çıkan sözleşmeli üretim modeline ilişkin yeni bir yasa hazırlığı (taslak) bulunmaktadır. Hukuki altyapının eksikliği nedeniyle özellikle üretici aleyhine yaşanan sorunların ortadan kaldırılmasını öngören taslak çalışmaya göre, sözleşmeler Tarım ve Orman Bakanlığı'nın gözetiminde yapılacağı öngörülmüş, üç nüsha olarak düzenlenecek sözleşmenin bir nüshası Bakanlıkta kalarak, Tarım ve Orman Bakanlığına denetim yetkisi verilmiş olacaktır (Sakarya, 2021).

4. ARICILIKTA SÖZLEŞMELİ ÜRETİM

Arıcılık sektöründe iki çeşit sözleşmeye rastlamak mümkündür. Bunlardan birincisi bal ve katma değerli diğer arı ürünlerinin üretim ve pazarlamasına yönelik sözleşmeler, diğeri ise polinasyon sözleşmeleridir. Üretim ve pazarlama sözleşmeleri firmalar ve arıcılar arasında belli bir arı ürününün üretim ve hasadını kapsayan, üreticinin üretimi gerçekleştirme yükümlülüğü karşısında firmanın da ürünü belli koşullarda satın almayı taahhüt ettiği bir üretim ve pazarlama şekli olarak ifade edilmektedir. Polinasyon sözleşmeleri ise bir arıcının, tozlaşma amacıyla ekinlerin çiçeklenmesi sırasında kovanlarını bir yetiştiricinin mülküne veya kiralık arazisine yerleştirmeyi kabul ettiği anlamına gelmektedir. Yetiştirici, arıcıya genellikle kovan başına veya çıta başına ödeme yapmayı taahhüt etmektedir. Arıcının yeterli şekilde hazırlanıp koloni varlığını sağlayabilmesi için, baharda tozlaşma hizmetleri için düzenlemelere kış başlangıcından önce başlamak en iyisidir. Polinasyon sözleşmelerinde fiyatlar, nakliye ve koloni yönetim maliyetinin yanısıra, taşıma sırasında koloni stresinden kaynaklanan bal üretim kaybını telafi edecek bir şekilde belirlenmelidir (Saner, 2021). Bu sözleşme türüne ABD'de badem ağaçları polinasyonu ve Türkiye'de ayçiçek ve kanola polinasyonu örnek olarak verilebilir (Goodrich, 2017; Şengül, 2020).

Üretim ve pazarlama sözleşmeleri özelinde incelendiğinde kırsal arıcılık çiftlikleri geçimlik üretimden ticari üretime geçişini engelleyen çeşitli kısıtlamalar bulunmaktadır. Bunlar arasında pazarlama sorunu, fiyat belirsizliği, teknik bilgi eksikliği vb., gibi etmenler yer almaktadır. Bu kısıtlamalar, girdi talebinin yanı sıra verimlilikleri, satışları ve arıcılık faaliyetinin sürdürülebilirliğine katkıda bulunan geliri etkilemektedir (Arouna et al., 2021). Sözleşmeli üretim arıcılık sektörüne risk yönetimi, maliyet azaltımı, krediye erişimi artırma ve üretim ölçeklerini artırma, pazarlara erişimin sağlanması, gelirin artırılması ve fiyat dalgalanmalarına karşı arıcıyı koruması gibi avantajlar sunabilmektedir. Arıcılık sektöründe üreticilerin karşılaştıkları başlıca sorunlara yönelik sözleşmeli üretimin sunduğu çözümler Tablo 2'de sunulmuştur.

Tablo 2: Arıcılık sektörüne sözleşmeli üretimin getirdiği çözümler

Arıcılara yönelik kısıtlamalar	Çözüm olarak sözleşmeli arıcılık
Bal ve diğer arı ürünlerinin verim düşüklüğü	Yüklenici firma, yayım desteği sağlayabilir, üretim faaliyetlerini izleyebilir ve üretkenliği artırabilir.
Likiditeye sınırlı erişim, ticari üretimi engellemesi	Yüklenici polen tuzağı, propolis tuzağı, arı zehiri makinesi vb. dahil olmak üzere girdi tedariki şeklinde aynı kredi sağlayabilir.
Yetersiz piyasa bilgisi, bal ve katma değeri yüksek diğer arı ürünlerinin pazarlamasında yaşanan sorunlar ve değişken fiyatlar	Yüklenici bal ve diğer arı ürünleri için pazar ve fiyatı garanti eder.
Yetersiz altyapı, girdi maliyetlerini yükseltir, pazara erişimi kısıtlar ve arıcılık faaliyetinden elde edilen geliri düşürür.	Yüklenici bazen girdileri teslim eder ve arıcılardan üretilen ürünleri toplar. (Örneğin boş propolis tuzaklarının dağıtımı ve dolu tuzakların toplanması gibi)
Arıcılar arasındaki yetersiz iş bilgisi, etkin kovan yönetimini engellemektedir.	Yüklenici bazen arıcılık işletmesinin yönetimini iyileştirmek için temel girişimcilik becerileri eğitimi sağlar.
Parazitler, predatörler, virüsler gibi biyolojik etmenlerden kaynaklanan hastalık ve zararlı kayıpları	Yüklenici firma tarafından sağlanan yayım ve eğitim desteği ile etkili mücadele yöntemleri üreticiye aktarılabilir, kayıplar minimize edilebilir

Arıcılık işletmelerinde üretilen bal ve diğer arı ürünleri güvenliği	Yüklenici firma üretimin bütün aşamalarını denetleyerek ürün sağlığını ve kalitesini sağlayabilir

Kaynak: Aksoy ve Öztürk, 2012; Çukur vd., 2016; Karadas and Birinci, 2018; Şengül ve Saner, 2022; RIU, 2022

Sınırlı pazar erişimi ve olumsuz fiyatlandırma, arıcıların ekonomik olarak güçlendirilmesinin önündeki en büyük engellerden biri olarak ortaya çıkmaktadır. Kendi çabalarıyla kişisel bir doğrudan pazarlama ağı ve tüketici kitlesi yaratabilen az sayıda arıcı dışında arıcıların ürettikleri ürünlerin pazarlanması ve satışı, dolayısıyla arıcının kazancı sektöre hakim birkaç firmanın politikasına bağlıdır.

Düşük fiyatın yanı sıra, piyasada kaliteli ürünü ödüllendirme mekanizmasının olmaması, üreticiyi kalitesiz ürün üretmeye yönlendirmektedir (Şengül, 2020). Sözleşmeli üretim, üreticilerin karşılaştığı riskleri azaltma yanında üretkenliğini de artırmaktadır (MacDonald and Korb, 2011). Sözleşmeli üretimin hem üreticiler hem de işleyiciler için birincil potansiyel katkısı, risk azaltmada yatmaktadır (Mishra, 2018). Bu üretim ve pazarlama modeli, çiftçilerin ürünlerinin miktarını, spot piyasalara kıyasla kazandıkları fiyatı veya her ikisini makul bir şekilde tahmin etmelerini sağladığından, pazar riskini (bir yetiştiricinin ne kadarını ve hangi fiyattan satabileceği konusundaki belirsizliği) azaltır. Sözleşmeli üretim aynı zamanda fiyat riskini de azaltabilir; üreticiler genellikle gelişmekte olan ülkelerde ürün/mahsulleri için spot piyasadan ne kadar alacaklarından emin değildirler, bu da ciddi refah kayıplarına neden olmaktadır. Halbuki sözleşmeli üretim, fiyatları önceden belirleyerek fiyat riskini azaltabilir ve fiyat riskinin azalmasıyla, çiftçiler daha öngörülebilir gelir akışlarından ve daha iyi yatırım kararlarından yararlanabilir (Bellemare and Lim, 2018). Fiyat ve pazar risklerindeki azalma, arıcıları tek ürün odaklı (bal) çalışmaktan üretiminde çeşitlendirmeye (polen, propolis, arı sütü, arı ekmeği, arı zehiri vb.) de yönlendirebilmektedir.

Arıcılık işletmelerinde üretilen bal ve katma değeri yüksek diğer arı ürünlerinin uygun/tutarlı kalite standartları, modern tarım değer zincirlerinin temel gerekliliklerinden biridir (Bellemare and Lim, 2018). Arıcılıkta sözleşmeli üretim, izlenebilirliği sağladığından belirli standart ve kalitedeki ürünlerin üretimi kolaylıkla sağlanabilmektedir. Sözleşmeli üretim ile izlenebilirliğin sağlanması satın aldıkları arı ürünlerinin kaynağı ve kalitesinden emin olmak isteyen tüketicilerin talebinin karşılanması yanı sıra, ihracatı hedefleyen işleyici firmalar için de önem kazanmaktadır (RIU, 2022).

Likiditeye erişim, arıcılık faaliyeti ile geçimini sağlayan kırsal nüfusun önündeki önemli sorunlardan bir diğeridir. Diğer taraftan kovan başına verilen desteklerde yetersiz kalmaktadır (Ören vd., 2010, Sert, 2017, Söğüt vd., 2019). Bu noktada sözleşmeli üretimde yüklenici tarafından sunulan girdi tedariki şeklinde aynı krediler üretimin sürekliliğini sağlayabilir.

Sözleşmeli üretimin arıcılık sektörünün sorunlarına getirdiği çözümlerin yanı sıra, sözleşmelerin uygulanmasından veya yapısından kaynaklı üreticinin yan satış yapması; yüklenicinin bir ürünü kararlaştırılan fiyattan satın almayı reddetmesi; yüklenicinin önceden kararlaştırılan miktarları satın almaması ve yüklenici tarafından ürünün kalitesinin düşürülmesi veya eksik tartılması gibi bazı sorunlar ortaya çıkabilmektedir (RIU, 2022). Yan satış, genellikle istekli alıcıların sayısındaki artışla ilişkilendirilir. Alternatif pazarlar geliştirmede ve rakip alıcılar rekabetçi fiyatlar sunduğunda, çiftçilere sözleşmelerini feshetmeleri için teşvik verilebilir.

Sözleşmeli üretimle ilgili bir diğer sorun eşitsiz pazarlık gücüdür. Yüklenici firmalar genellikle küçük üreticilerden daha fazla bilgi, kaynak ve organizasyon becerisine sahiptir. Yükleniciler bu becerilerini finansal avantajları için kullanma eğiliminde olduklarından daha iyi derecede pazarlık güçleri bulunmaktadır. Çiftçilerin iyi organize olmadığı veya ürünleri için az sayıda alternatif alıcıya sahip olduğu veya başka bir ürüne kolaylıkla geçebilecek durumda olmadığı durumlarda, çiftçilerin zayıf pazarlık güçleri nedeniyle adil bir anlaşma sağlayamama olasılığı bulunmaktadır.

Diğer taraftan sözleşmeli üretim, yüklenici için işgücü yönetimini azaltabilse de, gerçekte bu yük, çiftçilik yapan yoksul ailelere aktarılmakta, hatta kadın ve çocukları da kapsayan aile emeğinin sömürülmesine yol açabilir.

Sözleşmeli üretim düzenlemeleri risk yükünün önemli bir kısmını yüklenicinin omuzlarına yükler. Çoğu sözleşme, firmanın tüm ürünleri genellikle geçerli piyasa fiyatından daha yüksek bir fiyattan satın alacağını şart koşar. Firma, kötü yönetim veya çevresel faktörler nedeniyle üretim başarısızlığı riskinin yanı sıra fiyat riskini de üstlenebilir. Potansiyel kayıpları önlemek için firma, yönetim üzerinde sıkı bir kontrol sağlayabilir ve verimsiz çiftçileri gelecekteki sözleşmelerden dışlamak için mevsimlik veya yıllık sözleşmeler sunabilir. Bu bağlamda, sözleşmeli üretim, yüklenici açısından üst düzey yönetim becerileri gerektirir. İşletmede çiftçileri düzgün bir şekilde denetlemek için çok yetenekli bir yönetime ihtiyaç vardır. Kötü yönetim ve sözleşme tarafları arasındaki iletişim eksikliği, çiftçilerin memnuniyetsizliğine ve sözleşmeden doğan anlaşmanın bozulmasına yol açabilir.

Bunlarla beraber Uluslararası Bal Pazarı Şubat 2021 raporuna göre; arıcılar, dürüst paketleyiciler ve dürüst ihracatçılar, arı ürünlerinin yaratıcı pazarlamasında kaçınılmaz olarak artan bir şekilde insiyatif alacaklarını belirtmiştir (Phipps, 2021). Bu bağlamda arıcılıkta sözleşmeli üretim Türkiye açısından incelendiğinde; 2000 yılında arıcılık alanında gelen dış talep doğrultusunda İzmir'in Kemalpaşa ilçesinde bulunan bir firma organik bal üreten arıcılarla sözleşmeli arıcılık modelini uygulamıştır (Saner vd., 2005). Ancak bu proje kısa süreli olmuştur. 2017 yılında Türkiye Arı Yetiştiricileri Merkez Birliği (TAB) tarafından sözleşmeli arıcılık projesi üzerinde çalışılmış, arı ürünleri pazarında da tekelleşme ve kaçak üretimin bu proje ile önüne geçilmesi planlanmıştır (Maybir, 2022). Diğer taraftan son yıllarda sözleşmeli üretim modeli bazı arı ürünlerinde (propolis, arı sütü, arı ekmeği, arı zehiri vb.) görülmeye başlanmıştır. Sektörde faaliyet gösteren firmalardan birisi de son yıllarda bu konuda önemli adımlar atmış, gerek propolis, arı sütü, polen, arı ekmeği (perga) gibi katma değerli arı ürünleri üretimi konusunda üreticilerle sözleşme yaparak, arı ürünlerinin belli fiyattan, belli üretim koşullarında ve belli nitelikler doğrultusunda doğrudan arıcıya ürettirilmesi konusunda iş modelini ortaya koymuştur. Firma kovandan sofraya izlenebilir üretim ve üreticiye alım garantisi ile kalite ve üretime odaklanmayı da hedeflemiştir.

Son dönemde bazı firmaların da bu tip sözleşmelere yöneleceği beklenmektedir. Göksu ve Saner(2021) tarafından yapılan bir çalışmada 2021 yılından itibaren çam balı üretici reel satış fiyatlarının dalgalı bir seyir izleyerek düşüş eğiliminde olacağı beklenmektedir. Türkiye'de bal üretiminde fiyat düşüklüğünün ürün pazarlamasında oluşturduğu bu etkiler yapılan birçok araştırmada vurgulanmıştır (Çevrimli ve Sakarya 2019; Çukur vd. 2019; Onuç vd, 2019). Diğer taraftan Dünyada çam balının %93'ünü üreten Türkiye'de, çam balı üretiminin fazla olduğu dönemde ürünün depolanması, az olduğu dönemde ise piyasaya arz edilmesine olanak veren ve ürün sahiplerinin mallarının kalitesini koruyan bir depolama sistemine de gerek duyulmaktadır. Çam balının da lisanslı depolarda depolanabilecek ürün kapsamına alınıp, lisanslı depolarda bulunan ürünleri temsil eden elektronik ürün senedi ile kayıt altına alınarak Türkiye Ürün İhtisas Borsasında (TÜRİB) işlem görmesi son derece önemlidir (Göksu, 2022).

5. SONUÇ

Bu çalışma literatür taramasına dayanarak arıcılık işletmelerinde sözleşmeli üretim modelinin çerçevesini oluşturmak amacıyla yapılmıştır. Aslında sözleşmeli tarım, gelişmekte olan ülkelerin tarımında dikey koordinasyonu desteklemek ve teşvik etmek için popüler bir mekanizma olarak ortaya çıkmıştır.

Arıcılık sektörünün sürdürülebilirliğini sağlamak için sözleşmeli üretim önemli bir araç olarak görülmektedir. Sözleşmeli üretim programlarının sürdürülebilir bir şekilde uygulanması için destekleyici bir yasal ortamın olması çok önemli iken, Türkiye'de sözleşmeli üretim sadece bir yönetmelikle idare edilmektedir. Sözleşmeli üretim bir an önce yasa ile düzenlenerek, cezai müeyyide getirilmesi son derece gereklidir.

Sözleşmeli üretim yapılırken, her iki tarafında bu sözleşme çerçevesinde mağduriyet yaşamaması için sözleşmelerin açık, şeffaf olması ve ürünlerin alım garantisi ile kabul edilebilir(değer) fiyatlardan alınması son derece önemlidir. Ayrıca tüketici gözünde marka bilinirliği; güvenilirlik, kalite ve prestij olarak algılandığından firmalar pazar paylarını markaları ile korurken, üreticiyi de gerek yeni tekniklerle, eğitimlerle desteklemeli ve sivil toplum kuruluşları ile işbirliği içinde çalışmalıdır. Devletin de kovan başına verilen destekten vazgeçerek, sözleşmeli üretime arıcıları yönlendirebilecek, arıcı birliklerini ve bal kooperatiflerini desteklemesi, kaliteli bal ve arı ürünlerine prim ödemesi yapması ve birlik/kooperatiflere kalıntı analiz desteği vermesi son derece önemlidir. Ancak bu model dışında arı ürünlerinde doğrudan pazarlama seçeneklerinin yaygınlaşması için arıcılara ihtiyaçlar doğrultusunda eğitim ve danışmanlık hizmeti verilmeli, Türkiye Arı Yetiştiricileri Merkez Birliği(TAB), Bal kooperatifleri, STK'lar, firmalar ve üniversiteler işbirliği içinde çalışmalıdırlar.

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Kirlilik Sığınağı Hipotezi: Asya-Pasifik Ülkeleri İçin Ampirik Kanıtlar

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Özet: Küreselleşmeyle birlikte doğrudan yabancı yatırımlar bir ülkenin kalkınmasında ve büyümesinde kilit bir faktör olarak kabul edilmektedir. Bununla birlikte yabancı yatırımlar teknoloji transferi, üretimde verimlilik artışı, istihdam ve yeni yönetim becerilerinin kazanımı gibi ülke ekonomileri üzerinde beklenen olumlu etkileri açısından önem arz etmektedir. Bu nedenle ülkeler arasında doğrudan yabancı yatırım kaynaklarını kendi ülkesine çekmek için şiddetli bir rekabet bulunmaktadır. Diğer taraftan doğrudan yabancı yatırımlar bazen ülke ekonomileri için çevresel bozulmaya yol açabilecek ana faktörlerden biri olarak kabul edilmektedirler. Bu doğrultuda çalışmada 13 Asya-Pasifik ülkesine ait 1985-2021 yılları verileri kullanılarak doğrudan yabancı yatırımların karbon emisyonları üzerindeki etkisi araştırılmıştır. Çalışmada yatay kesit bağımlılığı kontrol edilmiş ve yatay kesit bağımlılığının olduğu durumlarda kullanılması gereken ikinci kuşak panel birim kök testleri uygulanmıştır. Birim kök testleri sonucunda değişkenlerin düzey değerlerinde durağan olmadıkları görülmüş, I(1) düzeyinde ise durağan oldukları tespit edilmiştir. Değişkenlerin arasındaki uzun dönem ilişkisi tespit edebilmek için Westerlund Panel Eşbütünleşme Testi kullanılmıştır. Analiz sonucunda değişkenler arasında eşbütünleşme ilişkisinin bulunmadığı ortaya çıkmıştır. Bu nedenle çalışmada kullanılan ülkeler için kirlilik sığınağı hipotezinin geçerli olmadığı sonucuna ulaşılmıştır.

Anahtar Kelimeler: Doğrudan Yabancı Yatırımlar, Karbon Emisyonları, Panel Eşbütünleşme Testi.

The Pollution Haven Hypothesis: Empirical Evidence for Asia-Pacific Countries

Abstract: Foreign direct investment is recognized as a key factor in the development and growth of a country along with globalization. In addition, foreign investments are important in terms of the expected positive effects on the country's economies such as technology transfer, productivity increase in production, employment and the acquisition of new management skills. For this reason, there is intense competition between countries to attract foreign direct investment resources to their own country. On the other hand, foreign direct investments are sometimes considered as one of the main factors that can lead to environmental degradation for national economies. In this direction, the effect of foreign direct investments on carbon emissions was investigated by using data from 13 Asia-Pacific countries for the years 1985-2021. In the study, cross-sectional dependence was checked and second-generation panel unit root tests, which should be used in cases where there is cross-sectional dependence, were applied. As a result of the unit root tests, it was observed that the variables were not stationary at the level values, but were found to be stationary at the I(1) level. Westerlund Panel Cointegration Test was used to determine the long-term relationship between the variables. As a result of the analysis, it was revealed that there was no cointegration relationship between the variables. For this reason, it has been concluded that the pollution haven hypothesis is not valid for the countries used in the study.

Key Words: Foreign Direct Investment, Carbon Emissions, Panel Cointegration Test.

1. GİRİŞ

Doğrudan yabancı yatırımlar, çok uluslu şirketlerin yeni bir tesis kurmak veya mevcut bir tesisi kısmen veya tamamen satın almak amacıyla yaptıkları yatırım şeklidir. Bu yatırımların kaynakları; döviz, makine ve teçhizat, fikri ve sınai mülkiyet hakları ve şirket menkul kıymetleri şeklindedir (Uygur, 2017). Doğrudan yabancı yatırımlarda, yatırımcı yurt dışındaki tesisin mülkiyetine kısmen veya tamamen sahip olmanın yanında yönetimini ve denetimini elinde bulundurmaktadır (Seyidoğlu, 2017). Doğrudan yabancı yatırımların yapıldıkları ülkeler açısından olumlu ve olumsuz yönleri olabilmektedir. Yatırım yapılan ülkedeki yerel ekonomi için teknolojik dışsallıklar, bilgi yayımları, iş becerisi ve yönetim bilgileri sağlamaları faydaları arasındadır. Ayrıca yerli firmaların toplam faktör verimliliği ve ihracat eğilimleri üzerinde olumlu etkiler bırakabilirler. Üretim artışı sağlarken aynı zamanda istihdam yaratabilirler. Ancak doğrudan yabancı yatırımların teknolojik dış bağımlılık yaratma, yerli şirketler açısından ek rekabet unsurları oluşturma, yerli yatırımlar üzerinde azaltıcı etki gibi olumsuz yönleri de bulunmaktadır (Markusen ve Venables, 1999). Doğrudan yabancı yatırımların olumsuz olarak görülen bir diğer yanı ise çok uluslu şirketlerin daha düşük çevre standartlarına sahip ülkelerde yatırım

yapma eğilimleridir. Literatürde bir ülkeye doğrudan yabancı yatırım girişi ile çevre kirliliği arasındaki ilişki kirlilik sığınağı hipotezine dayalı olarak açıklanmaktadır. Kirlilik sığınağı hipotezine göre, gelişmekte olan ülkelerdeki yaptırımların veya çevresel düzenlemelerin eksikliği, bu ülkeleri kirlilik yoğun endüstrilerde uzmanlaşmaya teşvik etmektedir (Kearsle ve Riddel, 2010). Çünkü bu ülkeler ekonomilerini hızlı bir şekilde inşa etmek için doğrudan yabancı yatırımlara ihtiyaç duyarlar. Çevre standartlarını düşük tutarak yatırım çekme yolu, yüksek kirlilik ve yüksek enerji tüketimine sahip endüstrilerin gelişmiş ülkelere transferine yol açmakta, bu durum gelişmekte olan ülkelere kirlilik seviyesini artırmakta ve ev sahibi ülke gelişmiş ülkeler için bir kirlilik cenneti haline gelmektedir (Cole vd., 2006). Teorik ve ampirik çalışmalar açısından bakıldığında kirlilik sığınağı hipotezine karşı olarak doğrudan yabancı yatırımların çevre standartlarını iyileştirdiğini ifade eden bulgulara da rastlanmaktadır. Bu çalışmalarda ele alınan kirlilik hale hipotezine göre, doğrudan yabancı yatırım yapan çok uluslu şirketler az gelişmiş ülkelere teknoloji transferi yoluyla getirdikleri çevre standartları nedeniyle, ev sahibi ülkede daha yeşil teknolojilerin yayılmasına katkı sağlarlar (Hoffman, 2005). Kirlilik sığınağı hipotezi ve kirlilik hale hipotezinin geçerliliğini araştıran literatürdeki çalışmalara bakıldığında, çalışmaların ele alınan ülke, dönem ve yöntemler itibarıyla farklılık gösterdiği görülmektedir. Bu doğrultuda çalışmanın amacı doğrudan yabancı yatırımlar açısından önemli olan 13 Asya-Pasifik ülkesinde doğrudan yabancı yatırımların karbon emisyonları üzerindeki etkisini analiz etmektir. Bu doğrultuda çalışmanın ikinci bölümünde literatür yer alırken üçüncü bölümünde de veri seti ve yöntem hakkında bilgiler verilmektedir. Son bölümde ise analiz sonuçları ve değerlendirme yer almaktadır.

2. LİTERATÜR TARAMASI

Doğrudan yabancı yatırımlarla çevre arasındaki ilişkiyi inceleyen literatür kirlilik sığınağı hipotezinin geçerliliğini araştıran çalışmalar üzerinde yoğunlaşmaktadır. Bu çalışmaların bir kısmı kirlilik sığınağı hipotezinin bazı ülkelerde geçerli olduğunu ortaya koyarken, bazıları ise kirlilik sığınağı hipotezinin geçerli olmadığını tespit etmiştir. Çalışmanın bu bölümünde literatürdeki çalışmaların kısa bir özetine yer verilmiştir. Bu çalışmalar üç grupta kategorize edilmiştir. Öncelikle kirlilik sığınağı hipotezinin geçerli olduğunu ortaya koyan çalışmalara yer verilmiştir. Daha sonra kirlilik sığınağı hipotezinin geçerli olmadığını tespit eden, son olarak hipotezin ele alınan ülkelere bazıları için geçerli, bazıları için geçersiz olduğunu tespit eden çalışmalara yer verilmiştir. Kirlilik sığınağı hipotezinin geçerliliğini destekleyen çalışmalar; List ve Co (1999) ABD için 1986-1993 yılları arasındaki eyalet düzeyindeki verileri kullandıkları çalışmalarında çevresel düzenlemelerin sıklığı ile yatırım yapılacak ülkenin çekiciliği arasında ters orantı olduğunu ortaya koymuşlardır. Cole vd. (2006) 33 ülke için 1982-1992 verilerini kullandığı çalışmada daha az katı çevre politikası bulunan yolsuzluğun yüksek olduğu ülkelere kirlilik sığınağı hipotezinin geçerli olduğunu ortaya koymuşlardır. He (2006) çalışmada Çin'in 29 eyaleti için 1994-2001 verilerini kullanmış ve doğrudan yabancı yatırımların endüstriyel SO₂ emisyonu üzerindeki toplam etkisinin çok küçük olduğunu ancak kirlilik sığınağı hipotezinin geçerli olduğunu ortaya koymuştur. Lee (2009) Malezya için 1970-2000 yılları verilerini kullandığı çalışmada doğrudan yabancı yatırımlardan karbon emisyonlarına doğru tek yönlü nedensellik tespit etmiştir. Pao ve Tsai (2011) çalışmada BRIC ülkelerinde 1980-2007 verilerini kullanarak doğrudan yabancı yatırımlarla karbon emisyonları arasında uzun dönemli ilişki ve çift yönlü nedensellik tespit etmişlerdir. Blanco vd. (2013) çalışmada 1980-2007 dönemi için 18 Latin Amerika ülkesinde kirlilik yoğun endüstrilerdeki doğrudan yabancı yatırımlardan kişi başına karbon emisyonlarına doğru bir nedensellik bulunduğunu tespit etmişlerdir. Shahbaz vd. (2015) yüksek, orta ve düşük gelirli 99 ülke için 1975-2012 yılları verilerini kullandıkları çalışmalarında doğrudan yabancı yatırımların çevresel bozulmayı artırdığını, kirlilik sığınağı hipotezinin geçerli olduğunu ve karbon emisyonları ile doğrudan yabancı yatırımlar arasında çift yönlü nedenselliğin küresel olarak gözlemlendiğini tespit etmişlerdir. Yıldırım vd. (2017) çalışmalarında Türkiye'de 1974-2013 yılları verileriyle doğrudan yabancı yatırım artışlarının belirli bir seviyeye kadar karbon emisyonlarını artırdığını ortaya koymuşlardır. Işık ve Işık (2019) 6 Orta Asya Türk Cumhuriyeti için 1995-2016 yılları verilerini kullandıkları çalışmalarında kirlilik sığınağı hipotezinin geçerli olduğu sonucuna ulaşmışlardır. Şahin vd. (2019) çalışmalarında 1990-2015 yılları verileriyle Türkiye'de kirlilik sığınağı hipotezinin geçerli olduğu sonucuna ulaşmıştır. Mike (2020) çalışmada 1970-2012 yılları verilerini kullanmış ve Türkiye'de kirlilik sığınağı hipotezinin geçerli olduğu sonucuna ulaşmıştır. Pehlivanoğlu ve Solmaz (2020) BRIC ve MIST ülkelerinde 1990 ve 2015 yılı verilerini kullanmış ve doğrudan yabancı yatırımların karbon emisyonlarını artırdığı sonucuna ulaşmışlardır. Yurtkuran (2021) çalışmada 1971-2018 yılları verilerini kullanmış ve Türkiye'de kirlilik sığınağı hipotezinin geçerli olduğu sonucuna ulaşmıştır. Xu vd. (2021) Çin'in eyalet düzeyindeki 2002-2016 verilerini kullandıkları çalışmalarında doğrudan yabancı yatırımlarla SO₂ emisyonları ve kömür tüketimi arasında ters U şeklinde, doğrudan yabancı yatırım ile doğal gaz tüketimi arasında U şeklinde bir ilişkisi olduğunu tespit etmişlerdir. Caetano vd. (2022) çalışmalarında 15 OECD ülkesinde 2005-2018 yılları verilerini kullanmış, toplam doğrudan yabancı sermaye stoğu ile imalat, inşaat ve hizmet sektörlerindeki toplam

doğrudan yabancı sermaye stoğunun kirliliği artırdığını, birincil sektör sermaye stoğunun kirliliği azalttığını ortaya koymuşlardır.

Literatürde kirlilik sığınağı hipotezinin ele alınan ülkeler için geçerli olmadığını ortaya koyan çalışmalar; Talukdar ve Meisner (2001) 44 gelişmekte olan ülkenin 1987-1995 yılları verilerini kullanarak gelişmekte olan ülkelerdeki doğrudan yabancı yatırımların gelişmiş ülkelerdeki kirli endüstriler için kirlilik cenneti olmaktan çok, gelişmiş, daha temiz çevre teknolojileri sağlama olasılığının daha yüksek olduğunu göstermişlerdir. Zheng vd. (2010) Çin'in 35 eyalet düzeyinde 1997-2006 yılları verilerini kullandıkları çalışmalarında kişi başına düşen doğrudan yabancı yatırım akışının daha yüksek olduğu şehirlerin daha düşük kirlilik seviyelerine sahip olduğunu ortaya koymuşlardır. Fereidouni (2013) çalışmasında 2000 ve 2008 yılları arasında 31 yükselen ekonomide gayrimenkul sektöründeki doğrudan yabancı yatırımların karbon emisyonlarını artırmadığı sonucuna ulaşmıştır. Lee (2013) 1971-2009 verilerini kullandığı G-20 üyesi 19 ülke için net doğrudan yabancı yatırım girişlerindeki artışın CO2 emisyonlarındaki bir artışa eşlik etmediğini ortaya koymuşlardır. Şahinöz ve Fotourehchi (2014) çalışmalarında 1974-2011 yılları verileriyle Türkiye'de doğrudan yabancı yatırımların karbon emisyonlarını azalttığı sonucuna ulaşmışlardır. Phuong ve Tuyen (2018) 1986-2015 yılı verilerini kullanarak doğrudan yabancı yatırımların Vietnam'daki çevre kirliliği üzerinde artırıcı etkileri olduğu veya çevre ile ilgili düzenlemelerin gevşetilmesinin Vietnam'ın yabancı yatırımcılar için ekonomik çekiciliğini artıracak sonucuna varmak için yeterli istatistiksel kanıt bulunmadığını göstermiştir. Huynh ve Hoang (2019) 19 Asya ülkesinin 2002-2015 verilerini kullandıkları çalışmalarında doğrudan yabancı yatırım girişlerinin başlangıçta Asya'daki hava kirliliğini artırdığını, ancak kurumsal kalite belirli bir seviyeye eriştiğinde kirliliği azalttığı sonucuna ulaşmışlardır. Nathaniel vd. (2020) çalışmasında Kıyı Akdeniz ülkelerinin 1980-2016 yılları verilerini kullanmış ve Kıyı Akdeniz ülkelerinde kirlilik sığınağı hipotezinin geçerli olmadığını sonucuna ulaşmışlardır. Chen vd. (2022) çalışmasında 2001-2015 eyalet düzeyindeki verilerini kullandıkları çalışmalarında doğrudan yabancı yatırımların karbon emisyonlarını, hava ve su kalitesini iyileştirdiğini, sonuçların kirlilik sığınağı hipotezi ile çeliştiğini göstermişlerdir.

Son olarak kirlilik sığınağı hipotezi geçerliliğinin ülkeden ülkeye farklılık gösterdiği çalışmalar; Zeren (2010) 1970-2010 yılları verilerini kullandığı ve doğrudan yabancı yatırımların karbon emisyonları üzerindeki etkisini araştırdığı çalışmasında Fransa, ABD ve İngiltere'de kirlilik hale hipotezinin geçerli olduğunu, Kanada'da kirlilik sığınağı hipotezinin geçerli olduğu bulgusuna ulaşmıştır. Kim ve Adilov (2012) çalışmasında 164 ülkenin 1961-2004 verilerini kullanmış, gevşek çevre düzenlemelerinin doğrudan yabancı yatırımları çekebileceğini, ancak yabancı şirketlerin düşük gelirli ülkelerdeki yerel şirketlere kıyasla daha az kirlilik teknoloji kullandığını göstermiş, kirlilik sığınağı hipotezinin tüm ülkelerde geçerli olmadığını, bazı ülkelerde doğrudan yabancı yatırımların karbon emisyonları üzerinde azaltıcı etkisi bulunduğunu ortaya koymuşlardır. Omri vd. (2014) 54 ülkeye ait 1990-2011 yılı verilerini kullandıkları çalışmalarında Avrupa ve Kuzey Aya hariç tüm ülkelerde doğrudan yabancı yatırımlarla karbon emisyonları arasında çift yönlü nedensellik olduğunu tespit etmişlerdir. Kiviyiro ve Arminen (2014) 1971-2009 verilerini kullandıkları çalışmasında altı Sahra-Altı Afrika ülkesinden Zimbabwe ve Kenya'da doğrudan yabancı yatırımların karbon emisyonlarını artırdığını, Demokratik Kongo Cumhuriyeti ile Güney Afrika'da doğrudan yabancı yatırımların karbon emisyonlarını azalttığını, Kongo Cumhuriyeti ve Zambia'da doğrudan yabancı yatırımlarla karbon emisyonları arasında ilişki bulunmadığını tespit etmişlerdir. Kisswani ve Zaitouni (2021) çalışmalarında dört Asya ülkesinde 1971-2014 yılları verilerini kullanmışlar, Filipinler için kirlilik sığınağı hipotezinin doğrulandığını ancak Malezya ve Singapur'da kirlilik hale hipotezinin geçerli olduğunu ortaya koymuşlardır. Literatürdeki çalışmalar incelendiğinde sonuçların kullanılan yöntem ve ele alınan örnekleme göre değişiklik gösterdiği görülmektedir. Bu farklı sonuçlar doğrudan yabancı yatırımların etkileri açısından bazı ülkelerde kirlilik sığınağı hipotezinin, bazı ülkelerde ise kirlilik hale hipotezinin geçerli olduğu argümanını desteklemektedir.

3. VERİ SETİ, YÖNTEM VE METODOLOJİ

Çalışmada 13 Asya-Pasifik (Çin, Japonya, Güney Kore, Singapur, Tayland, Bangladeş, Hindistan, Endonezya, Malezya, Pakistan, Filipinler, Sri Lanka, Vietnam) ülkesine ait 1985-2021 yılları verileri kullanılmıştır. Değişkenler arasındaki uzun dönemli ilişkinin tespit edilebilmesi için eşbütünleşme analizinden yararlanılmıştır. Çalışmada kullanılan ekonometrik yöntemlerden aşağıda kısaca bahsedilmiştir.

Tablo 1: Değişkenlerin Tanımlanması

Değişkenler	Tanımlar	Kaynak
CO	Milyon ton karbondioksit	BP İstatistikleri
DYY	Milyon ABD doları	UNCTAD

Modelin genel gösterimi aşağıdaki gibidir. Model Yıldırım vd. (2017), Kisswani ve Zaitouni (2021) tarafından kullanılan benzer yöntemler dikkate alınarak türetilmiştir.

$$CO_{it} = f(DYY)$$

$$CO_{it} = \beta_0 + \beta_1 DYY_{it} + \varepsilon_{it}$$

Analiz aşamasında herhangi bir test yapmadan önceki ilk aşama, yatay kesit bağımlılığının kontrol edilmesidir. Yatay kesit bağımlılığının varlığını gösteren bu tür bir korelasyon, ülkeler arasında farklı etkileri olan ortak küresel şoklardan kaynaklanabilir. Çalışmada yatay kesit bağımlılığının değerlendirilmesinde üç farklı test kullanılmıştır. Bunlar LM Breusch Pagan (1980), CD Pesaran (2004) ve LMadj-Düzeltilmiş LM (2008) birimler arası korelasyon testleridir.

Yatay kesit bağımlılığı sıfır ve alternatif hipotezi;

$$H_0: Cov(\mu_{it}, \mu_{jt}) = 0 \text{ tüm } t \text{ ve } i \neq j$$

$$H_1: Cov(\mu_{it}, \mu_{jt}) \neq 0 \text{ en az bir çift } i \neq j \text{ için şeklindedir.}$$

Daha sonra eğim parametrelerinin homojenliği Pesaran ve Yamagata Δ Testi (2008) ile kontrol edilmiştir. Sıfır ve alternatif hipotezi;

$$H_0: \text{Eğim katsayıları homojendir}$$

$$H_1: \text{Eğim katsayıları heterojendir, şeklindedir.}$$

Birimler arası korelasyon ve eğim parametrelerinin homojenliğine göre uygun birim kök testi seçilmiştir. Panel birim kök testleri, örnek çekim sürecinin bir sonucu olarak birinci kuşak ve ikinci kuşak panel birim kök testleri olmak üzere ikiye ayrılmaktadır. Birinci kuşak panel birim kök testlerinde, birimler arasında korelasyon dikkate alınmaz. Ancak birimler arası korelasyon olduğunda bu testlerin gücü zayıftır. İkinci kuşak panel birim kök testleri ise, birimlere ait seriler arasında korelasyonu dikkate almaktadır. Çalışmada bu nedenle ikinci kuşak panel birim kök testlerinden heterojen panel birim kök testi olan Im, Pesaran ve Shin (2003) birim kök testi kullanılmıştır.

Değişkenlerin durağanlık seviyelerinin $I(1)$ olduğu durumlara panel eşbütünleşme testleri kullanılmaktadır. Westerlund (2007), eşbütünleşmenin varlığını tespit etmek için hata düzeltme modeli temelli 4 adet panel eşbütünleşme testi önermiştir. Testte otoregresif parametrenin iki şekilde değerlendirilmesine izin verilmektedir. Panel varyans oranı istatistikleri (Pa ve Pt) adını alan birinci tür istatistiklerde, tüm birimler için otoregresif parametre sabittir. Grup ortalaması varyans oranı istatistikleri (Ga ve Gt) ismini alan ikinci tür istatistiklerde ise otoregresif parametre birimden birime değişmektedir.

Westerlund eşbütünleşme testi hipotezleri;

$$H_0: \text{Değişkenler arasında eş bütünleşme yoktur.}$$

$$H_1: \text{Değişkenler arasında eş bütünleşme vardır.}$$

4. ANALİZ SONUÇLARI

Tablo 2’de yatay kesit bağımlılığı, Tablo 3’te homojenlik testi, Tablo 4’te birim kök testi sonuçları, Tablo 5’te gecikme uzunluğu seçimi ve Tablo 6’da eşbütünleşme testi sonuçlarına yer verilmiştir.

Tablo 2: Yatay Kesit Bağımlılığı Test Sonuçları

Breusch-PaganLM	LM adj	CD _{LM}
364.6 (0.0000)*	77.48 (0.0000)*	13.56 (0.0000)*

*%1 düzeyinde anlamlılığı temsil etmektedir.

Çalışmada yatay kesit bağımlılığının değerlendirilmesinde üç farklı test kullanılmıştır. Tablo 2’de yer alan yatay kesit bağımlılığı testi sonuçlarına göre tüm değişkenler için yatay kesit bağımlılığı yoktur şeklindeki sıfır hipotezi reddedilmektedir.

Tablo 3: Homojenlik Testi Sonuçları (Pesaran, Yamagata:2008)

Δ	Δ_{adj}
29.407 (0.000)*	30.677 (0.000)*

*%1 düzeyinde anlamlılığı temsil etmektedir.

Tablo 3'te yer alan homojenlik testi sonuçlarına göre eğim parametreleri homojen değil, heterojendir. Bu nedenle heterojen ve yatay kesit bağımlılığının dikkate alındığı birim kök testlerini uygulamak gerekmektedir. Bu nedenle ikinci kuşak, ikinci grup panel birim kök testlerinden Im, Peseran ve Shin (2003) birim kök testi kullanılmıştır.

Tablo 4: IPS Birim Kök Testi Tahminleri

Değişkenler	Sabit	Sabit ve Trend
CO-Düzey	8.1227(1.000)	0.8330(0.7976)
CO-Birinci Fark	-6.7606(0.000)*	6.5784(0.000)*
DYY-Düzey	5.4273(1.000)	-2.8110(0.0025)*
DYY-Birinci Fark	-25.0707(0.000)*	-25.4057(0.000)*

*%1 düzeyinde anlamlılığı temsil etmektedir.

Tablo 4'te yer alan birim kök testi sonuçlarına göre karbon emisyonu değişkeni düzeyde sabitli ve sabitli-trendli modelde durağan değildir. Doğrudan yabancı yatırımlar değişkeni düzeyde sabitli durağan değilken, düzeyde sabitli-trendli durağandır. Değişkenlerin birinci farkları alındığında her iki değişkenin sabitli ve sabitli-trendli modelde olmak üzere durağan hale geldikleri görülmektedir.

Tablo 5: Gecikme Uzunluğunun Seçimi

Gecikme Sayısı	BIC	AIC	QIC
1	-81.65349*	-20.48476	-44.86311*
2	-65.50763	-19.63108	-37.91485
3	-43.25394	-12.66957	-24.85875
4	-22.31823	-7.026047	-13.12063

*En düşük bilgi kriterini sağlayan gecikme uzunluğunu ifade etmektedir.

Eşbütünleşme analizinin yapılabilmesi için uygun gecikme uzunluğunun belirlenmesi gerekmektedir. Bu doğrultuda Tablo 5'te gecikme uzunluğunun seçimine ilişkin sonuçlara yer verilmiştir. Üç farklı bilgi kriteri incelenmiş ve en uygun gecikme uzunluğu 1 olarak seçilmiştir.

Tablo 6: Westerlund ECM Panel Eşbütünleşme Testi (Bootstrap)

Statistic	Value	Z-value	P-value	Robust P-value
Gt	-1.010	3.174	0.999	0.970
Ga	-3.454	2.493	0.994	0.980
Pt	-1.069	4.193	1.000	0.650
Pa	-1.149	2.520	0.994	0.580

Westerlund (2007), panel verilerle çalışırken eşbütünleşmenin varlığını sınamak için, hata düzeltme modeli temelli 4 adet panel eşbütünleşme testi önermiştir. Westerlund (2007) panel eşbütünleşme testinde, birimler arası korelasyonun varlığında dirençli kritik değerler bootstrap süreci sonucunda elde edilebilmektedir. Çalışmada birimler arası korelasyon durumunda yanıltıcı sonuçlardan kaçınmak için bootstrap kritik değerlere 100 olarak izin verilmiştir. Bu hususlar dikkate alınarak yapılan eşbütünleşme testi sonucunda dört adet test istatistiğine ait robust olasılık değerlerinin 0,05'ten büyük olduğu görülmektedir. Test istatistiğinin 0,05'ten büyük olduğu durumlarda eşbütünleşme ilişkisi yoktur şeklindeki sıfır hipotezi reddedilememekte, diğer bir deyişle kabul edilmektedir. 13 Asya-Pasifik ülkesi için doğrudan yabancı yatırımlarla karbon emisyonları arasında eş bütünleşme ilişkisi yoktur.

5. SONUÇ VE ÖNERİLER

Çevresel duyarlılık, üretim yeri seçimi, yatırım ve ticaret arasındaki ilişki bir ülkenin ekonomik politikaları açısından önemli konulardır. Bu ilişkiler açısından dikkat çekici olan husus ticaret engellerinin azaltılmasının, kirlitici endüstrilerde üretim yapan çok uluslu şirketlerin üretim faaliyetlerini daha az katı çevresel düzenlemeye sahip alanlara taşıdığını varsayan kirlilik sığınağı hipotezidir. Bu doğrultuda çalışmada 13 Asya-Pasifik ülkesinin 1985-2021 yılları doğrudan yabancı yatırım ve karbon emisyonu verileri kullanılarak kirlilik sığınağı hipotezinin geçerliliği panel eşbütünleşme analizi yardımıyla incelenmiştir. Çalışmanın sonuçları doğrudan yabancı yatırımların karbon emisyonları ve çevre kalitesi üzerinde doğrudan bir etkisi olmadığına işaret etmektedir. Analiz sonuçları bu ülkelerde kirlilik sığınağı hipotezinin geçerli olmadığını göstermektedir. Sonuçlara bakıldığında 13 Asya-Pasifik ülkesinde çevre kalitesine ilişkin bir dizi politika çıkarımı yapılabilir. Analiz bulgularına göre 13 Asya-Pasifik ülkesine yapılan doğrudan yabancı yatırımların bu ülkelerdeki düşük çevre standartları sebebiyle yapılmadığı varsayılabilir. Bu durum kirlilik sığınağı hipotezinin bu ülkelerde

geçerli olmamasının bir nedeni olarak görülebilir. Ayrıca kirlilik sığınağı hipotezinin geçersiz olması hiçbir doğrudan yabancı yatırım projesinin çevre kirliliği yaratmadığı anlamına gelmemektedir. Politika yapımcıların karbon emisyonlarını kabul edilebilir seviyenin altında tutmak için yatırımlar yapılmadan önce ve yapıldıktan sonra emisyon düzeylerini kontrol etmesi ve çevre politikalarını etkin bir şekilde uygulaması önem arz etmektedir.

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Building Circular Economy Business Models in Albania: What can Further be Improved?

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Abstract: While production and consumption are reaching their highest points due to economic growth and the exploitation of resources; concepts such as sustainability and circular economy are gaining recognition and being further discussed within the media, industry, governments, and people. Understanding the current situation and coming to terms with issues which affect society deeply, makes a call for change in the economic model of production – that of Circular Economy and Circular Business Models. The main purpose of this model is to close the loop hole in the production process of goods and replace the current economic model – Linear Economy.

The purpose of this study is to establish how circular economy can be beneficial for the Albanian market based on the pioneering of implementation of circular economy business models of some companies. Topics on how circular economy principles are being used and what can be further be improved are introduced in the research.

Qualitative methods are applied in the conduction of this study, with a deductive approach by collecting primary as well as secondary data. Primary data have been collected through two interviews. Interviews go into detail on how the company has moved towards a circular economy business model and how is this behavior executed continually. The research concludes that companies should implement circular economy business model, recycle and find efficient ways of using their resources.

Keywords: Circular Economy, Circular Business Models, Sustainability, Albania.

1. INTRODUCTION

European Parliament (2021) defines the circular economy (CE) as a model of production and consumption, which extends the life cycle of products, through sharing, leasing, reusing, repairing, refurbishing, and recycling existing materials and products. Moreover, Ellen MacArthur Foundation (2017) view CE as an economic model which continually builds system's health with its' restorative behavior by minimizing waste, making total use of raw materials, and encouraging production system utilization. In this way consumption and waste can be reduced by turning goods that won't serve anymore into resources for others and this reprocess of materials, aside from assisting in environmental causes, leads at the same time to higher employment rate and energy saving (Stahel, 2016).

Furthermore Hysa et al. (2020, p. 4831), determine Circular Economy "as an economic system operating at micro-meso-macro levels, focusing on the 4R of reducing, reusing, recycling, and recovering materials in production-consumption activities, aiming to achieve sustainable development, enabled by business model innovation and responsible consumers, and supported by the quadruple helix collaboration". To satisfy the concept of sustainable development, the best possible use of all available economic resources should be studied for the production of the maximum possible output of goods and services that are needed for the community now and in the future, and the just distribution of this output (Kruja 2013a, p. 97). However, policy makers can either facilitate or constrict the process by enacting a regulative climate, increasing their authority and proper implementation of their policies as well as boosting entrepreneurship (Xheneti & Smallbone 2008; Kruja, 2020b; Ahmeti & Kruja, 2021; Maione et al., 2021; Manta et al. 2021).

Through this study we aim to bring an understanding of the concept of Circular Economy and Circular Business Model implementation in Albania, which represents a developing country, with agriculture which dominates the economy and employs about 40% percentage of the workforce, large informality that characterizes the way of doing business and government integrity remains always a concern (Kruja, 2020a; Kruja & Ruci, 2021).

Therefore, an analysis has been conducted to determine how truly beneficial would application of the CE business model be for the community and how it would affect Albanian companies, cost, and profit wise.

With Circular Economy being a new topic in the market, difficulties have been taken into consideration such as individuals or entities not being aware of the CE concept and its' definition; limited number of previous studies

and research; and issues relating contacting companies. For delivering a profound work of studies, regarding data collection, interviews were used.

Economic situation in Albania has been further analyzed, together with the path towards a circular economy taking into consideration the legislation and environmental issues the country has faced.

2. STUDY BACKGROUND

To better understand Circular Economy and its' importance in the grand scheme of things, we need to come to terms with Linear Economy and the differences both model's project. According to Walter R., creating a visual representation of Circular Economy as a lake, where all the raw materials are sufficiently used, reused, or recycled; Linear Economy would be represented by a river, where every step of creating goods flows like so (Stahel, 2016). Linear Economy is driven by the notion of producing in excessive amounts, selling, and finally consuming until the product turns to waste.

With Linear Economy being our current economy model, every product we buy and consume, for instance smartphones, are mostly purchases with the sole purpose of replacing old ones. The latter gets disposed and creates waste, resulting to larger issues for a planet with finite resources (Taylor, 2020).

Taylor (2000) argues that the impact of disposed materials is multidimensional: firstly, it creates methane emission which is generated by the waste rotting inside the ground and secondly, there's a lot more energy waste and new materials used from earth for the creation of new products and lastly, the value of used materials decreases rapidly. Moreover, referring to the World Bank (2019), there has been a 2.01 billion tones waste in 2016, which 90% of it is often disposed unregulated or burned in the open. These practices of waste disposal create serious concern of health and major environmental causes, whilst effective waste management is expensive and compromises 20%-50% of the municipal budget (The World Bank, 2019). In contrary, the innovative model of Circular Economy offers a much effective way of material use and is more cost efficient. However, knowledge is crucial to the development of innovation systems and universities, governmental institutions as well as innovative enterprises are key components of this system (Kruja, 2013b; Kruja & Berisha, 2021).

With the global population forecasted to exceed 9 billion by 2050, shifting from linear economic model to the circular model is becoming crucial and the essentially only way to save planet Earth. With resources fully utilized the CE model becomes essential to be implemented in current times (State of Green, 2017).

2.1. Circular Economy Principles

Circular Economy is characterized by minimizing or eliminating waste and this is achieved by following three main principles: preservation of natural capital, resource optimization, less dependencies.

- Preservation of Natural Capital.

Waste pollution is massively caused by human behavior to design products. Finding alternative ways to preserve these given resources by practicing sustainable behavior, managing finite stocks and renewable resources, over time it will bring us closer to a much healthier lifestyle.

Moreover, the circular model preaches the implementation of supplying nutrients within the system and improving the natural capital. For instance, the soil can regenerate with the circular economy concept being applied correctly, consequently companies make more profit using renewable materials (Ellen MacArthur Foundation, 2015, p. 6).

- Resource Optimization

Resource optimization happens when materials are being used at their highest, in both biological and technical cycle. In other words, the system must be designed in a loop where different components and resources come to support one another. These circular systems encourage materials to re-enter the natural world in which they will biodegrade and come back as new materials ready for the next use (Ellen MacArthur Foundation, 2015, p. 6).

- Less Dependencies

We need to realize our dependencies on one-use materials such as coffee cups, plastic cups, straws, packaging etc., and start focusing more on building resources' resilience.

Aside for building products which last longer, it's important to pay notice to these short-life materials, which can cause massive amount of waste pollution. Therefore, we turn our heads to reusing or recycling.

Coming to terms with the negative external factors is vital. Designing an effective ideal system comes after elimination of negative externalities, controlling resources, being water, air and land and protecting said resources from depleting.

2.2. Circular Economy Opportunities

According to World Wild Life Organization (2020), the rich diversity of life on planet Earth has declined by 68% since 1970, with the population size of mammals, birds, fish, amphibians and reptiles become alarming, as this loss impacts humans' health and the overall wellbeing of our environment. Taking care of nature and protecting animals' welfare, eventually leads to a healthier-happier lifestyle and prevents disasters from happening in a situation where every source is depleting, and wildlife is going extinct. Transitioning our current economy model, Linear Economy, into Circular Economy can be quite beneficial, and environmental wise. These opportunities create an opening for economic growth, higher employment rates and innovation in both sectors, economy, and government (Popescu et al., 2022).

The consequences after implementing CE model, are favorable to the world. According to McKinsey Sustainability (2015), the implementation of CE in Europe would increase resource productivity to 3% and would generate an annual total benefit to around \$1.8 trillion. Subsequently, this would also translate into an increase of GDP by 7% compared to today.

- Boost Economy

The amount of waste caused by plastic pollution reaches a total of \$13 billion in costs and losses per year (McGinty, 2021). Minimizing plastic waste would benefit the tourism and fishing industry; lower health costs and decrease fossil fuel. If we can lead the business model towards recycling, repairing, reusing, and remanufacturing would benefit in the long-term. According to McGinty (2021), the implementation of Circular Economy supplies \$4.3 trillion economic growth with the minimization of waste, encouragement of innovative ideas and increasing employment rate.

- High Employment Rates

As stated by McGinty (2021), converting to a Circular Economy business model would increase the net to 6 million jobs by 2030 as well as fields in the recycling industry, rental and services for reparation would open and make creative ways of usage for secondary materials.

Just as creating new job positions there would also be a considerate amount of loss in linear business economy; fast-fashion workers are an obvious example. However, the Linear Economy business model has been implemented for years and its' history has been impactful and has left traces into people's lifestyle; its' complete extinction would take years if not centuries. Action-plans for the implementation of the circular economy are being assembled; by governments and entities worldwide, forecasting every loss and gain from the shift. Several private entities have already acted; everyday people become more aware of surroundings and the importance of one's lifestyle. The shift from an open to a closed loop is necessary and gradual, as humans learn more about CE and its' profits.

- Environment

Air, soil, and water pollution created by mismanagement of waste has been one of the main causes of lives being lost. Natural resources are being misused leading to major climate changes and therefore taking a big toll on human's health and biodiversity. If businesses and individuals fail to act in the present, into making big environmental changes, in 20 years from now we will be living in areas with massive water shortage, reduction in earth fertilization thus toxic air substances would enter our organism causing further permanent damage.

According to McGinty (2021), the world produces around 300 million tons of plastic waste and 54 million tons of electronic waste, which only 17.4% of the latter gets recycled. Rather than degrading, Circular Economy focuses on regenerating natural resources. With its' main purpose of designing out waste by making products last longer. In addition, there would be a reduction of primary materials, such as; fuel, pesticides etc., by 32% in

2035 (Ellen MacArthur Foundation, 2015). Returning materials into the soil will give the environment the opportunity to replenish itself and the lands to regenerate into a healthier state.

2.3. Opportunities, Barriers and Challenges for Circular economy business Modelling

Businesses are continuously looking for strategic ways to make profit and at the same time, lower costs. Circular Economy offers exactly the security of financial gain while taking care of future productions risks, which mainly come from the implementation of linear production model of finite sources. The latter displays unassertiveness especially in comparison to future demand.

Switching from finite resources to a sustainable model and materials, lowers the risk of demand exceeding supply and secures the businesses in the long-term, providing a lot more cost-effective solution. The implementation of CE creates a manufacturing loop. Recycling and reusing allow materials to regenerate allowing businesses to protect their resources.

Transitioning from traditional linear economy model into circularity it's not easy. Especially since the implementation of LE has been practiced for years; new models acquire very good research methods; changes of policy and conditions with suppliers; different approach strategy to customer and so on. However, it's not an impossible task.

Customers are getting smarter with every purchase and companies are constantly looking for greener ways to perform in the market. Moreover, Circular Economy helps businesses connect on a deeper level with their customers. This model requires collaboration from both parties; it's not business to customer nor business to business, it is human to human.

However, several factors and uncertainties can have an impact in the formation of challenges for the implementation of Circular Economy or any "green" economy system/practices.

- Financial Barrier

Companies make investments attentively, foreseeing the pay-back time period. It's important for businesses to be cautious before adapting to any economic system without any distinguish financial costs, from which they might not recover back (Rizos et al., 2015). Sometimes entities lack additional financial resources to then make big changes. Moreover, small entities may face difficulties obtaining the collateral required by banks. However, one approach could be funding innovative plans or sustainable performance from different sources, for instance: public institutions, EU support or the government (Rizos et al., 2015).

- Lack of government support and legislation

Environmental improvements are mostly driven by managers' commitment to sustainability in the absence of an effective enforcement mechanism (Rizos et al., 2015). The need to integrate green solutions into companies' operations is somewhat influenced by the lack of a strict regulatory framework. However, sometimes neglect is portrayed by several companies as there is no influence from local authorities, resulting to unethical behavior or abuse of resources and raw materials.

- Lack of Information

The lack of information of CE benefits and principles or even general knowledge regarding the concept, has been recognized as another barrier to performing circular economy business activity. Nonetheless, even with the absence of the awareness from the media or government, businesses have tried other ways to decrease their impact on the environment by recycling and repairing (Rizos et al., 2015). Businesses state that making even a little bit of effort into managing waste, created by production and consumption activity, might open new opportunities (Rizos et al., 2015).

- Lack of Technical Skills

According to several studies, a lack of internal technical skills is another barrier preventing enterprises from taking advantage of green economy prospects (Rizos et al., 2015). Many companies lack the technical competence to discover, evaluate, and implement more advanced technological choices that might allow them to decrease environmental impacts while saving money (Rizos et al., 2015). In fact, enterprises prioritize technologies which they are already familiar with and depend on what has always worked for them.

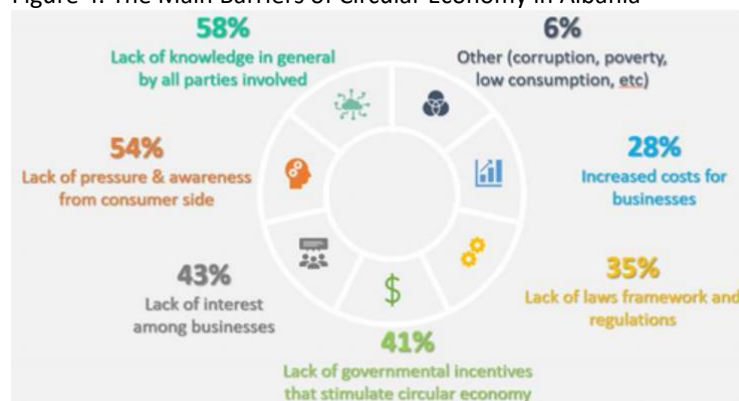
3. AN OVERVIEW OF CIRCULAR ECONOMY AND CIRCULAR ECONOMY BUSINESS MODELLING IN ALBANIA

3.1. Barriers and Challenges of Circular economy business Modelling in Albania

Waste Management has been an important topic within the government of Albania, however, not much action has been taken towards the implementation of any green movement or regulation (Memaj & Kosta 2019a). According to QarkEkonomia (2020) study report, lack of pressure coming from consumers is one of the main barriers that's slowing down the development of a CE business model. Aside from that, the equal lack of awareness from both parties (customers and businesses) plays a big role in separating Albanian citizens further from a lifestyle change and reduction of damage that's already been done to the environment (Berisha et al., 2022). In addition, indicatives from the Albanian government, into supporting green movements; Circular Economy in particular, has been carried poorly throughout the years. Not only that, but the significant lack of regulatory framework, regarding the implementation of CE, has been pointed out as another main barrier (QarkEkonomia, 2020, p. 23).

Figure 4 below summarizes the perceptions of citizens and entities on the main barriers of circular economy implementation in Albanian to be lack of knowledge (58%); lack of pressure and awareness from consumer side (54%); lack of interest among businesses (43%); lack of government incentives (41%); lack of laws framework and regulations (35%); increased costs for businesses (28%); corruption, poverty, low consumption, etc (6%).

Figure 4. The Main Barriers of Circular Economy in Albania



Source: (QarkEkonomia, 2020, p. 22)

In 2010, the Albanian government drafted a National Waste Management Strategy for the first time. The most recent "National Integrated Solid Waste Strategy," which is currently in draft form and has yet to be adopted, is for the years 2018-2033. This draft document emphasizes the necessity of a gradual transition from a linear economy to a circulating economy and introduces some aspects of CE, such as waste prevention, green security and extended producer responsibility (QAK, 2020, p. 6). The government capacity in to pushing the Circular Economy principles into businesses is important (Memaj & Kosta 2019b). Some of these principles, however, are noticed in the contribution the government has paid to the integration of waste management, shown by the laws below:

- Law no. 1043/2011 "On environmental protection", as amended, which provides the principles basic green growth;
- Laws no. 10436/2011 "Integrated waste management", no. 10448/2011 "For environmental permits ", and No. 111/2012" On integrated water resources management "which it also provides a basic environment for potential economic instruments circulating.

Measures for the recycling industry, and promotes the reduction, reuse and recycling of municipal solid waste have been implemented by many entities in Albania, however, not even half of them implement the authentic terms and principles of a business model of Circular Economy.

3.2. Opportunities and Examples of Circular economy business Modelling in Albania

As of right now, there are no laws nor regulations driven by the Albanian government for the implementation of Circular Economy. Rather individuals or certain entities have taken initiative into contributing to the environment.

To further understand the situation in Albania, interviews were conducted with representatives of Aiba, Bètte Handmade Lingerie and QarkEkonomia. The interviews were conducted with the purpose of gathering information regarding companies which implement Circular Economy or sustainable activity and to collect information on how the society has responded to this project.

The interview with the poultry company Aiba, was conducted via email and took less than a week. The company is one of the biggest poultry companies in Albania and uses advanced technology devices for their processes. Ms. Enka Rushani, Chief of Human Resource Department of Aiba, answered the questions. The firm is the first in Balkan to have built a Waste Processing Plant producing Organic Fertilizer. Even today this factory is favorable for the company, its ever-increasing capacity has come as a demand of the local consumer. Their last project was supported by AZHBR (Agency for Agricultural and Rural Development); the project consists of the installation of the manure dryer. Ms. Enka Rushani supports the conversion of CE and believes that Albania would be able to fully transition from Linear Economy to Circular Economy, as it would provide inputs and goods for the companies and the standards of the country.

On the other side, Bètte Handmade Lingerie is a small business which operates in the lingerie and swimwear making from fabrics. Throughout the study report, big companies which have set example for performing green behavior and motivated several entities to do so, however, is equally important for small businesses ensure sustainability and maintain the same activity throughout the business' life cycle. Bètte does exactly this. The business uses fabrics for creating products, which then go for sale on-line; the same way the interview was conducted.

Where does the excessive amount of fabric go? The interviewee stated that no fabric goes to waste, in contrary, every single piece comes together to form a piece of swimwear or lingerie which either gets given away for free to one of the customers or gets sold and the money goes to charity. Moreover, the business cooperates with "GreenPosta" for all their deliveries. Green Posta is a delivery service which promotes delivering goods in ecofriendly ways that don't pollute the environment, for instance, bicycle.

Moreover, during the interview, the representative of the project QarkEkonomia under QAK, Ms. Ledi Leka, answered and gave detailed information regarding the questions prepared. The project started on November 2019 financed by the European Union; with the sole purpose of raising awareness concerning Circular Economy business model and its' importance to the society. The initial plan was to promote the business model in schools and include it in the curriculum; specifically, in Tiranë and Durrës. This method has raised awareness amongst students and has familiarized them with the concept of Circular Economy. Promoting sustainable business model in schools has impacted the youth deeply and the response has been reassuring. Although with no support from the government, the movement for raising awareness regarding this topic has gone smoothly and succeeded for 2 years.

The project has currently ended however every piece of information that QarkEkonomia has collected and researched, is on their official website qarkekonomia.al.

CONCLUSIONS

The need to implement and promote sustainable business activity to the global market, is increasing continually. Circular Economy is gradually making its' place in the global market as a salvation method for limited resources. The main goal of this study was to understand what Circular Economy is and how is it beneficial, specifically for the Albanian market.

Circular Economy relates to efficient production solution to manage waste created by the "make-take-dispose" model of consumption, the linear economy. CE aims to preserve raw materials and keep them at its highest value, minimizing pollution; to mention a few gas emissions, energy leakage and water pollution. The business model of Circular Economy cares about the longevity of environment.

Circular Economy isn't very common among Albanian businesses. The lack of local government to push the implementation of circular economy business model is discouraging, whilst the few enterprises which perform

sustainable activity have support from foreign companies and institutions. However, there is willingness and determinations to implements green behavior from companies in Albania and the said business model is only beginning to develop.

From an environmental point of view, Circular Economy can resolve the waste pollution and the issue of decreasing of raw materials. Economic wise, Circular Economy can be quite beneficial and opportunistic for companies; it can contribute to new market expansion and brand extension. Companies which implement CE gain a competitive advantage in terms of attracting new clients and generating more profit.

Further research can be conducted by observing how other countries approach and implement Circular Economy. Particularly countries in the European geographical area, for the life-long purpose of Albania becoming part of the European Union; the implementation of CE would require changes in the legislation to fit the development plan of the EU. Moreover, foreign companies can be interviewed for profound research and understand how CE benefits these enterprises. Analysis of the circular economy business model and development plan of different industries via interviews or case studies.

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APPENDIX. INTERVIEWS

Interview 1. The importance of Circular Economy

1. Why do you think it is important to implement the circular economy in Albania?
2. How does the circular economy help reduce costs and create jobs?
3. What are you doing to promote the circular economy?
4. What measures are foreseen to be taken for waste management?
5. What strategies are you taking to promote the return of waste to resources?
6. Which are the businesses that have taken the initiative to implement the circulating business models in Albania?
7. How do these businesses work?
Are there initiatives and how have they been undertaken?
Is there any support from the government?

Interview 2.

1. A brief introduction about yourself and the company
2. How did the need / idea for the implementation of the Circular Economy model arise?
3. In what aspect do you implement the Circulation Economy?
4. What are the challenges of implementing Circular Economy?
5. Have you had support in implementing this business model? If so, what kind of support?
6. Do you think that all Albanian companies should be convert to Circular Economy?
7. Do you think that the Circular Economy will soon spread in Albania?

Göç Kavramı ve Türkiye’de Göç Tarihi Üzerine Bir Araştırma

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Özet: Göç insanların bir yerden başka bir yere gitmesidir. Göç alan ve göç veren toplumlarda, göç eden kişilerde birtakım olumlu ve olumsuz etkiler yaşanmaktadır. Özellikle kitlesel göç sonrasında göç alan ülkelerde yaşanan toplumsal etkiler dikkat çekmektedir. Anadolu toprakları jeopolitik açıdan sürekli göç almaktadır. Osmanlı Devleti’nin zayıflaması ile birlikte diğer devletlerin Osmanlı Devleti topraklarına saldırması sonucu yüzlerce yıldır o toprakları yurt edinen insanların Anadolu topraklarına doğru göç etmesine yol açmıştır. Özellikle 2010’lu yılların başında meydana gelen Suriye’deki iç karışıklıklardan dolayı milyonlarca insan ülkeye göç etmeye başlamıştır. Bu durum Türkiye’nin sosyoekonomik yapısına etkisi kaçınılmaz olmuştur. Bu çalışmada Osmanlı Devleti’nin son dönemlerinde ve Türkiye Cumhuriyeti’nin ilanından itibaren günümüze kadar gerçekleşen göçler ele alınmış, kitlesel göçlerin nedenleri, çeşitleri açıklanmaya çalışılmıştır.

Anahtar Kelimeler: Göç, Göç tarihi, Mülteciler

1. GİRİŞ

Dünya tarihinde göç hareketi, genellikle savaşlar, işgaller ve iklimsel nedenlerle yaşanmıştır. Günümüzde de temel göç hareketlerinin başında benzeri nedenler gelmektedir. Göç hareketinin ülke içi, ülkeler arası, kısa veya uzun süreli, kişisel nedenlerden, yasal ve yasal dışı yollarla gerçekleşebilmektedir. Bu göçlerin en sorunlu ve dramatik olanı yer değiştirme hareketinin zorunlu nedenlerden dolayı kitlesel olarak gerçekleşenlerdir. Bu göçler daha çok doğal afetler, savaş vb. durumlardan dolayı yaşanmaktadır. Kitlesel göçler, özellikle göç edilen bölgenin toplumsal ve ekonomik yapısına genel olarak olumsuz etkileri olmaktadır.

Dünya tarihinde, savaşlardan, kuraklıktan, doğal afetlerden kaynaklı olarak pek çok göç yaşanmıştır. Bu göçler içinde en güncel olanı 2011 yılı Suriye iç savaş sonrasında yaşanan göç dalgasıdır. Günümüzde resmi verilere bakıldığında 6,7 milyon kişi yerlerinden edilmiş (Kurban, 2021:1082) ve bu göçmenler çoğunlukla Türkiye, Lübnan, Ürdün gibi çevre ülkelerde yerleşmiştir. Türkiye, Suriye’den yaşanan kitlesel göçlerde açık kapı politikasıyla 3.6 milyon kişiye ev sahipliği yapmaktadır (www.multeciler.org.tr).

2. GÖÇ KAVRAMI

Göç, insanlık tarihi ile varlığını devam ettiren bir olgudur. Göçü tetikleyen en önemli faktör insanın daha iyi bir hayat yaşama emelidir. Göç, aslında sosyolojik bir olay olsa da nedenleri ve sonuçları yönüyle farklı bilim dallarını da ilgilendirmektedir. Göç kavramı Türk Dil Kurumu sözlüğünde “Ekonomik, toplumsal, siyasi sebeplerle bireylerin veya toplulukların bir ülkeden başka bir ülkeye, bir yerleşim yerinden başka bir yerleşim yerine gitme işi, taşınma, hicret, muhaceret” olarak tanımlanmaktadır. Ancak, göç kavramının salt fiziki bir yer değişikliği olarak anlaşılması doğru olmaz. Göçle ilgili tanımlar incelendiğinde ortak anlayışın bir bölgeden başka bir bölgeye yönelik yer değiştirme hareketi olduğu anlaşılmaktadır. Bu hareket kısa ya da uzun mesafeli de olabilmektedir.

Göç, tarihsel süreç içerisinde devamlı olarak yaşanan bir olay olarak devam etmiştir. Ancak 19. Yüzyılın sonlarına doğru bilimsel çalışmalara konu olmuş ve göç sürecini, göç nedenlerini açıklamaya yönelik teoriler ortaya atılmıştır. Günümüzde literatürde göç konusuyla ilgili çok sayıda kitap, makale ve tezler yer almakta olup bu alandaki eserler her geçen gün artmaktadır (Aktaş, 2021, s. 7).

3. GÖÇ NEDENLERİ

Göçlerin temel nedenleri arasında savaşlar, doğal afetler ve zorunlu göçler ilk sırada yer almaktadır. Göçe yol açan başka bir neden ise gelir dağılımındaki dengesizlikler nedeni ile insanların içinde bulundukları açlık ve yoksulluktur. Bu durumdaki insanlar daha iyi yaşam koşullarına kavuşabilmek için köyden kasabaya, kasabadan da şehirlere, büyükşehirler ve hatta yurt dışına göç etmektedirler (Kaygalak, 1999:8 ve Doğan, 2002:23’den

aktaran Çakı, 2018:12). Genel olarak insanların bir bölgeden diğerine göç etmelerine yol açan faktörler aşağıdaki gibi sıralanabilir.

3.1. Ekonomik Nedenler

İnsanların bulundukları yerlerden göç etmelerindeki en önemli etmenlerden biri ekonomik nedenlerdir. Daha iyi yaşama hakkına sahip olma, daha yüksek gelir sahibi olma ve refah içinde yaşama isteği insanları göçe zorlamıştır. Örneğin kentte daha iyi yaşam şartı ve daha çok iş olanağının bulunması kentleri çekici hale getirmiştir. Bu durumda işsizlik kırsalda itici bir faktör olurken iş imkânları kentleri çekici hale getirmektedir. Ekonomik nedenlere bağlı olan göçler kalıcı olduğu gibi geçici de olabilir (Ekici ve Tuncel, 2015: 13, Aktaş, 2021:33).

3.2. Doğal Nedenler

Doğal afetler de insanların göç etmesinde önemli bir etkiye sahiptir. Çünkü doğa sürekli bir hareket halinde olduğu için kendisinin coğrafi ve jeolojik yapısını değiştirmektedir. Bunlara depremleri, heyelanları, sel baskınlarını, volkanik patlamaları, aşırı kuraklık, iklim değişiklikleri vb. örnek gösterebiliriz. Doğada meydana gelen bu gelişmeler doğrudan insan yaşamını etkilemektedir. İnsanlık, doğada meydana gelen bu olaylar karşısında gerektiği zaman yer değiştirmek zorunda kalmıştır. Örneğin volkanik bölgelerde her ne kadar topraklar verimliyse de burada yaşamının da zorlukları vardır. Hayati tehlike bu bölgede yaşayan insanların göç etmelerine sebep olmaktadır. Kuraklık, iklim değişimi gibi nedenler de doğal göçlere neden olmaktadır. Ancak uluslararası toplum son 30 yıldır iklim değişikliği kaynaklı göçlerin etkilerini tanımaya başlamıştır (Laczko ve Aghazarm, 2009: 13'dan aktaran Ilık, 2017:99S).

3.3. Siyasi ve Askeri Nedenler

Göçe sebep olan siyasi nedenler arasında savaşlar, ihtilaller, sıkıyönetim, ülkeden ihraç, siyasi krizler, yargısız infaz, totaliter yönetimler, olağanüstü hal uygulamaları, insan hakları ihlallerinden korunmak amacıyla göç edilmesi sayılabilir (Aktaş, 2021:30-38). Ülkelerde çıkan savaşlar neticesinde yaşanan baskılar, katliamlar göçe neden olmaktadır. Savaşlar sonrasında ülkelerde yaşanan göçler kitleseldir, geçmişten günümüze tüm göçlerde bu gözlemlenmektedir. 1922 yılında imzalanan Lozan Barış Antlaşması'nda Yunanistan ve Türkiye arasında bir mübadele anlaşması imzalanmıştır. Bu anlaşma gereği iki ülkenin vatandaşları karşılıklı olarak göç etmişlerdir ve bu göçler siyasi göçlere verilebilecek örneklerden biridir (Saygın, 2021:6).

4. GÖÇ ÇEŞİTLERİ

Günümüzde göç küresel bir sorun haline gelmiş bulunmaktadır. Özellikle 20. yüzyılda toplu göç hareketleri yaşanmıştır. Son elli yıllık dönemde 175 milyondan fazla insanın ülkeler arasında göç ettiği bilinmektedir. Birleşmiş Milletler'in 2021 göç istatistikleri verilerine göre, dünyada 258 milyon göçmen bulunmaktadır (Global Migration Indicators, 2021:11). Farklı literatür incelendiğinde beş farklı göç türünden bahsedilebilir.

4.1. İç Göç

Ülkenin nüfusunu etkilemeyen ve bir bölgeden ya da şehirden diğerine ve aynı zamanda ülke sınırları içerisinde gerçekleşen göçler, iç göç olarak adlandırılmaktadır. İç göç içerisinde kırsal alandan kente doğru göçler olduğu gibi ekonomik, sosyal ve kültürel sebeplerle kentten kente doğru göç de söz konusu olabilmektedir. İç göçler hem göç veren hem de göç alan yerleşim yerlerindeki toplumsal yapıyı etkilemektedir. Yerleşme amaçlı yapılan göçlerde kalıcılık esasken, mevsimlik göçlerde geçicilik vardır. Örneğin Adana bölgesine yaz aylarında pamuk toplamak için giden işçilerin göçü mevsimlidir. Bu göçmenler iş imkânları süresince bölgede kalır ve tekrar yaşadıkları yere göç ederler. İç göçlerin odak noktasını daha kaliteli yaşama arzusu oluşturmaktadır. Bir ülkede bölgeler arasında yaşam standartları farkı olduğundan bazı bölgelerin diğer bölgelere göre cazibesi daha yüksek olmaktadır. Bu da o ülke içerisinde yaşanacak olan iç göçleri tetiklemektedir (Bostan. 2017:5, Aktaş, 2021:26, Saygın, 2021:4, Çakı, 2018:15, Ilık, 2017:7).

4.2. Dış Göç

Bir göç hareketi, devletin, kendi sınırları dışına veya sınırlarının dışından ülkesine yönelik insan hareketlerini kapsıyorsa (Baklacioğlu, 2010:131'den aktaran Saygın, 2021:5), devamlı ya da kısmi süreli olarak göç edilen yerde çalışmak veya kalmak amacıyla bir ülke sınırlarının dışında başka ülkelere doğru yapılan yer değiştirme eylemi ise (Özdemir, 2008:21'den aktaran Çakı, 2018:17) ya da ülke sınırlarını aşıyorsa dış göç olarak tanımlanır. Hızla değişen çevresel faktörlere, teknolojik gelişmelere ve sosyal ve siyasal olaylara paralel olarak ülkeler arasında gerçekleşen göçler daha yaygın hale gelmiştir. Batı Avrupa ülkelerinde yabancı işgücüne duyulan ihtiyaç dış göç hareketinin yoğun olarak yaşanmasına yol açmıştır. Örnek olarak 30 Ekim 1961 tarihinde Türkiye ile Almanya arasında imzalanan iş gücü anlaşmasıyla Türkiye'den dış göç hareketini hızlanmış bulunmaktadır (Kocadaş, 2016:15).

4.3. Zorunlu Göç

Bireylerin istemleri dışında yaşadıkları yerlerden ayrılmak zorunda kalmalarını zorunlu göç olarak tanımlanır (Tekin, 2011:93). Zorunlu göçe örnek olarak Türkiye'de 2005 yılı Ocak ayı sonu itibariyle Doğu ve Güneydoğu Anadolu bölgelerindeki 12 ilde terör ve terörle mücadele nedeniyle yaklaşık 357.000 insan yer değiştirmesi gösterilebilir (Tekin, 2011:93). Türkiye ve Yunanistan arasında imzalanan 30 Ocak 1923 tarihli mübadele anlaşması da zorunlu göç kapsamında değerlendirilebilecek başka bir örnektir (Şenışık, 2016:85).

4.4. Gönüllü Göç

Daha iyi bir yaşama kavuşma arzusundan dolayı, insanın bulunduğu mekânı terk etmesi gönüllü göç olarak tanımlanır. Bu göç türünde daha iyi imkanlarla iş bulmak arzusu gibi genellikle ekonomik faktörler belirleyici rol oynar (Ekici ve Tuncel, 2015:14). Gönüllü göçte esas etken, insanların daha iyi yaşam şartları elde edeceklerini ummalarındır. Yaşadıkları ülkede ya da şehirde iş imkanı bulamayan ya da yaptığı işten herhangi bir nedenden dolayı başka ülkelere ya da şehirlere iş bulabilmek amacıyla giden göçmenlerin bu yer değiştirmeleri bu kapsamda değerlendirilebilir (Yılmaz, 2014:1687)

4.5. Mevsimlik Göç

Kişilerin kendi bulundukları bölgelerden, şehirden başka yörelere giderek çalışmak, dinlenmek, gezmek gibi amaçlarla bir süreliğine gitmelerine mevsimlik göç denir (Koçak ve Terzi, 2012: 169'den aktaran Eraldemir, 2013:11). Başka bir tanıma göre ise mevsimlik göç, göç hareketinin yılın sadece belli dönemleri veya mevsimleri içerisinde gerçekleşmesi durumudur. Mevsimlik göçlerin farklı nedenleri olmakla birlikte, tarımsal faaliyetlerde çalışma en önemli neden olarak belirmektedir (Orhan ve Akpınar, 2018:413).

5. OSMANLI ve CUMHURİYET DÖNEMİNDE YAŞANAN GÖÇLER

Osmanlı Devletinin 17. Yüzyıldan itibaren toprak kaybetmeye başlaması ile birlikte bu bölgelerdeki Müslüman-Türk azınlıklar Anadolu'ya göç etmek zorunda kalmışlardır. 1783 Kırım'ın ilhakı, 1821 Mora ayaklanması, 1877-1878 Osmanlı-Rus harbi, 1896-1897 Girit Ayaklanması, 1912-1913 Balkan savaşı ve 1914-1918 I. Dünya savaşları göç hareketini tetikleyen olayların başında gelmektedir (Sariahmetoğlu ve Kemaloğlu, 2015:303).

Türkiye'nin göç politikasını belirleyen en önemli yasal düzenlemeler Cenevre Sözleşmesi ve 1967 Ek Protokolü, 1994 İltica Yönetmeliği ve 2006 İskân Kanunu olmuştur, 2013 yılında yürürlüğe giren 6458 sayılı Yabancılar ve Uluslararası Koruma Kanunu göç sorununa daha çağdaş çözümler sunmayı amaçlamıştır. Yasa ile Göç İdaresi Genel Müdürlüğü kurulmuş, göç hukukunda yer alan sığınmacı ifadesi yerine "şartlı mülteci" terimi getirilmiştir. "İkincil koruma" ve "geçici koruma" kavramları göç düzenlenmesinde yer bulmuştur (Ceylan ve Uslu, 2019:202).

5.1.Kafkasya-Kırım Göçleri

Rusya, 16. Yüzyılın başından itibaren Kafkasya'yı ele geçirme çabaları 18.yüzyılda bu bölgede etkili olmaları sonucu yöre halkına baskı uygulayıp asimilasyon politikalarını benimsemiş olması yöre halkının özellikle 19 yüzyılın başından itibaren Anadolu topraklarına göç etmeye başlamışlardır. Anadolu'ya göçen bu toplulukların önemli bir kısmını Çerkezler oluşturmuştur. (Aydın ve Kaya, 2021:223). Ayrıca Osmanlı İmparatorluğu'nun din, dil ve ırk ayrımı yapılmaksızın tüm gelen göçmenlere hoşgörü anlayışı içinde davranması çok sayıda kitlesel

göçlerin Anadolu'ya yönelmesine neden olmuştur. Bu göç dalgasının ilklerinden biri olarak Rusların Kırım'ın ilhakından sonra bölgede yaşayan Türk-Tatarlarını çeşitli yıldırma politikalarıyla göçe zorladıkları için 1783 yılı itibarıyla 80.000 civarında Tatarın Balkanlara ve Anadolu'ya yerleştiği bilinmektedir (Karpas, 2013:162'den aktaran Karacoşkun, 2020:1323). Daha sonrasında 1853-1856 Kırım Savaşı'ı başka bir önemli göç hareketine neden olmuştur. (Bayraktar, 2007:407 ve Kaya, 2014:19'den nakleden Çakı, 2018:29). Bu süreçte 1862 yılına kadar Kırım üzerinden 398.000 kişinin göç ettiği tahmin edilmektedir (Tepekaya, 2006:464). Bu göçmenler o zamanın Osmanlı hakimiyetindeki farklı bölgelere yerleştirildikleri bilinmektedir. 1859-1879 yılları arasında çoğunluğu Çerkes olmak üzere 2 milyona yakın Müslüman nüfusun Rusya topraklarını terk edip Anadolu'ya göç ettiği anlaşılmaktadır (Karpas, 2003, 112'den aktaran Celep, 2019:22).

5.2.Balkan Göçleri

1877-1878 Osmanlı-Rus Savaşında Osmanlı'nın yenik düşmesi sonucu Türk-Müslüman tebaanın can ve mal güvenliğinin tehlikeye düşmesi nedeniyle özellikle Balkanların batı kesimlerinden başta Anadolu olmak üzere Balkanlar'ın doğu kısımlarına ve Cezayir'e çok sayıda göçmen yerleştirilmiştir. Bu göçmenlerin sayısı yaklaşık 694.000'dir. En çok göçmen yerleştirilen yerler sırasıyla Selanik, İstanbul ve Bursa olmuştur (Bozkurt, 2021:74). Balkanlardaki bu göçlerin yaşanmasında Kırım Tatar ve Nogay göçleri ile Çerkez göçlerinin etkisi fazladır. Bu göçlerle ilgili Alman tarihçi Wolfgang Höpken şu sözleri dile getirmiştir: "Şüphesiz ki, Türkler gidiyor ve Hristiyanlar geliyor." Bu önemli bir değişikliğin yaşandığını göstermektedir (Krzysztof 2018:47'den aktaran Doğan, 2021:49). Balkan Savaşları sonrasında da Anadolu'ya göçler devam etmiştir. İttihat ve Terakki Yönetimi, Balkan Savaşları sonrasında oluşan göçmenlerin 200.000 kadarını Edirne ve Aydın vilayetlerine yerleştirmiştir (Deniz, 2019:87).

Balkan göçleri arasında Bulgaristan kaynaklı göçlerin çok daha yoğun olduğu bilinmektedir. Bu göçler 1878'de Bulgaristan Prenslüğü'nin kurulması ile başlamış olup, 1878-1989 arasında Türk azınlığa karşı Bulgaristan hükümetlerinin uyguladığı baskılar nedeniyle Türkiye'ye dönemsel olarak büyük çaplı göç hareketleri gerçekleşmiştir (İçduygu, Erder ve Gençkaya, 2014:147'den aktaran Ölmez, 2021:75) 18 Ekim 1925 tarihli Türk-Bulgar İkamet Sözleşmesi Türklerin göç etmeleri halinde taşınabilir eşyalar ve hayvanları yanlarına almaları ve taşınmaz mallarını satmaları, ayrıca paralarını gümrükten geçirmeleri serbest bırakılmıştır. Bu uygulama Bulgaristan'dan Anadolu'ya olan göçleri hızlandırmıştır. (Kamil, 1989: 37-43'den aktaran Ölmez, 2021:76). Farklı tarihlerdeki göç rakamları incelendiğinde 1923-1933 yılları arasında 101.537, 1934-1939 arasında 97.191, 1950 yılının Ağustos ayında 250.000, 1951 yılında ise 150.000 (Yıldız, 2015: 3902-3905), 1989-1990 yıllarında Bulgar hükümetinin baskılarından kaçan 345.000, sonuçta 1923-1979 yılları arasında toplam 1 milyon kadar Bulgaristan Türkü Türkiye'ye göç etmiştir (Eren, 2019:612-618).

5.3. Yugoslavya göçleri

Osmanlı Devletinin yıkılışı ile birlikte Türkiye sınırları dışında kalan bölgelerden Türkiye'ye sürekli bir göç hareketi başlamıştır. Tito rejiminin etkisiyle 1923'ten 1947'ye kadar olan dönemde Yugoslavya'dan yaklaşık 143.500 kişi (Gücüyener, 2019:3) göçmen olarak gelmiştir. Aslında Yugoslavya göçleri 1877-1878 Osmanlı-Rus savaşında, 1912-1913 Balkan Savaşında, 1923-1951 döneminde, 1952-1967 ve 1968-1996 yılları arasında gerçekleşmiştir. Bu göçler Türklerin yoğun olarak yaşadıkları Makedonya bölgesinden gerçekleşmiş olup bu göçlerin temel amacı bu bölgeden Türklerin temizlenmesi olmuştur (Bandžović, 2003: 22'den aktaran Tekin, 2018:249-251). Tito'nun Türkiye'yi 1953'te ziyaretinde imzalanan "Serbest Göç Anlaşması" Türkiye'de kendisine destek olabilecek akrabası olanlara "serbest göçmen" vizesi verilmesiyle 1967 yılına kadar 175 bin 392 kişi aile Makedonya'dan Türkiye'ye göç etmiştir (Memić, 1996:74, Politika, 1953:10'den aktaran Tekin, 2018:249-258). 1833-1923 ve 1950-1958 yılları arasında Yugoslavya'dan Türkiye'ye göç edenlerin sayısının 100 binin üzerinde olduğu, toplamda Türkiye'ye Cumhuriyet döneminde toplam 77.431 aileye mensup 305.158 kişi göç etmiştir bilinmektedir (Celep, 2019:27-28). Bu grupta değerlendirilebilecek önemli bir göçmen kesimi de Bosna-Hersek göçmenleridir. Özellikle 1990'lı yıllarda Yugoslavya'nın dağılması ile birlikte Sırp zulmünden kaçan Bosna Müslümanları bir kurtuluş yeri olarak gördükleri Türkiye'ye geçici veya kalıcı olarak göç etmişlerdir (Demirel, 2008:298).

5.4.İran Göçü

1970'lerin sonunda, İran'da Şah rejiminin yıkılıp, yerine sürgündeki Ayetullah Humeyni'nin başa getirilmesi sonucu İran'dan Türkiye'ye göçlerin başlamasına neden olmuştur. 2003 yılı itibarıyla 500.000-1.000.000

arasında İranlı, Türkiye’yi transit ülke olarak kullanmıştır ve 10 000’e yakını Türkiye’de kalmıştır (Kirişçi, 199:11-112 ve İçduygu, 2003’den aktaran Yücel, 2010:219).

5.5.Afgan Göçü

Afganistan’dan Türkiye’ye yönelik göçlerin yasal temelini 1982 yılında yürürlüğe giren 2641 sayılı “Afganistan’dan Pakistan’a Sığınan Türk Soylu Göçmenlerin Türkiye’ye Kabulü ve İskâna Dair Kanun” oluşturmaktadır. Zamanın Cumhurbaşkanı Kenan Evren’in Pakistan’ı ziyaretinden mülteci kamplarındaki Türk soylu olan Türkmen, Kazak, Kırgız ve Özbeklerin zor şartlarda mülteci kamplarındaki yaşam mücadelesine destek olmak amacıyla bu kanun yürürlüğe girmiştir. Bundan sonra Afgan göçmenler için de Türkiye bir güvenli liman olmuştur. 2013-2018 yılları arasında Türkiye’ye göç eden Afgan sayısı 100.841’dir (Durmaz, 2019:44).

5.6. Irak Göçü

Irak’tan ilk göç dalgası, 1926’da Musul’un Irak’a bağlanmasından 1980’lere kadar süren göçlerdir. Özellikle Irak Türkmenlerin Türkiye’ye göçleri az ve devamlı olmuştur. İkincisi 1988-1991 yılları arasındaki kitlesel göç hareketidir (Avşar, Solak ve Tosun, 1994:61 ve Danış, 2010:193-194’den aktaran Celep, 2019:23). Üçüncü göç dalgası ise 1990-1991 yıllarında Körfez krizi sonucudur. Bu dönemde, özellikle 1991 İran-İrak Körfez savaşının etkisiyle 467.489 kişi Türkiye’ye göç etmiştir (<https://www.goc.gov.tr/goc-tarihi>)

5.7.Suriye Göçü

Suriye’den Türkiye’ye yönelik ilk göç hareketi 29 Nisan 2011 tarihinde, Suriye’deki şiddet olaylarından kaçanların Cilvegözü sınır kapısından Türkiye’ye giren yapan 252 kişilik grupla başlamıştır (Ceylan ve Uslu, 2019:211). 2012 yılında toplam Suriyeli göçmen sayısı 14.237, 2013 yılında 224.655 olmuştur. Daha sonra Türkiye’nin açık kapı politikası uygulaması sonucu 28 Mart 2019 tarihinde geçici koruma statüsünde göçmen sayısı 3.641.344, 6.10.2022 tarihinde ise 3.636.698 kişi olmuştur (Tablo 1). Bu haliyle Türkiye dünya üzerinde en fazla Suriyeli sığınmacıya ev sahipliği yapan ülke konumundadır (Ceylan ve Uslu, 2019:212, Göç İdaresi Genel Müdürlüğü, 2022).

Tablo 1. Suriyeli Mültecilerin Yoğun Olduğu İller

SIRA	İL	MÜLTECİ SAYISI
1	İstanbul	551.479
2	Gaziantep	464.292
3	Hatay	363.597
4	Şanlıurfa	378.562
5	Adana	256.709
6	Mersin	243.190
7	Bursa	185.667
8	İzmir	149.440
9	Konya	123.956
10	Ankara	100,065
	Diğer	818.741
TOPLAM		3.636.698

Kaynak: Göç İdaresi Genel Müdürlüğü, 2022

Suriyeli sığınmacıların ülke ekonomisine önemli bir yük getirdiği bilinen bir gerçektir. Bu konuda araştırma yapan Karabulut ve Açık (2018:142) 2011-2017 yılları arasında Suriyeli mültecilerin barınma merkezlerinin inşası, idame ve iâşe giderleri için 6.752.423.795 TL, eğitim hizmetleri için 12.210.510.816 TL ve sağlık hizmetleri için 1.919.617.646 TL olmak üzere; toplam 20.882.552.257 TL olduğunu bildirmektedir. Diğer taraftan dönemin Başbakanı tarafından Aralık 2017 tarihine kadar 16 milyar liralık sadece sağlık hizmetleri için harcama yapıldığı

belirtilmektedir (Gültaş ve Balçık, 2018: 201'den aktaran Gençler, 2020:127). Bu iki rakam arasındaki farklılık 2017 yılından sonraki mülteci sayısının aşırı artmış olması ile açıklanabilir.

6.SONUÇ

Bu çalışmada Türkiye'ye yönelik dış göçler tarihsel süreçte ve göç kaynakları açısından ele alınmıştır. Ayrıca göç olgusu kavramsal olarak açıklanmış, göç nedenleri ve göç çeşitleri hakkında bilgi verilmiştir. Göç tarihi incelendiğinde Anadolu topraklarına ilk toplu göçler 1783 yılında Rusların Kırım ilhak etmesi ile birlikte başlamıştır. Bu göç hareketi 1920'lere kadar aralıksız devam edecek olan yaklaşık 2.000.000 Kırım Tatarlarının Anadolu'ya göç etmesine neden olmuştur (Kırımlı, 2017). 1877-1878 Osmanlı-Rus Savaşı sonrasında başlayan ve 1990'lara kadar devam eden başka bir göç dalgası ise Balkanlardan gerçekleşmiştir. Bu süre içinde farklı tarihlerde göç edenlerin toplam sayısı yaklaşık 1.200.000 kadardır. Balkan göçlerinin çoğu Bulgaristan kaynaklıdır. Tito'nun Yugoslavya'da yönetimi gelmesi sonucu uyguladığı asimilasyon politikası ise yaklaşık 300.000 Türk azınlığın Türkiye'ye göçmesine neden olmuştur. Yugoslavya göçleri büyük ölçüde Makedonya ve Bosna Hersek kaynaklı gerçekleşmiştir. İran'dan 10.000, farklı tarihlerde Afganistan'dan 100.000, Irak'tan 500.000 ve nihayet Suriye'den 3.600.000 göçmen Türkiye'ye göç etmiştir. Bu veriler ışığında 1783 yılından günümüze en azından 8.000.000 Türk-Müslüman azınlığın Anadolu'ya göç ettiği kabul edilebilir.

Osmanlı devletinin gelişme döneminde fethedilen topraklara Anadolu'dan çok sayıda göçler gerçekleşmiştir. Osmanlı devletinin büyümenin sınırlarına ulaşip toprak kaybetmeye başlaması ile birlikte bu topraklarda psikolojik, siyasal ve ekonomik baskılara maruz kalan Türk-Müslüman halk tersine Anadolu'ya göçmek zorunda kalmıştır. Cumhuriyet döneminde de kısmen ikili antlaşmaların etkisiyle genellikle de asimilasyon politikası gereği çok sayıda soydaşlarımız Anadolu'yu sığınma alanı olarak görmüş ve her türlü varlıklarını terk ederek Anadolu'ya göç etmek zorunda kalmıştır. Türkiye Cumhuriyeti devleti bu soydaşlarımıza her türlü imkanı sağlayarak Anadolu'nun farklı şehirlerinde iskan etmelerini ve uyum sağlama süreçlerini desteklemiştir. Ancak 2021'den başlayarak özellikle Suriye kaynaklı sığınmacıların sayısının milyonlara ulaşması ülke ekonomisine milyarlarca dolarlık yük getirmiş ve ülke genelinde halk tarafından bu sığınmacılar genel olarak kabul görmemiş ve uyum sorunu yaşanmıştır.

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The Use of Games in Teaching German as a Foreign Language

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Abstract: In this article, the use of games in German classes is discussed. In foreign language lessons, games are used for a number of reasons and so play an important role. They are integrated in teaching languages still for a long time. In addition to its practical usefulness, this element is thoroughly researched from a theoretical point of view. This is the foundation for the theoretical and practical investigative approach this paper takes. For this purpose, at the current state of research is provided. In the second step, the theoretical foundations for using games in foreign language instruction are examined. Next is argued what kinds of language games might be employed in German language classes. Moreover, useful recommendations for the application of the game genres mentioned are developed. They are formulated for a particular target audience especially. The main purpose of this process is to demonstrate the benefits of using games in language instruction. At the end of the article, related conclusions are drawn.

Key Words: Teaching German as a Foreign Language, Language Games, Language Exercises

1. INTRODUCTION

In this article, the potential applications of games in German classes are discussed. To accomplish the specific goals, the following step entails defining the concept of the term "game." It refers to any activity or set of activities that occur within a purportedly genuine context that is governed by rules. In a game, the participants are making a specific effort to accomplish their objectives (Adams, 2010: 3).¹ Throughout the history of teaching foreign languages, various methods have been employed. These include the grammar-translation method, the direct method, and the audio-lingual or audio-visual method. Therefore, using games in the classroom can be seen as a component of the teaching process from a procedural perspective. According to Kacjan (2010: 1177),² their utilization in foreign language instruction can be linked to the Communicative Turn (in German: Kommunikative Wende). The Monographs by Göbel et al. (1977), Steinhilber (1982), and the journal articles by Goethals (1985) and Hoppe (1985) are some examples for the scholarly investigation of the subject in that era.

The use of games in language learning has various benefits. Students' interest might be maintained, for instance, by employing games to teach. It also encourages experience-based learning built on situations that are relevant for the students. Further, a crucial aspect of active communication is the repetition of language elements. Last but not least, games play an important role in language classes since they lay the foundation for using intensive and effective teaching methods (Wright et al., 2006: 2).³ These explanations should help to clarify the rationale behind the selection of the issues for this article. Moreover, the state of the topical research is presented in light of recent scientific studies in the next part. The theoretical view on utilizing games to teach foreign languages is then covered, and following that, categorical consideration is given to language games. Further, some recommendations are made regarding the integration of games into the teaching of German as a foreign language. At the end of the study, several conclusions are drawn.

2. CURRENT STATE OF RESEARCH

The aim of this part of the paper is to describe the current state of research on the utilization of games in foreign language teaching in order to highlight how important their application in foreign language lessons has

¹ For a more thorough analysis of the term game, see Dondi et al. (2004: 30f.).

² Games gained a lot of significance in this era, which Rösler (2012: 114) dates to the late 1970s and early 1980s.

³ See also Ibrahim (2017: 141f.) for the benefits of using games in foreign language teaching.

currently become. In this context, it should also be told that the target group of the practical suggestions for classroom use, which will be presented in the fourth section of the study, consists of Turkish learners of German. Therefore, and for providing a better overview, the usage of games in the context of foreign language teaching is considered from two perspectives at this point: from an international viewpoint and from a Turkish one.

2.1. Scientific Studies in International Context

In her yearbook entry, Sykes discusses the connection between digital gaming as well as language learning and teaching. First, she highlights the current global trend of the growing video game industry, emphasizing the circumstances in the USA. Then, she illustrates the benefits of employing games in language learning in detail. Based on this, the author examines the potential of digital games in the context of language learning and teaching as the focus of her study and takes a view to their global applicability. She begins by talking about the increased availability of community-based games. Next, she considers the prospect of using virtual reality in the teaching context in a way that supports learning. Finally, she talks about the likelihood of increased access to commercial games. The study's conclusions refer, among other things, to the interaction opportunities provided by the game's context, the individual feedback opportunities for learners that are needs-oriented, and the learner motivation that may be attained through the use of the games (Sykes, 2018).

The journal paper by Adipat et al. focuses on how game-based learning engages students in the learning process. Because of the benefits of including educational games into the classroom activities while learning English as a second language or as a foreign language, the authors present their core ideas in this regard. The study should serve as the basis for discussion of the potential application of the pedagogical games learning process in the academic setting. This would give students access to opportunities for lifelong learning and interdisciplinary education. In the following sections of the article, the relationship between games and learning, collaborative learning, and growth-oriented thinking is discussed. Additionally, the theoretical foundations of a model for pedagogical playing techniques are laid. Examined are both the advantages and disadvantages of digital game-based learning, including how teachers view it. The conclusions begin by emphasizing that there are more benefits to playing games in the classroom than drawbacks. In this framework, it will also be regarded as essential to think about how teachers might use games to facilitate effective teaching and learning processes (Adipat et al., 2021).

In Liunokas' journal article, the usefulness of the cup stacking game in teaching speaking skills to Indonesian language learners is examined. The study specifically investigates the effectiveness of using the game to teach conditional sentences. Thus, Liunokas' work can be considered as a contribution to the ongoing process of teaching English speaking skills. The study's participants were 160 first-semester English Study Program students from Nusa Cendana University in Kupang during the 2020-2021 academic year. They were placed in four classes. The research method was pre-experimental. It was constructed with a pre-test and a post-test. The students' fundamental speaking abilities were determined via the pre-test. The purpose of the post-test was to assess the students' verbal proficiency improvement as a result of the cup stacking game. The findings of the study demonstrate how useful the cup stacking game is at teaching speaking skills to English as a foreign language students in Indonesia. For this reason, employing the cup stacking game in English lessons to practice speaking is advocated for Indonesian students in addition to reading skills development (Liunokas, 2021: 521 and 527f.).

2.2. Scientific Studies from Turkey

The subject of Coşkun's journal paper is the use of marble games in German teaching. In the article, the motivation of German students by the use of educational games is demonstrated. For this reason, the author carries out experimental research. During the academic year 2013-2014, 84 **prospective English language teachers** from Hacettepe University participated in the study. They had selected German as their second foreign language. Kitchen appliances are the subject of the example teaching unit that was presented as part of the study. This topic was chosen since it will be covered frequently in foreign language classes. The study's findings indicate that, in contrast to traditional approaches, learners are more successful in courses that include games. The paper also examines the current state of German teachers and German education in Turkey. Next, the preparation of the educational marble game, the fundamental design of the marble games, and the related accessories will be discussed. Both the original marble game's rules and its variations are described. Also mentioned are the word lists and the marble activity flowchart. In the appendix,

suggestions other than game variants are presented to help students learn the vocabulary, and examples of such exercise materials are included as well. The study's findings contain specific guidelines for the effective use of games in classroom teaching, among other things (Coşkun, 2015).

The impact of educational computer games on vocabulary learning performance is the central subject of Zengin and Yilmaz's journal article. Middle schoolers who are learning English as a foreign language are the study's target group. A real experimental model was employed in the research. A control group was established for the pre- and post-test. Students from two middle schools in the fifth grade took part in the study. The experimental group included 166 pupils, while the control group contained 171. Adobe Captivate 9.0 was used to generate selection-matching-space-filling games, memory games, word capture games, crossword games, and millionaire games for assessment purposes. While language instruction was given to the control group in accordance with the current program, educational video games were used in the experimental group. A test of academic achievement was employed to gather data. It was carried out both before and after the experiment. Quantitative methods were utilized in the data analysis. According to the study's findings, employing educational computer games is more effective than utilizing the current program. In terms of learning retention, the experimental group performs better than the control group. The conclusion recommends, among other things, that the experiment might be continued for a longer period of time (Zengin and Yilmaz, 2021: 191 and 206f.).

The impact of language games on the teaching of irregular past tense verbs in English as a foreign language lessons is the main topic of Çiftçi's master's thesis. Since teaching irregular verbs to Turkish English language learners is challenging, this research topic was chosen. The impact of language games on enhancing the recall of irregular verbs is explored as the study's major focus. The target group consisted of ninth-grade Turkish English language learners. 72 students from an Anatolian Technical High School who had already achieved the primary level of English participated in the study, which lasted 47 days. There are pre-test, post-test, and delayed post-test stages in the research process. The students were divided into a control group and two experimental groups. One of the experimental groups was the play group, while the other was the traditional group. A statistical analysis of the collected data reveals that learners in the play group outperform learners in the traditional group and the control group in both short- and long-term learning outcomes. A significant decline in the information provided in the play group is not indicated by the results of the post-tests that were conducted three and six weeks later. On the other hand, a considerable long-term decrease in learning can be observed in both the traditional group and the control group. The study's findings indicate that games are a useful way to teach irregular verbs (Çiftçi, 2010: vf. und 50 ff.).

3. THEORETICAL UNDERPINNINGS OF USING GAMES IN GERMAN LESSONS

The use of games in German classes is discussed theoretically in this section. The research findings are partially implemented in the work's following section. It is possible to view playful second language learning from a structural-behaviorist, psycho-cognitive, socially-informed, and ecologically-informed perspective using Reinhardt's concept as a guide.⁴ The grammar-translation method is the most well-known way of teaching that took inspiration from structuralism. More specifically, it involves memorizing grammar and vocabulary rules in addition to translating written documents. The linguistic comparisons, contrasts, and analyses between the mother tongue and the target language are other key elements.⁵ Learners could be provided a vocabulary list based on the method's strengths as part of a structural approach to game-based target language teaching. They can play the game, matching form to meaning as they do so. The vocabulary size and correctness of a given translation would be the accuracy criteria. However, since the grammar-translation method is structure-oriented, learners would not be expected to use the language in a communicative or pragmatic manner. In contrast to the grammar-translation method, the audio-lingual method is behaviorism-informed. Habit formation and both negative and positive reinforcement are the cornerstones of the audio-lingual method. One of the most crucial aspects is making students practice patterns and forms repeatedly so that they can utilize them automatically without having to think about them.⁶ The behaviorism-informed concept of gameful

⁴ For a modeling representation of how the game is used and a related design framework in the context of learning processes (in language lessons), see Plass et al. (2015: 262ff.).

⁵ For further information on the guiding principles of the grammar-translation method, see Howatt and Widdowson (2004: 151ff.).

⁶ For more information on the characteristics of the audio-lingual method, see Coady and Huckin (1997: 10ff.).

learning will motivate the learners to repeat the linguistic structures in light of this. Rewards and penalties are employed for both positive and negative reinforcement. A psycholinguistic-cognitive perspective is built on the assumption that language exists in the individual's mind. It consists of relationships and representations, including meaning and form. Environmental input and neuro-biological maturation are the main factors that influence language development. The importance of instructions in a communicative learning context is underlined in the context of cognitive language learning. The language should therefore be conveyed via the appropriate inputs. Students should, for instance, be given the opportunity to push output and negotiate meaning.⁷ The game must have aspects that stimulate experimentation and deduction on the part of the learner if the psycho-cognitive view is to be taken into account in game-based language learning. Students should also be able to recognize the lexical-grammatical structures being used. Additionally, adequate chances for language comprehension and production should be provided.

The relevance of sociality in the language learning process is heavily stressed in social-informed perspectives. Therefore, it is essential to promote collaborative learning while encouraging meaning-making.⁸ On the one hand, the socially informed perspective will be reflected onto the gameful language learning by the student engagement with the game discourses, the role-playing within the game, and the use of identities. On the other hand, the students should take part in social interactions that are consciously designed as game elements and negotiate meaning with other players. The notion that language and learning are situated, contextualized, cognitive-social processes is addressed by ecological approaches. From an ecological perspective, learning and language are considered as being complex and systemic, among other things. In this setting, non-linearity and emergence are additional components. The ecological view also takes into account the concept of affordance. Its objective is to describe technologically mediated language learning. Thus, the term "affordance" refers to action potential. It results from the collaboration between an actor and an ecological design. The game mechanic and player actions interact to produce affordances in the context of language learning. From an ecological view, language acquisition is seen as a dynamic change. For instance, it takes into account how actors and potential actions are related ecologically.⁹ Consequently, relationality is the essential component of the ecologically-informed perspective on gameful learning (Reinhardt, 2019: 104ff.).

4. TYPES OF LANGUAGE GAMES

In the anthology edited by Nurmukhamedov and Sadler (2020), the categorical consideration of games in foreign language teaching is divided into traditional pencil-and-paper-games, dice games, board games, card games, technology-mediated games, and miscellaneous games. This categorization is used in this article section because to the extensive structure it provides for achieving the work objectives. On the other hand, miscellaneous games are not covered in order to restrict the working framework. This section discusses how the games that are presented can specifically be used in German classes. This justifies the application of particular linguistic themes in this setting. Language beginners at levels A1 to A2 with Turkish as their mother tongue make up the target group for the present explanations. The primary goal of using the games is to improve vocabulary and grammar proficiency. 10 to 15 minutes should be scheduled for each game. Further, the recommended games could not only be employed as parts of other language lessons; theoretically, they could also serve as separate teaching units with more time. Above all, the lesson's contents could be reinforced and the subject could be repeated in a motivating manner by using them.

As previously stated, the third section's theoretical underpinnings are used in part when discussing the particular games. The structural-behaviorist, psycho-cognitive, and social-informed perspectives are explicitly taken into account. A structural-behaviorist view is adopted in the questions about the vocabulary and grammatical structures as well as the frequency with which the related game is played. The psycho-cognitive approach is reflected in the questioning of the understanding of meaning and rules. In accordance with the social-informed perspective, the game process encompasses the participation of multiple learners in the relevant game. Additionally, the teaching and learning processes are harmoniously integrated in German lessons, giving the instructional procedures a coherent structure. This would imply, in other words, that the ecologically-informed view is automatically represented within the framework of the specific game application.

⁷ For further details on psycholinguistic processes (and also language use) and cognition-based modeling of language learning, see Skehan (1998: 43ff.).

⁸ For more details on the role that society plays in language acquisition processes, see Verga and Kotz (2013: 3f.).

⁹ For further information on the features of the ecological approach to language learning, see daSilva Iddings (2017: 3f.).

As a result, it will not be covered separately in the following. For instance, the topic of personal information could be addressed employing traditional pencil-and-paper games. The teacher gives the students some paper for this activity. Each student's worksheet includes a personal question about themselves, such as "Woher kommst du?" "Wo wohnst du?" "Wie alt bist du?" etc. The teacher then collects the papers and folds them in half. After that, each student selects a card and answers the relevant question aloud in front of the class. Any questions that the students do not ask may be added by the teacher. This also keeps the activity from becoming monotonous. Playing dice games is a useful way to practice nominative case personal pronouns, for example. For this purpose, the teacher should provide the personal pronouns in the following order at the start of the game: 1. ich 2. du 3. er 4. sie 5. es 6. wir 7. ihr 8. sie 9. Sie. He would then throw a nine-sided virtual dice. Depending on the outcome, the learner whose turn it is would say the appropriate personal pronoun. If necessary, more dice could be used to simultaneously address the personal pronouns in the genitive, dative, and accusative.

Playing board games is one way to practice the present tense verb conjugations, for instance. The teacher could draw boxes and connect them to one another on a piece of paper for this activity. He would then write the infinitive of a number of verbs into each box. The students start by going to the first box. Every student must conjugate a verb in a particular person according to the teacher's instructions. Students may move up one box if they correctly performed the relevant conjugation. The student who reaches the goal first also wins the game. However, the conjugation question should also be posed to the other students who are in the last box as well. Multiple winners of the round could occur if there are more correct answers. Additionally, the Präteritum and/or Perfekt tense verb conjugations might be included in the game as well. Card games, for example, can be used when discussing the articles in the nominative singular. The teacher prepares cards with pictures of furniture pieces for this purpose. The cards are then laid out on the desk. Each student draws a card in turn. They must name each piece of furniture with its article in the nominative singular. The expansion of the game could also incorporate the article's declension in other cases. Online hangman games are an example of how technology is applied to games. Letters of chosen clothes could be automatically displayed with a dash on an online learning platform in order to integrate the hangman game in the lesson. The students are then expected to make guesses. Following their choices and the identification of the correct word, the teacher might also ask what the plural form is. Last but not least, it should be highlighted that focusing on the learners' mother tongue, Turkish, could be accomplished, among other things, by purposefully incorporating intercultural and linguistic contrasts into the teaching process.

5. CONCLUSIONS

In the context of this article, the current state of the use of games in the teaching of foreign languages was discussed. For this purpose, recent studies from Turkey and other countries were presented. Next, theoretical foundations for using games in German classes were explained. Then, suggestions for utilizing the variety of games in German courses were offered. It should be noted that only a part of the theory chapter's explanations was used in that section of the paper. In order to keep the working framework to a manageable amount, a few recent studies were reviewed. For the same reason, a more extensive discussion of the theories underlying the usage of games in foreign language teaching was omitted. A more target group-specific approach that more thoroughly considers the target learner group's mother tongue while designing the game material can be advised to continue the research. Based on the literature, it could be determined, for instance, which lexical-grammatical structures Turkish speakers learning German struggle with the most.¹⁰ In this regard, tertiary language didactics may also merit special attention. With German having a significant role as the second foreign language in Turkey, English is taught as the first foreign language. Accordingly, Turkish language students would benefit from applying their English language proficiency when learning German vocabulary and grammar, for example.¹¹ It is also important to keep in mind the expanding role that digital technology and hybrid teaching methods play in the language learning process. This is a major factor that specifically refers to the design and implementation of appropriate digital materials for the application of games in German lessons, especially in the post-pandemic era.¹² The final thought in the conclusion part is the possibility of developing an

¹⁰ An example would be the journal paper by Balci (2006) on the valence structure-dependent difficulties faced by Turkish students.

¹¹ For information on the significance of teaching German as a second foreign language in Turkish schools and the need of adopting appropriate tertiary language didactics, see Tapan (2010: 1820).

¹² Regarding the hybrid design option for teaching foreign languages, see Asutay (2022).

age-specific program with a number of games which might potentially utilized with or without textbooks. In light of the emphasis on textbooks in language teaching processes, the idea of integrating with regional German textbooks in Turkey comes to mind.¹³ On the other hand, textbooks from German publishers would be employed for this purpose in Germany where German is taught as a second language.

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¹³ For further information on the process of producing regional textbooks for German lessons, see Breitung and Lattaro (2001: 1044ff.).

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The Role of New Media in German as Foreign Language Teaching

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Abstract: This article deals with the role of the new media in German teaching. The expanding digitalization process that is visible in the twenty-first century is a major factor in the choice of this issue. The employment of new media in the personal, professional, and social arenas is consequently becoming more crucial. Thus, corresponding influences are also applied to the structure of teaching German as a foreign language. For instance, a number of new media are being created and developed especially for use in teaching foreign languages. It should be noted, nevertheless, that in this context, new media that were not initially intended for teaching foreign languages can also be used to do so. These facts serve as the foundation for this article's examination of the use of new media in foreign language instruction at the present time. This is supported by recent research studies. Theoretical underpinnings for new media's usage in foreign language instruction are then presented. The objective is to better understand how they are used in foreign language classes. The category analysis of the new media is then continued. The practical uses of new media in teaching German are also covered. The conclusions are developed in the end.

Key Words: Teaching German as a Foreign Language, Language Games, Language Exercises

1. INTRODUCTION

This article investigates the significance of new media in German language lessons. The first step before attaining the work objectives should be to define the term “new media.” At the outset, it should be mentioned that the word new media is, so to say, subject to constant modification. For instance, paper, printing presses, and tape recorders were all regarded as new media when they were first created.¹ In contrast, digital media are basically seen as new nowadays.² Furthermore, the advancement of social life has been significantly impacted by digitalization, which has become a necessity for many people. Above all, this results in newer — and, in a sense, progressively stronger — ways of connecting the individual to the rest of the world and relates, for example, to the use of communication or the interactive, simultaneous acquisition of information. The inescapable presence of new media in daily life would also imply the need for media literacy in order to actively participate in modern social environments (Loicq, 2014: 77).³ Teaching is another area in which new media have significant potential. The benefits of using them include the possibility of increasing learning motivation and the chance for longer-term learning (Wilson et al., 2017: 22f.).⁴

The use of new media must be taken into account while designing lessons for German as a foreign language. As part of the ongoing scientific discussion on this topic, a lot of literature has been published. On the basis of scholarly articles, the potential of using new media in German teaching is principally discussed. Additionally, in the context of teaching foreign languages, for instance by anthologies, the subject is explored from a wider viewpoint. Important examples of this can be found in the works edited by Zeyer et al. (2016) and Biebighäuser et al. (2012). While the latter discusses the interactive design of the teaching and learning processes that may be achieved through the utilization of new media, the former goes over the tasks that can be implemented using them. From this, among other things, it can be inferred that the scientific examination of the use of new media in German language teaching is generally conducted from a variety of angles. However, it must be remembered that not all types of media utilized in German language lessons were developed with this objective in mind. Using PowerPoint in the teaching process is an example for this.⁵ Its original intent, namely,

¹ For a thorough historical analysis of media change in the social context, see Briggs and Burke (2002).

² Bod (2013: 343) and Feng and Wang (2020: 597) are two sources providing supporting evidence for this assertion.

³ For a thorough discussion of the significance of having digital competency available at the present time, see Avni and Rotem (2018).

⁴ Based on the edited anthology by Conway et al. (2015), a thorough analysis of the function of digital media in the context of teaching and the value added by its use can be found.

⁵ In favor of using PowerPoint to create German lesson plans, see Bialas-Wilson (2018: 44f.).

was not to teach German as a foreign language, but rather to implement presentation planning and execution.⁶ The potential uses of new media in teaching German as a foreign language are further established as the focus of the present work in light of the aforementioned considerations. In the following, the situation of the use of new media in German language instruction is described using recent studies. In this context, it should also be noted that the work's target group consists of Turkish students learning German as a foreign language in Turkey. Therefore, scientific studies from various countries as well as from Turkey are provided separately to help the reader better understand this aspect. Next, theoretical underpinnings for the use of new media in the teaching of foreign languages are discussed. The new media are also categorically presented, and practical teaching suggestions are generated to apply them in German language classes with Turkish learners. At the end of the work, several conclusions are made.

2. CURRENT STATE OF RESEARCH

This section of the article presents the current state of research on the use of new media in German language teaching. As previously said, this topic is examined from both an international and a Turkish perspective. In other words, the foundation is provided by recent research studies from different countries and Turkey separately. This is due to the target group of the work, which, as indicated, consists of German language learners with Turkish as their mother tongue. This approach should make it easier to understand the topic's contemporary significance and its addressee-specific relevance for the development of German lessons.

2.1. Scientific Studies in International Context

The relationship between visual literacy and new media in the context of teaching German as a foreign language is the focus of Kolečáni Lenčová's contribution to the publication series. The author argues that people are constantly exposed to visual media and multimedia. The necessity for an enhanced consideration of visual culture in the educational setting is explored in a synchronous manner based on the communicative activity inspired by this. Moreover, the investigational focus of the term "visual literacy" is provided and the article's focus is on its importance in teaching foreign languages. Because of its multidisciplinary character, the systematic integration of visual literacy and new media is thought to be a progressive alternative to the traditional pathways. Additionally, the current function of images in human life is examined at the outset of the article, and after this, the connection between literacy and visual communication is discussed. The concept of visual literacy and how it applies to teaching foreign languages will be covered separately. Next, examples from practice are provided. The paper finishes with a conclusion. One of the aspects that may be inferred from the outcome is the prospect of adding a new dimension to teaching foreign languages. It should be accomplished by concentrating especially on visual literacy in conjunction with new media (Kolečáni Lenčová, 2019).

In her journal article, Kováčová focuses on using modern media while teaching German as a foreign language. She begins by discussing the contemporary significance of media for children and teenagers and the dominance of the audiovisual dimension in this context. The article also alludes to the great difference between textbooks' primary influence on school instruction and the media-dominant roles of television and computers in the lives of the younger generation. Further, it emphasizes that it is important to have learners' needs in mind while constructing teaching procedures. Regarding this, the author suggests that the context of the work include examining how new media might be used in learner-centered teaching processes. She provides definitions of the terms "medium," "new media," "e-learning," and "media education" for this purpose. Then, a topic of the new media's function in teaching foreign languages is covered. This is accomplished by emphasizing the role of media in language learning, examining the stimulating aspects of new media for a reflective view of language usage, and comprehending their potential application as technical aids in the design and implementation of teaching processes. The importance of using computers for communication and as a tool for teaching is also highlighted and at the end of the work, a conclusion is drawn. In this context, for instance, it is examined in which way new media can be used as a helpful learning tool while teaching foreign languages. In addition to other aspects, it is emphasized that it is crucial to include media literacy and media didactics in teacher education and training in order for instructors to successfully integrate new media into their courses (Kováčová, 2013).

In Ajao's project work, the use of new media in Nigerian German language instruction is considered as a way to enhance students' listening comprehension. Accordingly, the author starts by outlining the context of the

⁶ For information on how PowerPoint was created, see Thakur (2022: 3).

research. In light of this framework, drawing the reader's attention to the importance of listening comprehension abilities is regarded as fundamental for a better understanding of its function in the ideal design of communication processes. It is also made evident that many Nigerian German language students find it difficult to develop good listening comprehension skills. Therefore, the necessity for improving listening comprehension in German classrooms in Nigeria should be recognized in the context of the work. Also, the potential for improving listening comprehension skills in Nigerian German lessons by using new media should be investigated. In order to do so, a lesson plan should be developed that allows to teach the listening comprehension and topic-related subjects. To carry out the empirical study, both qualitative and quantitative research methods are used. A pre-teaching phase, a trial lesson, and a post-teaching phase make up its three-part structure. Questionnaires are used at the beginning of the empirical part to assess learning needs. Participants are third- and fourth-year University of Ibadan students as well as those from the Universities of OAU and UNN. Also, two German instructors from the Goethe-Institute and the University of Ibadan participate in the study. Then, the research's findings are used to create a lesson plan. Further, the lesson design constructs a theoretical framework for the trial lesson. Finally, the findings of the study should be applied to evaluate the effect of using new media. The CLIL concept is utilized to analyze the questionnaire. Within the conclusion, the use of new media in the teaching process is discussed, among other things, and the success it achieved to a certain extent (Ajao, 2018: 1 and 6ff.).

2.2. Scientific Studies from Turkey

In Sakarya Maden's and Çelik's contribution to the conference proceedings, the findings of an empirical investigation are presented. The purpose of this study was to determine the effectiveness of digital media and the outcomes of using them in teaching and learning of German as a foreign language at the higher education level in Turkey. This article based on the outcome of the empirically study TÜBAP 2008-47. The Trakya University-funded research project ran from April 14, 2008, until April 14, 2009. It compares the impact of teaching German in a traditional classroom setting with the effects of a multimedia learning setting. This approach was employed to examine whether the students would learn the German language more effectively in a multimedia learning environment. It was conducted in order to evaluate the computer lab of Trakya University's School of Foreign Languages. A survey of German teachers and students was also part of the study. In addition, the study's participants were freshmen without any prior German knowledge who took German lessons in the computer laboratory for a year (28 weeks and 26 hours weekly). Also, the usage of media components in the new textbooks in Turkey should be analyzed in light of the study's results, and suggestions for successfully integrating digital media into the educational process should be provided. Among other things, the study's outcomes indicate that the computer lab produces higher learning results. On the basis of the research's findings, recommendations have been made, including the need for more address-specific textbooks and their components to better serve Turkish German learners and the provision of suitable continuing education courses for German teachers to support their effective use of digital media (Sakarya Maden and Çelik, 2010: 88ff. and 100ff.).

The topic of Balkan's dissertation is using new media for teaching German as a foreign language. More specifically, it entails a contrast and semiotic analysis of how multimedia tools are used. In this regard, it should also be mentioned that the study occurs in a setting of new knowledge and action. Initially, theoretical underpinnings are given in order to accomplish the work objectives. The following issue is the question how language is learned and which standards should be followed when creating Turkish foreign language teaching. Further, the significance of identity formation in the context of language acquisition as well as the action-oriented design of foreign language lessons and media pedagogy are thoroughly examined. Other key elements of the work are the use of new media in language teaching, the analysis of foreign language learning processes from a semiotic perspective, and the change in foreign language acquisition processes brought about by multimedia. The thesis also includes an empirical investigation. More precisely, interviews with participants were performed after pilot research. Twelve Berlin-based foreign language teachers took part in the survey. They were questioned in problem-focused interviews, and their participation was then evaluated. Among other things, the empirical part's findings highlight the special value of digital media for putting foreign language teaching processes into practice and the significance of designing interactive lessons for foreign language instruction in schools, taking into account the multimedia perspective. To complete the work, a summing-up reflection is presented (Balkan, 2020: 1ff., 120ff., and 141f.).

The historical transformation of literary works in relation to new media is the topic of Kalemci's master's thesis. It investigates the viewpoint of foreign language students on simplified literary audiobooks. The study is a

survey on integrating particular audio books into the German language learning process. It was conveyed through a complete semester and the participants were 54 second-semester students at Namik Kemal University's German Language and Literature Department. The first points in the study to be explained were the research process and its current condition. Next, some key terms related to medium were defined. Before introducing new media tools that are suitable for teaching foreign languages, the author initially analyzes the value of new media in shaping the processes of language learning. Four language abilities are exemplified in this context. After this, the topic of audio books is explored. For instance, the development's history and the different categories of audio books are illustrated. Finally, a conclusion is developed. Based on the survey's findings, the author pursues the theory that adopting audiobooks as supplementary materials can help foreign language learners to increase their reading habits. The other exemplary features mentioned at this point include motivating students to read, assisting pronunciation and the reading comprehension procedure (Kalemci 2022: xf., 5f., 10, 48ff., 77, and 82f.).

3. THEORETICAL UNDERPINNINGS OF USING NEW MEDIA IN GERMAN LESSONS

In this section of the study, the theoretical foundations of using new media to teach German as a foreign language are covered. On the one hand, this will improve the reader's understanding of the subject matter. On the other hand, the explanations provided here will be used in part in the next section of the work to develop the practical recommendations. Furthermore, the theoretical underpinnings of new media primarily apply to the teaching and learning processes in the context of teaching German as a foreign language. More precisely, it is expected that new media will be used in teaching German to improve the effectiveness of language instruction. Therefore, the connection between new media and electronic learning (hereinafter referred to as e-learning) has priority in the explanation of the theoretical basis at this point. According to James-Springer and Cennamo, e-learning is the learning process that is planned to utilize digital tools. The design of this learning process should also be goal-appropriate, situation-appropriate, and media-appropriate (James-Springer and Cennamo, 2021: 6f.).⁷ On the basis of this, the teaching and learning processes for German as a foreign language are seen in the framework of this work under e-learning. They are carried out by the purposeful use of digital media in accordance with the respective teaching objectives.⁸ The theoretical underpinnings of this form of learning will be addressed initially in this section of the study. Before considering the issue in detail, it should be mentioned that Kong's (2021: 6) e-learning framework is utilized for realizing the work objectives. In his study, he developed it in the context of school education.⁹ This choice is supported by the framework's detailed structure, which makes it possible to include the main aspects of teaching German as a foreign language within the setting of new media. Additionally, significance of the general pedagogical framework for specific use in teaching German as a foreign language is added independently at appropriate points in accordance with the primary focus of this article.

Furthermore, the framework has two dimensions: technology and pedagogy. Each dimension includes three components. The technological dimension consists of e-resources, digital ways of communication and of collecting data. E-resources can be basically attached to four categories: e-textbook, curriculum-related e-resources, open courseware, and e-resources in general. E-textbook and curriculum-related-e-resources are produced especially for use in the school curriculum. Open courseware, on the other side, is primarily appropriate for self-learning processes and is not typically perceived as a component of the curriculum in schools. Although the primary goal of general e-resources is not using them in classes, teachers and students are free to include them into their teaching and learning processes as needed. Digital ways of communication are included in the second component, which is similarly divided into four categories. The first category criterion is the use of digital communication tools in classroom instruction. Among other things, it is considered to make the students engage. The second categorization criterion focuses on the processes that are relevant for teaching and typically take place outside of the classroom. For instance, this entails utilizing digital platforms to increase learner interactions. The third classification criterion discusses relationships between teacher and learner interactions occurring in social networks. Learners can express themselves and their views through the fourth classification criterion, for example. The third component, digital ways of collecting data,

⁷ In their definition of the term e-learning, Rice and Gregor (2016: 2) especially emphasize the interaction aspect.

⁸ For a thorough explanation of the term e-learning in the context of learning German as a foreign language, see Mitschian (2010: 15ff.), who also discusses the concept in relation to the term m-learning (, which was created by highlighting the location independence in the learning process).

⁹ For an example of the implementation of the concept of a learner-centered e-learning framework, see Glancy and Isenberg (2013: 25ff.).

includes both formative and summative data gathering. It is possible to obtain formative data throughout the learning process and summative data, among other things, during the evaluation phase of the learning outcomes. At this point, it should be noted that it was the goal of the expansion of the framework's technological dimension to include the component digital technology in order to enable the inclusion of technological items.¹⁰ Given the importance of the textbook in language instruction, it may be argued that the digital textbook components contribute significantly to the teaching of German as a foreign language.¹¹ In contrast, digital ways of communication will be crucial when creating the advisory contacts between the teacher and the students.¹² A scientific study on the teaching and learning processes in German as a foreign language lessons could be the main context of an extensive use of digital ways to collect data.

Moreover, the theories / models / principles / strategies, learning and teaching activities and evidence-based pedagogical decision-making / supports make up the fundamental elements of the pedagogical dimension. The first part of the pedagogical aspect, theories / models / principles / strategies, focuses on the epistemic underpinnings of the e-learning process. As the second component of the pedagogical dimension, the tasks are primarily at the core of the learning and teaching activities. The learners should be encouraged to reflect through their use in order to enhance knowledge construction. The third component, evidence-based pedagogical decision-making / supports, is basically the adaption of gathering data in the learning process, the analysis of the collected learner data, and the potentially modifying revision of the lesson design on the basis of the analytical data consideration.¹³ The pedagogical theories / models / principles / strategies reflect the fundamental principle of the e-learning framework, which is the last point that has to be discussed in this context. In other words, the teacher should have the most influence on the design of the instructional process by carefully considering this pedagogical component. Furthermore, ways of language teaching (such as the use of the audio-lingual method or the communicative approach) are prioritized in the context of teaching German as a foreign language in terms of theories / models / principles / strategies.¹⁴ Of course, these can be more precisely defined to include specific elements, for instance, through the discussion of learning strategies.¹⁵ Further, when it comes to the organization of learning and teaching activities, lesson planning is crucial.¹⁶ Last but not least, it should be mentioned that the use of evidence-based pedagogical decision-making / supports could be closely related to lesson evaluation (Kong, 2021: 6ff.).

4. TYPES OF NEW MEDIA

The topic of this chapter is the categorical presentation of new media. On the basis of this, ideas are developed how to applicate them in German language instruction. As already noted, the theoretical concepts discussed in the third section of the work are utilized to some extent. On the other hand, the explanations of Reyna et al. in the context of university education with regard to digital media assignments offer the theoretical foundation for the categorization of new media. This is due to the fact that their taxonomy description for learner-generated digital media has a thorough yet compressed structure, making it possible to achieve the goals of this study efficiently. The teacher should be able to identify which type of media is utilized to complete each assessment task by using the taxonomy for learner-generated digital media, as well as which relevant study skills should be strengthened by using the media tools. The taxonomy could also be utilized by the teacher to give students specific feedback in the context of skill reinforcement. On the other side, the taxonomy representation enables the students to identify the skills required to accomplish their respective digital media assignments.

Reyna et al. distinguish between several media types and the skills related to each sort of media as part of their taxonomy. The types of media that should be used in a teaching situation include the audio podcast, blog

¹⁰ For a detailed review of the technologies used to execute e-learning, see Craig et al. (2012: 31ff.).

¹¹ For information on the significance given to the textbook in the teaching of German as a foreign language, see also Tornero Pérez (2022: 225).

¹² For further information on the theoretical underpinnings of language learning counseling in the context of German language lessons in relation to culture-related practical differences, see Vogler (2011: 21ff.).

¹³ For a thorough examination of e-learning from a pedagogical perspective, see Siadaty and Taghiyareh (2008).

¹⁴ For a thorough examination of foreign language teaching procedures from a historical viewpoint, see Henrici (2001: 843ff.).

¹⁵ For further information on the significance of teaching strategies of learning in German language classes in relation to enhancing learner autonomy, see Chudak (2008: 126ff.).

¹⁶ For more details on lesson planning in the context of teaching German as a foreign language and German as a second language, see Gehring (2018: 67ff.).

posting, brochure, digital story, video, blended media, and game. Moreover, there are three domains for each media: conceptual, functional and audio-visual. The conceptual domain refers to the students' production of scientific documents. The functional domain, in contrast, is concerned with the usage and management of various software and applications. The audiovisual domain is subject to the principles of digital media. According to the taxonomy of Reyna et al., the conceptual domain with a uniform nature is assigned to each sort of media. Both the functional and the audiovisual domain have a number of components. This information forms the basis for the taxonomy, which identifies the functional domain and audiovisual domain components that constitute each digital medium's structure in the context of teaching and learning (Reyna et al., 2017: 314ff.; see also Reyna, 2021: 3f.).¹⁷

The focus next shifts to developing practical recommendations for the integration of new media in German language teaching for Turkish learners. It is assumed that they perform at the A2-B1 level. In order to restrict the working framework while yet achieving the relevant working goals, only audio podcasts and videos will be taken from the taxonomy of Reyna et al. (2017: 314). Further explanation of the streamlined adaptation of each taxonomy domain for German language instruction is provided in the following. Contrary to the arguments of Reyna et al. (2017: 314), the conceptual element in this situation has more to do with the specifics of teaching foreign languages than it does with the production of academic documents. Similar to the original representation, the functional component alludes to the application-based technological aspects. On the other hand, the term audio-visual is used just to designate whether a medium is auditory, visual, or audio-visual. Additionally, the framework of Kong (2021: 6) is integrated into this context by only considering the pedagogical dimension. To be more specific, the theory part of the categorization criterion theories / models / principles / strategies and the role of the instruction in relation to the categorization criterion learning and teaching activities are employed for this purpose because these two sub-criteria are appropriate to fulfill the corresponding objectives in this section. The working framework can also be limited in this way. As a result, the sub-criterion theories examine the process of language mediation, in line with which the structural design of the relevant new medium was built. In contrast, the utilization of the sub-criterion for instruction, which is more accurately characterized as instructional activities, demonstrates the additional potential for enhancing and complementing the content of the respective media.

The utilization of audio podcasts is the next step in the practical recommendations.¹⁸ Their conceptual aspect primarily refers to discussions on particular life topics, including sports, music, or entertainment. Then, the digital devices needed to operate them should be identified using the functional aspect. One example might be computers or cell phones. It is evident from the audio-visual analysis criterion that audio podcasts are an auditory teaching tool. The analysis of audio podcasts from a theoretical standpoint should follow next. This phase is important for the teacher, as it should make it possible to comprehend the process of language instruction used in the particular podcast. The communicative approach could be employed in the classroom by utilizing an authentic audio podcast.¹⁹ On the other hand, it may be argued that an audio podcast with intercultural reflections and a thorough cultural presentation offers compelling opportunities for the implementation of interculturality in the teaching of German as a foreign language.²⁰ The teacher could create listening comprehension exercises for the related podcast and go through them with the students as part of teaching activities. It might be possible to stress intercultural aspects for Turkish learners during this.

Videos are also created employing a range of topic-specific subjects. Examples of this feature include videos of news, documentaries, or instructions. They are audio-visual in design and may be accessed, among other things, on a computer. The grammar-translation method would primarily serve as the theoretical foundation for a grammar training video.²¹ The process of audio-lingual and/or audio-visual language mediation may also be significant, depending on how the issue is explained. To promote the use of video in German classes for Turkish students, worksheets could be used.²² With relation to the subjects covered, the teacher can provide a

¹⁷ For a deeper discussion of the systematizing use of digital media in relation with the learning process of German as a foreign language, see Rösler and Würffel (2013: 253ff.).

¹⁸ For further information on the use of podcasts in the context of mobile foreign language learning, see Adamczak-Krysztofowicz et al. (2015).

¹⁹ For further details on the contemporary application of communicative language teaching, see Richards (2006).

²⁰ For a thorough evaluation of the principles of intercultural language teaching, see Liddicoat (2004).

²¹ See Lestary's study (2019) on teaching Bahasa Indonesia as an instance of how the grammar-translation method is used in teaching foreign languages.

²² For a detailed explanation of the application of audio-lingual and audio-visual methods in the context of teaching English, see the study by Shakirova (2020).

grammatical comparison of the respective language structures in Turkish and German. The final point to make in this regard is that the conceptual analysis criterion might be expanded to include the identification of the new media's original production purpose given that not all new media are produced with the intention of being used in foreign language instruction. For instance, a database for teachers could be established that primarily includes a list of new media that were created specifically for teaching German. As a result, using new media to develop teaching procedures would be more convenient.

5. CONCLUSIONS

The focus of this paper is the significance of new media in teaching German as a foreign language. When beginning to implement the work goals, the importance of digitalization from a social and educational perspective was first brought up. This context also addressed the subject's emphasis, particularly in published literature. Then, the current state of research was described. The scientific research was analyzed from both an international and Turkish viewpoint. The application of this strategy should result in a deeper understanding of the topic of the work. It was then practically suggested to incorporate new media into the design of the teaching and learning processes in German lessons after discussing the theoretical foundations for using them in the context of teaching German as a foreign language. One aspect that constrained the working framework was the lack of a more complete examination of the theoretical underpinnings of the utilization of new media in German language instruction. For the same reason, not all of the aforementioned new media were employed in the creation of the practical recommendations.

Future studies in this field may concentrate on developing teaching materials that are especially adapted to the target group.²³ Thus, the potential benefits of using new media with Turkish speakers of German as a foreign language should be further explored as part of a broader study.²⁴ Moreover, academic areas of German Studies in Turkey include German teacher training, German language and literature, as well as translation and interpreting. Research should also be done on the potential for developing specific content or ways of language mediation using new media in this context.²⁵

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²³ In this framework, the three-phase needs assessment model by Spector and Yuen (2016: 52ff.) serves as an illustration of how to ascertain learners' needs in an educational setting.

²⁴ In this context, one study that might be looked at more closely as part of a wider project on the design of teaching German as a foreign language in Turkey is that of Asutay (2021) on the use of web-based tools in language teaching.

²⁵ This idea is supported by Walter's study (2009) on the use of e-learning in teacher education programs to enhance teaching internships in the context of teaching German as a foreign language.

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Merkeziyetsiz Finans: Kavramsal Çerçeveye Dayalı Bir İnceleme

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Özet: Son iki yılda oldukça hızlı bir biçimde büyüme kaydeden merkeziyetsiz yapılar farklı projeler bağlamında faaliyetlerini sürdürmektedir. Bu projeler işlem akışını blok zincirleri üzerine kurulmuş açık kaynak kodlu sözleşmeler vasıtasıyla yürütmektedir. Merkeziyetsiz Finans (Decentralized Finance/DeFi) adı verilen bu sistem geleneksel yapılara bağlılığı azaltma ve finansal işlemlere ilişkin pratiği değiştirme iddiasıyla ortaya çıkmıştır. Bu çalışmada DeFi ve ilgili ekosistemin anahtar kavramları tanıtılmış ve tanımlanmıştır. Geleneksel finans sistemi ile DeFi karşılaştırması yapılarak, DeFi'ya ilişkin temel özellikler ele alınmıştır. Son olarak DeFi ve bağlantılı kavramları içeren çalışmalardan oluşan bir literatür özeti sunulmuştur.

Anahtar Kelimeler: Finansal Sistem, DeFi, Blok Zinciri.

1. GİRİŞ

Yakın dönem finans araştırmaları gelişen teknolojiler ve buna bağlı olarak finansal inovasyonun yarattığı/yaratacağı etkiye odaklanmaktadır. Joseph Schumpeter tarafından “yaratıcı tahribat” olarak nitelendirilen olgu Clayton Christensen’in “bozucu inovasyon” teorisi sayesinde “piyasa” ile ilişkilendirilmiştir. David Rogers’ın “iş modeli bozumu” olarak ortaya koyduğu kavram ise mevcut teknolojilerin kullanılarak yeni bir iş modeli tasarım sürecini ifade etmektedir (Rogers, 2020:245-248). Finansal teknolojilerin (fintech) yükselişiyle birlikte geleneksel yapılara dayalı iş modellerinin tahribata uğradığı izlenmektedir. Finansal işlemlerin dijital ortama/platforma taşınması ilk gözlenen olgudur. Mobil ödeme, para transferi, kredi işlemleri, varlık yönetimi vb. finansal işlemlerin gerek hizmet veren gerekse de hizmet alan açısından farklı bir boyuta taşınması finansal inovasyonu hızlandırmıştır. Bu da yeni iş modellerinin, uygulamaların, süreçlerin ve ürünlerin ortaya çıkmasına zemin hazırlamıştır. (Madir, 2019:1). İkinci olgu ise blok zinciri teknolojisinin gelişmesiyle birlikte ortaya çıkan işlemlerde “aracısızlık” formu. Bu gelişme geleneksel yapıların mevcudiyetlerini fiziksel den dijital taşımaları veya yeni fintek girişimlerinin platform bazlı sektöre girişlerinden çok daha ötede bir duruma işaret etmektedir. Dağıtık defter teknolojisine (distributed ledger technology) dayalı blok zincirinin finans alanındaki yaygın kullanımı “merkeziyetsiz” olarak nitelendirilen bir finansal sistemin mümkün olabileceğini göstermiştir. Bu bağlamda Sert (2022) tarafından ifade edildiği üzere yelpazenin bir ucunda merkezi yapılar, diğer ucunda ise merkeziyetsiz dağıtık yapılar yer almaktadır. Küresel finans sistemi üzerine yapılan son dönem tartışmalarda popüler bir konu olarak öne çıkan merkeziyetsiz finansa yönelik akademik ilginin de arttığı gözlenmektedir. Bu bağlamda çalışmada merkeziyetsiz finans ekosisteminin kilit oyuncuları tanıtılarak kavramsal bir inceleme yapılmıştır. Buna ek olarak konuya ilişkin literatür özeti sunulmuş ve gelecekte yapılması muhtemel çalışmalar için araştırma önerileri verilmiştir.

2. CeFi ve DeFi KAVRAMLARI

Geleneksel finans sisteminde farklı katılımcıları bir araya getiren araçlar söz konusudur. Bu araçlar bankalar gibi finansal kurumlar ve menkul kıymet borsaları gibi piyasa sağlayıcılarıdır. Fon arz eden taraflar ile talep edenleri sistematik bir şekilde bir araya getiren merkezi finans sistemindeki (centralized finance / CeFi) majör araçlar finansal sistemin fonksiyonlarını ve finansal kaynakları merkezileştirmektedir. Piyasadaki işlemler (transaction) bu araçlar tarafından karakterize edilerek yürütülmektedir (Zetzsche vd., 2020).

Blok zinciri teknolojisinin gelişmesiyle birlikte ortaya çıkan işlemlerdeki aracısızlık formu ise finansal sistemin geleneksel yapısını dönüştürme potansiyeli yakalamıştır. Finansal işlemlerin tek bir merkezli otoriteye bağlı kalmaksızın dağıtık defter teknolojisi kullanılarak gerçekleştirilmesi merkezi olmayan, diğer bir deyişle merkeziyetsiz yapıların doğmasına zemin hazırlamıştır. Bu merkeziyetsiz finans (decentralized finance / DeFi) yapılarını bilgisayar yazılımları oluşturmaktadır ve işlemler silsilesi algoritmalar vasıtasıyla kontrol edilmektedir. Bu yapının ortaya çıkışındaki temel motivasyonun mevcut finansal sistemdeki sorunları ortadan kaldırmak olduğu ifade edilebilir. Amaç geleneksel finans sistemindeki fiziki ve/veya dijital ortamda verilen hizmetlerin dağıtık yapılara kaydırılmasıdır (Sert, 2022: 17).

CeFi ve DeFi arasındaki ayrımı ortaya koyabilmek ve yapıların karakteristik özelliklerini inceleyebilmek için Katona (2021) tarafından yapılan karşılaştırma Tablo 1’de verilmiştir.

Tablo 1: Bazı Karakteristik Özellikleri Bakımından Geleneksel Sistem ile DeFi Karşılaştırması

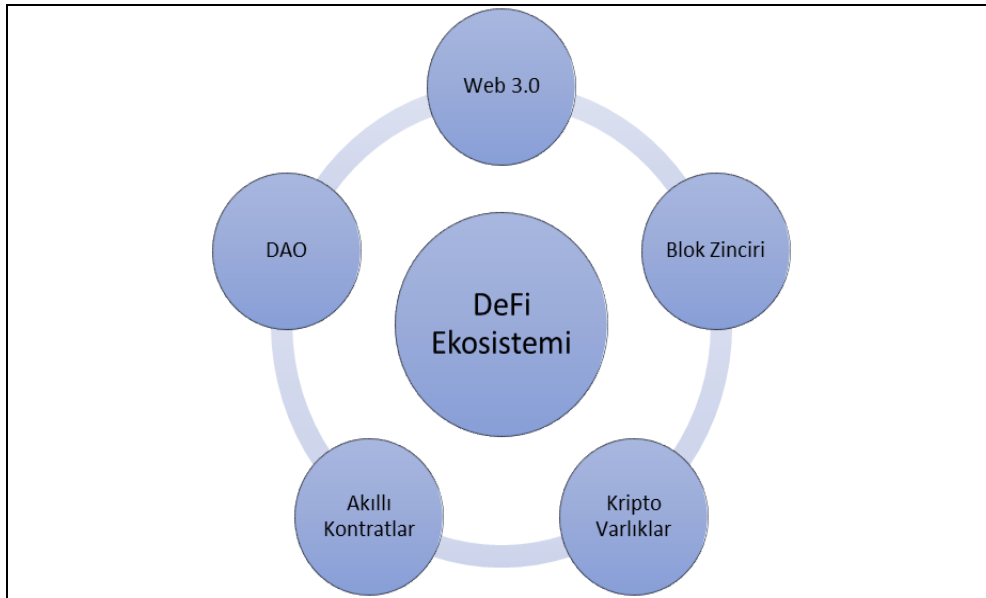
Özellik	Geleneksel Sistem	DeFi
Odaklanılan Faaliyet Alanı	Bütün finansal hizmetleri sunma	Mevcut durum itibarıyla sınırlı alanda finansal hizmet sunma
Odaklanılan Hedef Kitle	Sınırlı (Tipik olarak lokal)	Global
Kullanıcı Grubu	Bireyler, şirketler ve kamu kesimi	Baskın olarak bireyler, şirketler de bu alana nüfuz etmeye başlıyor
İş modeli	Geleneksel ve platform temelli iş modellerinin bileşimi	Yeni iş modelleri, aynı zamanda platform bazlı hizmetler
Varlıklar Üzerindeki Kontrol	Finansal kuruluşlar himayesinde	Kullanıcıların himayesinde
Kullanılabilirlik	Ödeme sistemleri dışında tipik olarak zaman sınırlı	Sürekli kullanılabilir
İşlem Öncesi Prosedürler	İstisnasız	Yalnızca işlem sırasında protokollere ait prosedürler
İşlemlerin Yürütülmesi ve İzlenmesinde Yetkili Mercî	Yasal çerçevede, rekabete bağlı olarak regüle eden kurumlar tarafından	Akıllı sözleşmeler yoluyla
Değişebilirlik (Mutability)	Mümkün	Temel noktalar dışında
İşlemlerin Geri Döndürülebilirliği	Belirli koşullar altında işlemler geri döndürülebilir	Geri döndürülemez
İşlem hızı	Değişken (günlük işlemler için hızlı)	Değişken (aksiyonlar hızlı fakat blok zincirinde çalışması nedeniyle geri dönüş hızı daha yavaş)
Likidite	Genellikle yüksek	Volatil
Şeffaflık	İşlem ayrıntıları ve IT yapısı herkese açık değildir	İşlem dataları ve protokol kaynak kodları kamuya açıktır
Müşteri Bilgileri	Zorunlu, müşteri verileri kurum tarafından saklanır ve yalnızca onaylananlar işlem yapabilir	Zorunlu değildir, cüzdan işlemleri ve/veya alım-satım yaparken açığa çıkabilir
Ücretler ve Komisyonlar	Genellikle yüksektir, dijitalleşme vasıtasıyla azaltılabilme potansiyeli vardır.	Düşüktür fakat farklı maliyetler söz konusu olabilir
Ücret ve Komisyonların Belirlenmesi	Sektördeki rekabete bağlı olarak kurumlar tarafından	Teknik şartlar altında arz ve talebe göre
Bilgi İşlem Güvenliği (IT Security)	Merkezi düzenlemelere bağlı olarak yüksek	Düşük, harici denetimlere ihtiyaç var
Müşterilerin Deneyim Düzeyi (UI / UX)	Yüksek	Yüksek
Müşteri Şikayetlerinin Yönetimi	Garanti altında	Oldukça zor

Kaynak: Katona (2021: 88).

DeFi sisteminin aktörleri geleneksel finans kurumlarının temel faaliyetlerini gerçekleştirmek için çok katmanlı bir yapıda çalışmaktadır. Katmanın en altında para birimleri (bitcoin, ethereum gibi) yer almakta, kullanıcılar sahip oldukları değerleri saklayabilmek ve finansal işlemleri yapabilmek için işlem katmanındaki alanları kullanmaktadır. DeFi ekosisteminin temel bilgi sağlayıcıları (oracle) blok zincir ile dış dünya arasında köprü vazifesi görmektedir. Bu bilgi aktarımını sağlayan altyapılar akıllı kontratların oluşturulmasını, diğer bir deyişle DeFi protokollerinin, ürünlerinin yaratılmasına olanak tanımaktadır. Kullanıcı açısından diğer önemli unsur olan cüzdanlar (wallets) ise DeFi protokollerinde işlem yapmak üzere kullanılmaktadır (Sert, 2022:50; Qin vd., 2022:3-4).

Her iki yapıya ilişkin karakteristik özellikler incelendiğinde DeFi yapılarının çalışma prensibinin geleneksel finans kurumlarından farklı olduğu ifade edilebilir. Finansal sistemin bir tarafında merkezi yapıların diğer tarafında ise tamamen dağıtık, merkeziyetsiz yapıların olduğu görülmektedir. Finansın merkeziyetsiz bir yapıya dönüşme potansiyeli yakalamasında en temel rolü blok zinciri teknolojisi oynamaktadır. Nitekim 2008 yılında kripto para işlemlerini -bitcoin- onaylamak için geliştirilen blok zinciri bütün dünyada merkeziyetsiz bir sistemin mümkün olabileceğini göstermiştir. Esas amaç, aracıyı ortadan kaldırmak, güvenlik sorunlarını asgari seviyeye çekmek ve varlıkların üzerindeki yatırımcı kontrolünü artırmaktır. Bu noktada DeFi yapılarına ilişkin anahtar kavramlara değinmek yerinde olacaktır (Şekil 1).

Şekil 1: DeFi Ekosisteminin Anahtar Kavramları



Web 3.0: Merkezi olmayan web teknolojisi olarak da adlandırılan Web 3.0 protokoller (ethereum gibi) ve yeni teknolojilerin (token gibi) geliştirilmesi üzerine inşa edilmiştir. Verilerin doğrudan bir merkezde depolanması ve buradan dağıtılması sistemine dayalı 2.0'dan farklı olarak makine öğrenmesi, büyük veri ve dağıtık defter teknolojisinin yer aldığı açık ağlar şeklinde kurgulanmıştır (Alabdulwahhab, 2018:1).

Blok Zinciri: Çevrimiçi dijital bir kayıt defteri olarak adlandırılan blok zinciri, üzerine yazılan bilgilerin değiştirilemez olma özelliği taşımasından dolayı yapılacak her türlü işlemin merkeziyetsizleşmesine ve aracısızlaşmasına zemin hazırlamaktadır. Her ne kadar ilk başta dijital paranın satın alma ve harcama işlemlerini izlemeye yönelik geliştirilmiş olsa da bu teknolojinin hayatın her alanına ilişkin “ideal” bir kayıt sistemi olabileceği görüşü öne sürülmektedir (Williams, 2020: 10-21).

Kripto Para: Merkeziyetsiz sanal para olarak da adlandırılan kripto paralar, merkezi bir yönetimi, gözetimi ve kontrolü bulunmayan dağıtılmış, açık kaynaklı, matematik esaslı, denkler arası (peer-to-peer) bir sanal paradır. Kripto varlıklar uygulamada dönüştürülebilir niteliktedir (Karacan ve Karacan, 2021:16).

NFT (Non-Fungible Token): Bu varlık türü diğer kripto paralardan farklı olarak soyut veya somut nesnelerin dijital mülkiyetini temsil etmektedir. Dijital eserlerin mülkiyet haklarının blok zinciri üzerine kaydedilmesi, eserlerin değiştirilmesini ve taklit edilmesini zorlaştırdığı için NFT’ler kripto piyasalarında alım-satıma uygun bir varlık haline gelmiştir.

Akıllı Kontratlar (Smart Contracts): Blok zinciri teknolojisine dayalı olarak çalışan dijital sözleşmeler, gerekli mantıksal koşulların sağlanması durumunda istenilen işlemin gerçekleşmesini sağlamaktadır. 2014 yılında duyurulan Ethereum, akıllı kontratlar için en sık tercih edilen blok zinciri çözümü olmuştur (Ünsal ve Kocaoğlu, 2018:59).

Merkeziyetsiz Otonom Yapılar (DAO): Topluluk tarafından yönetilen DAO oluşumları kurum içi temel kuralların ve yasaların kod diziniyle işletildiği otonom yapılardır. DAO'lar merkezi olmayan, hiyerarşik bir düzen ihtiva etmeyen, bürokratik teamüllerden uzak, şirketleşmemiş yapılardır. DAO katılımcıları blok zinciri (genellikle ethereum) üzerinde “token” adı verilen kripto varlıkları kullanarak finansman, yatırım, fonlama protokollerinde yer alabilmektedir (Tevetoğlu, 2021:201).

3. LİTERATÜR İNCELEMESİ

Araştırma kapsamında incelenen farklı türdeki çalışmalara ilişkin özet bilgiler Tablo 2’de sunulmuştur.

Tablo 2: Merkeziyetsiz Finansla İlgili Yapılan Bazı Çalışmalar*

Yazar(lar)	Türü	Konusu	Uygulama	Anahtar Kelimeler
Abdollah (2022)	Yüksek Lisans Tezi	Malezya örneğinde fintek ve DeFi uygulamalarına adaptasyonun finansal okuryazarlık üzerindeki etkisi	Anket çalışması	Fintek, DeFi.
Allen (2022)	Working Paper	DeFi hizmetlerinin bir gölge bankacılık faaliyeti olup olmadığı üzerine bir tartışma	Teorik	DeFi, banking.
Ayengin (2022)	Yüksek Lisans Tezi	Merkeziyetsiz finans ve geleneksel finans üzerine karşılaştırmalı bir çalışma	Karşılaştırmalı analiz	DeFi, geleneksel finans, coin, token.
Büberkökü (2022)	Tam Metin Bildiri	DeFi Coin'lere dayalı finansal risk analizleri	Monte Carlo Simülasyonu, hedging etkinliği, GARCH.	DeFi coinler, yatırım analizi, risk yönetimi.
Carapella (2022)	vd. Working Paper	DeFi'nin dönüştürücü potansiyelinin ve buna bağlı risklerin incelenmesi	Teorik	Blok zinciri, kripto, DeFi, finansal denge ve risk.
Gökbunar (2022)	vd. Kitap Bölümü	NFT'lerin bibliyometrik profili, literatür incelemesi	Bibliyometrik analiz	NFT.
Grassi vd. (2022)	Makale	DeFi hizmetleri örneği üzerinden finansal aracılığın gerekliliğine yönelik bir inceleme	Kamuya açık ikincil verilerin analizi ve odak grup görüşmesi	DeFi, blok zinciri, aracılık, algoritma, insan, işlem maliyetleri, bilgi asimetrisi, kripto varlıklar, bitcoin, ethereum, fintek.
Güleç ve Duramaz (2022)	Kitap Bölümü	Merkeziyetsiz finans ve küresel iş ortamına olası etkileri	Senaryo analizi	Merkeziyetsiz finans, uluslararası finans, finansal teknoloji, blok zinciri, kripto varlıklar, merkez bankacılığı, kuralsızlaştırma.
Inzirillo ve Quenetai (2022)	Makale	DeFi portföylerinde risk yönetimi	Portföy oluşturma ve simülasyon	Portföy yönetimi
Karim vd. (2022)	Makale	NFT, DeFi token ve kripto paraların ilişkilerinin incelenmesi	Oynaklık yayılımının tahmini	Blok zinciri piyasaları, çeşitlendirme, yüksek risk yayılımı, kantil bağlantınlılık
Kirvesoja (2022)	Yüksek	DeFi hizmetlerinin avantajları	Nitel görüşme	Blok zinciri, akıllı

	Lisans Tezi	ve inceleme	deavantajlarının	kontrat, merkeziyetsiz finans.
Makarov ve Schoar (2022)	Working Paper	Kripto varlıklar ve merkeziyetsiz finansın potansiyel faydaları ve zorlukları	Karşılaştırmalı analiz	Kripto varlıklar, DeFi.
Maouchi (2022)	vd. Makale	DeFi token ve NFT örnekleri üzerinden Covid-19 döneminde finansal balonların incelenmesi	Regresyon analizi	Covid-19, DeFi, NFT's, kilitli toplam değer, gerçek zamanlı algılama.
McKay (2022)	Makale	Merkeziyetsiz finasta siber saldırıların istatistiksel analizi	Veritabanı analizi	Siber güvenlik, DeFi.
Mohan (2022)	Makale	DeFi öncülüğünde otomatik piyasa yapıcılar ve merkeziyetsiz borsalar	Modelleme	DeFi, otomatik market yapıcı, merkeziyetsiz borsalar, akıllı kontrat, ethereum.
Momtaz (2022)	Working Paper	Merkeziyetsiz finans piyasalarında finansal sürtünme (financial frictions), aracılık ve verimlilik araştırması	Regresyon analizi	DeFi, dijital para halka arzı, blok zinciri temelli kitle fonlaması, token, girişim finansmanı, kripto fonları, aracılık, araştırma.
Özdoğan ve Turan (2022)	Kitap Bölümü	Merkez Bankası dijital para birimlerinin dijitalleşme ve merkeziyetsizlik bağlamında incelenmesi	Ülke bazlı inceleme	Dijital para, kripto para
Sadman vd. (2022)	Makale	Merkeziyetsiz finasta yapay zekanın geleceği, uygulaması	Literatür araştırması	DeFi, yapay zeka, güvenlik, güvenilirlik.
Treleaven (2022)	vd. Working Paper	Web 3.0, tokenizasyon ve merkeziyetsiz finansın kavramsal incelemesi	Teorik	DeFi, tokenizasyon, Web 3.0, blok zinciri, kripto varlıklar, NFT, finansal hizmetler.
Yousaf ve Yarovaya (2022)	Makale	NFT'ler, DeFi ve diğer varlıklar arasında statik ve dinamik bağlantılılığın incelenmesi, portföy oluşturma	Oynaklık yayılımının tahmini, portföy optimizasyonu	NFT's, DeFi varlıkları, alternatif yatırımlar, çeşitlendirme, covid-19, kripto balonları.

*Alfabetik sıra gözetilmiştir.

4. SONUÇ

Merkeziyetsiz finans sistemi ve bununla ilgili anahtar kavramların tanıtıldığı bu çalışmada, DeFi hizmetleri yapısal bağlamda geleneksel finans sistemiyle mukayese edilmiştir. Ayrıca DeFi ekosisteminde yer alan kilit kavramları içeren çalışmalara ilişkin literatür ise 2022 yılında yapılan bazı araştırmalar temel alınarak verilmiştir. Nitekim literatür incelendiğinde konuya son iki yıldır akademik ilginin arttığı gözlenmektedir. Artan akademik ilgiye koşut olarak literatürde DeFi ve ilişkili kavramlara ait teorik tartışmaların, literatür araştırmalarının, bibliyometrik analizlerin, ekonometrik analizlerin, simülasyon ve optimizasyon uygulamalarının, siber güvenlik tartışmalarının ve nitel araştırmaların yer aldığı görülmektedir. Kavramsal çerçeveye dayalı bu araştırmanın bir sonucu olarak konuya ilişkin Türkçe araştırmaların az sayıda olduğu ifade edilebilir. DeFi platformlarında son kullanıcının yaşadığı/yaşayabileceği sorunlar ve karşı karşıya kaldığı/kalabileceği güvenlik riskleri üzerine çalışmalar yapılması önerilebilir. Araştırmacıların veriye ulaşabilme kabiliyetleri arttıkça nicel çalışmaların sayısının da buna paralel olarak artması beklenmektedir.

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The Role of Birth Rate on Old Age Dependency in Turkey: A Long-run Analysis

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Abstract: This study we tries to analyze the long-run relationship between crude birth rate and old age dependency ratio in Turkey. Co-integration test findings imply that birth rate and old age dependency are co-integrated and they move together in the long-run in Turkey. According to long-run coefficient estimations, crude birth rate has a reverse effect on old age dependency ratio and this finding is statistically significant. In other words, one percent increase in crude birth rate leads to a drop in old age dependency ratio by %0.601 in the long-run in Turkey. Also conducted diagnostic test results reveal that estimated model does not possess autocorrelation, heteroscedasticity, non-normality, and model specification problems at %1 significance level.

Key Words: Birth Rate, Old Age Dependency, Co-integration, Stationarity, ARDL Model, Turkey.

1. INTRODUCTION

As seen in the literature, there are many studies on birth rates and dependency rates. These studies need to be re-examined according to each period. Because each period has its own unique population and economic structure. All of these affect birth rates and elderly dependency rates. A few of them are now summarized below. Li and Zhang (2007) examined the relationship between birth rate and economic growth in China. In the study, 28 provinces were included in the sample using panel data analysis. As a result, it has been seen that the birth rate has a negative effect on economic growth. In another study on birth rate, Mihaela (2013) investigated the effect of birth rates on economic growth. As a result, he proposes to regulate the relationship between population and growth by regulating the birth rate. Sinnathurai, in his study in 2013, examined the relationship between growth, employment, poverty and dependency rates on developing economies. It has been concluded that employment affects the dependency ratio and the problems will disappear with a stable growth. Han and Cheng (2020) examined the relationship between consumption and productivity and the dependency ratio in their studies. It has been concluded that the difference in dependency adjusted for production and consumption will gradually increase.

Lee et al. (2014) examined decreasing birth rates and increasing dependency rates in their study. It has been stated that there may be difficulties in pension financing in the coming years. Is low fertility. Hui, Zheng and Hu (2012) examined increasing elderly dependency rates in their study on declining fertility rates. In the study, it was focused on the reasons for which fertility rates decreased.

2. DATA AND METHODOLOGY

This study investigates the long-run relationship between birth rate and old age dependency in Turkey for the period of 1960-2018 via ARDL method. Our hypothesis is that crude birth rate reduces old age dependency ratio in Turkey. Old age dependency (OLDDEP) is old age dependency ratio (% of working-age population) and birth rate (BIRRATE) is crude birth rate (per 1,000 people). All data is from WDI of the World Bank. Logarithmic forms of each variable was used.

We conducted co-integration analysis by using ARDL boundary test and estimating the following model:

$$\Delta \text{OLDDEP}_t = \beta_0 + \sum_{i=1}^p \delta_i \Delta \text{OLDDEP}_{t-i} + \sum_{i=0}^q \phi_i \Delta \text{BIRRATE}_{t-i} + \gamma_0 \text{OLDDEP}_{t-1} + \gamma_1 \text{BIRRATE}_{t-1} + \varepsilon_t \quad (1)$$

In Equation 1, γ_0 and γ_1 are long-term coefficients; δ_i and ϕ_i display short-term coefficients; Δ is first degree difference operator; β_0 is intercept term of regression model, and ε_t is white noise error term of regression model.

The null hypothesis of co-integration test is $H_0 : \gamma_0 = \gamma_1 = 0$ (i.e., series are not co-integrated) and the alternative hypothesis of co-integration test is $H_1 : \gamma_0 \neq \gamma_1 \neq 0$ (i.e., series are co-integrated). If F-statistic value

obtained from ARDL boundary test is larger than the upper critical value then reject H_0 hypothesis and accept H_1 hypothesis. If F-statistic value obtained from ARDL boundary test is smaller than the lower critical value then H_0 hypothesis is valid. F-statistic value larger than the lower critical value but smaller than the upper critical value leaves us inconclusive. Short-run and long-run coefficients are imputed by estimating following model:

$$OLDDEP_t = \beta_0 + \sum_{i=1}^p \delta_i \Delta OLDDEP_{t-i} + \sum_{i=0}^q \phi_i \Delta BIRRATE_{t-i} + \eta ECM_{t-1} + \varepsilon_t \quad (2)$$

In Equation 2 above, δ_i and ϕ_i symbols represent the dynamic coefficients bringing the model to the balance in the long run; ECM symbol stands for error correction term; η symbol is the speed of adjustment at which the model reverts to long run balance after a shock occurred in short run. The speed of adjustment term must have a statistically significant negative coefficient.

Empirical Results

Augmented Dickey-Fuller (ADF) stationarity test was utilized to check the integration order of series. The null hypothesis of ADF test claims the non-stationarity of series while the alternative hypothesis of ADF test asserts the stationarity of series. We show the results of ADF unit root tests in Table 1.

Table 1. ADF Unit Root Test Results

Null Hypothesis: BIRRATE has a unit root		
Exogenous: Constant, Linear Trend		
Lag Length: 3 (Automatic - based on SIC, maxlag=10)		
	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.807282	0.0236
Test critical values:		
1% level	-4.137279	
5% level	-3.495295	
10% level	-3.176618	
Null Hypothesis: OLDDEP has a unit root		
Exogenous: Constant, Linear Trend		
Lag Length: 2 (Automatic - based on SIC, maxlag=10)		
	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.626384	0.7698
Test critical values:		
1% level	-4.130526	
5% level	-3.492149	
10% level	-3.174802	
Null Hypothesis: D(OLDDEP) has a unit root		
Exogenous: Constant, Linear Trend		
Lag Length: 2 (Automatic - based on SIC, maxlag=10)		
	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.384533	0.0640
Test critical values:		
1% level	-4.133838	
5% level	-3.493692	
10% level	-3.175693	

*MacKinnon (1996) one-sided p-values.

As seen from the Table 1, BIRRATE variable is stationary at level and integrated order zero whereas OLDDEP variable is stationary in first difference and integrated order one. Having integrated series no more than order one, we are able to use ARDL boundary test for co-integration analysis.

By utilizing AIC criterion, we selected optimal lag length for the model. As a result of evaluation of 20 distinct models via AIC selection criterion in Table 2, the best model is ARDL (4,3).

Table 2: Optimal Lag Length Selection based on AIC Criterion for ARDL(4,3) Model

Model	LogL	AIC*	BIC	HQ	Adj. R-sq	Specification
2	248.679019	-8.877001	-8.545503	-8.749155	0.999743	ARDL(4, 3)
1	248.781631	-8.843764	-8.475434	-8.701714	0.999739	ARDL(4, 4)
7	245.398646	-8.792542	-8.497878	-8.678902	0.999717	ARDL(3, 3)
6	245.407247	-8.755824	-8.424327	-8.627978	0.999710	ARDL(3, 4)
4	242.006974	-8.703962	-8.446131	-8.604527	0.999685	ARDL(4, 1)
3	242.262002	-8.676370	-8.381706	-8.562730	0.999682	ARDL(4, 2)
9	240.158206	-8.672526	-8.451528	-8.587296	0.999670	ARDL(3, 1)
8	240.377790	-8.643622	-8.385791	-8.544186	0.999666	ARDL(3, 2)
10	235.505500	-8.537241	-8.353076	-8.466215	0.999616	ARDL(3, 0)
5	235.988119	-8.518078	-8.297080	-8.432848	0.999615	ARDL(4, 0)
12	233.341704	-8.383026	-8.125195	-8.283591	0.999566	ARDL(2, 3)
11	233.401433	-8.348201	-8.053537	-8.234561	0.999558	ARDL(2, 4)
14	229.344486	-8.309055	-8.124890	-8.238030	0.999518	ARDL(2, 1)
13	229.755100	-8.287226	-8.066228	-8.201996	0.999515	ARDL(2, 2)
15	226.066693	-8.224692	-8.077360	-8.167872	0.999466	ARDL(2, 0)
16	198.782641	-7.103061	-6.845230	-7.003625	0.998441	ARDL(1, 4)
17	197.139283	-7.079233	-6.858234	-6.994002	0.998377	ARDL(1, 3)
19	184.354438	-6.679794	-6.532462	-6.622974	0.997499	ARDL(1, 1)
18	184.605252	-6.652046	-6.467881	-6.581021	0.997472	ARDL(1, 2)
20	160.238240	-5.823639	-5.713139	-5.781023	0.994010	ARDL(1, 0)

As can be seen from Table 3, F-statistic value of 11.26915 exceeds the critical values of upper bound at all significance levels and thus this implies that series of birth rate and old age dependency are co-integrated and there is a co-movement among them in the long-run.

Table 3. ARDL Bounds Test Results for ARDL(4,3) Model

<i>F-statistic</i>	11.26915	<u>Critical Values</u>	
<i>Significance</i>		<i>I(0) Bound</i>	<i>I(1) Bound</i>
10%		4.04	4.78
5%		4.94	5.73
2.5%		5.77	6.68
1%		6.84	7.84

Long-run coefficient estimation results reported in Table 4 show that birth rate and old age dependency are reversely and significantly related. In other words one percent increase in birth rate results in a drop of old age dependency ratio by %0.601 in the long-run in Turkey.

Table 4. Long-run Coefficients for ARDL(4,3) Model

Dependent Variable: OLDDEP			
<i>Variable</i>	<i>Coefficient</i>	<i>t-statistic</i>	<i>Prob.</i>
BIRRATE	-0.601089	-17.59112	0.0000

Regarding to short-run coefficient estimations displayed in Table 5, coefficients of first and third lags of OLDDEP variable are statistically significant and take positive and negative signs respectively. All short-run coefficients of BIRRATE variable are statistically significant and possess positive, negative, and positive signs respectively. In addition to that the ECM coefficient gets the expected negative coefficient and is statistically

significant. As can be deduced from the findings of diagnostic tests, there is no any problem in ARDL (4,3) model in terms of autocorrelation, heteroscedasticity, normality, and model specification error at %1 significance level.

Table 5. Error Correction Estimation Results for ARDL(4,3) Model

	Dependent Variable: OLDDEP		
	Coefficient	t-Statistic	Prob.
$\Delta OLDDEP_{t-1}$	1.024864	7.911630	0.0000
$\Delta OLDDEP_{t-2}$	-0.086941	-0.449039	0.6556
$\Delta OLDDEP_{t-3}$	-0.276342	-2.437927	0.0188
$\Delta BIRRATE$	3.432352	3.493538	0.0011
$\Delta BIRRATE_{t-1}$	-6.286851	-3.341490	0.0017
$\Delta BIRRATE_{t-2}$	3.677321	3.522448	0.0010
C	0.187310	4.999003	0.0000
ECM_{t-1}	-0.040617	-4.799912	0.0000
$ECM = OLDDEP - (-0.6011 * BIRRATE)$			
Diagnostic Tests			
Tests	Test Value (Prob.)		
Breusch-Godfrey Serial Correlation LM Test	1.289998 (0.2857)		
ARCH Heteroskedasticity Test	3.267845 (0.0765)		
Ramsey RESET Test	1.308797 (0.2588)		
Jarque-Bera Test	8.673770 (0.013077)		

3. CONCLUSION

In this study we examine the long-run association between crude birth rate and old age dependency ratio in Turkey for a sample covering the years of 1960-2018 by utilizing ARDL estimation method. After identifying integration order of our variables being no more than one, we conducted co-integration analysis via ARDL bound test. Co-integration test results disclose that birth rate and old age dependency are co-integrated and they move together in the long-run in Turkey. According to long-run coefficient estimations, crude birth rate has a negative impact on old age dependency ratio and this nexus is statistically significant. More specifically, one percent jump in crude birth rate induces to a decline in old age dependency ratio by %0.601 in the long-run in Turkey. Short-run coefficient estimation findings reveal that coefficients of first and third lags of OLDDEP variable are statistically significant and take positive and negative signs respectively. Moreover all short-run coefficients of BIRRATE variable are statistically significant and take positive, negative, and positive signs respectively. Lastly implemented diagnostic test results point out that our estimated model does not have autocorrelation, heteroscedasticity, non-normality, and model specification problems at %1 significance level.

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Hydrography in The Development of Rural Tourism, Case Study Republic of Kosovo

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Abstract: The development of rural tourism, among other things, is closely related to the water assets of a country. Even though Kosovo is a country with a small area, it is rich in water flow that offers a good opportunity for the development of rural tourism. Kosovo's rivers flow into three sea basins: The Adriatic Sea Basin, the Aegean Sea Basin and the Black Sea Basin. The Black Sea basin, although it is distinguished by a larger area due to the smaller amount of precipitation, it has a smaller flow of water than the Adriatic Sea basin, thus offering smaller opportunities for the development of rural tourism. What makes Kosovo special are the canyons, gorges, waterfalls, which are very attractive for both local and foreign tourists. This form of tourism is still in its initial phase and more investment is needed in this sector. Many rivers of Kosovo are in a bad condition due to the pollution, without any adequate treatment to remove the harmful compounds and this needs a emergent rehabilitation of these rivers. In addition to the rivers that it has, Kosovo is also known for a large number of natural lakes, stretching more 2000 meters in the Sharr Mountains and "Bjeshkët e Nemuna"(the Accursed mountains), which also offer a good opportunity to develop of natural tourism. That what makes Kosovo as special, is the bifurcation of the Nerodime river, i.e. a river whose waters flow into two seas, which is a unique natural phenomenon in Europe, and there is only one similar case in South America.

The purpose of this research is to study the natural waters in Kosovo that may be suitable for the development of different types of tourism in Kosovo, specifically to analyze: How suitable is hydrography for the development of rural tourism in Kosovo?

Keywords: Tourism, Hydrography, Rivers, Lakes, Waterfalls, Bifurcation

INTRODUCTION

In general, the rural tourism is a sector that develops in the rural countries, because it helps the country to have a good economic and social development, by engaging and employing a number of people especially of the female gender and on the other hand protecting the natural beauties that the country possesses.

In developing country, rural tourism is still not advanced, then it is necessary to study the geographical factors that can help development of rural tourism. Nowadays, people are busy all the time, they feel the need to go out and relax during the weekend in rural areas, watching and enjoy the untouched beauties of nature, which will positively affect the economic skills and emotions in people. [5]

In recent years, the expectations for the development of rural tourism have been greater, but in this sector not enough work has been done, then it is thought that the investment in infrastructure as well as in different policies from the relevant institutions will influence to achieve a better treatment, management and financing in all forms of tourism, especially in rural tourism, which in Kosovo would have a great economic and financial development. [3]

Since in our country's rural tourism is not so developed, based on nature and favorable geographical physical conditions that it has, then it was welcome and necessary to a research of rural tourism in the geographical aspect.

Therefore, the impact of water resources on the development of rural tourism was analyzed in the research. The tourist offer of a country cannot be thought of without the presence of water, so rural tourism is directly related to water resources, so with regular water suppliers which our country possesses and has enough. In addition to the water flows that our country has, it is also known for waterfalls, cataracts that make the place very attractive for tourists. [2]

So, do we have favorable conditions for the development and organization of rural tourism in Kosovo? In response to this, this research aims to analyze water assets and potentials that Kosovo offers for the development of rural tourism as well as natural beauties such as waterfalls, stones, cataracts that have created water flows in Kosovo.

METHODOLOGY

The research was carried out in the Republic of Kosovo. Even though Kosovo is small, it is considered as a place that has high natural hydrography potential for tourism view. For the analysis, we used an analytical research method, comparative research in the literature of local and international authors in the field of tourism and geography. The literature we provided have adequate information mainly in the databases where we secured access and some other information that were Open Access such as: Scopus, EBSCO, Google Scholar, DOAJ, AcademiaEdu, etc.

After reviewing the literature, we identified the three marine catchments of the rivers of Kosovo and we have studied the impact of water flows on the development of rural tourism, as well as making a comparative analysis regarding the three above-mentioned catchments, to understand which catchment rivers are the most preferred by tourists.

HYDROGRAPHY IN THE DEVELOPMENT OF RURAL TOURISM

2.1. General description:

Water is one of the most important factors in the development of tourism, especially rural tourism. The offers of tourism in a country cannot be thought of without the presence of water resources, relief, climate, infrastructure, flora and fauna. Their impact on the development of rural tourism is primary, where in addition to rivers, waterfalls, and cataracts which are also of great importance, make an attractive place for tourists. [2]

Therefore, the purpose of this research is to make an analysis of natural waters in the Republic of Kosovo, and telling how suitable the hydrography of Kosovo is for the development of rural tourism. Although the Republic of Kosovo has a small area, it is very important for the region because it gravitates to a large number of rivers, that are suitable for different types of tourism. Most of Kosovo's rivers originate from mountain areas, considering their flow from great heights, they become precipitous and create a nature very attractive to visitors. [1]

Kosovo's favorable geographical position such as: in the center of the Balkan Peninsula, the altitude average above sea level is 811m, and the closure of Kosovo with high mountains on the extreme sides- have influenced the formation of the hydrographic node in Kosovo. On the mountain of Nerodima - Suka e Demani at an altitude of 1364m, the waters of Kosovo are divided into three basins: The Adriatic Sea, the Aegean Sea and the Black Sea. In this research we will analyze and compare the river flows of three catchments marine, as well as their impact on the development of types of tourism, especially rural tourism.

1. Marine catchments of the rivers of Kosovo: [6]
2. The Adriatic Sea catchment
3. Aegean Sea catchment
4. The Black Sea catchment

2.1.1. The Adriatic Sea catchment

Since Dukagjini Field is surrounded by high mountains, they make it less communicable with other countries, but richer in water flow. However, one special importance is given to rivers and river valleys, through which the roads pass that enable connections with neighboring countries, and this offers very good opportunities for development of tourism, especially rural tourism. The rivers that gravitate the Dukagjin Plain have greater flow of water and belong to the Adriatic Sea Catchment, such as: Drini i bardhe with its branches. Most of the rivers of this basin in the upper part have the characteristics of a mountain river, going towards the place of discharge, take on the features of a lowland river, which form windings and give a beautiful and very picturesque nature for local and foreign tourists. Peja River, passing through the mountains of Bjeshket e Nemuna, under his influence, has also formed the Rugova Gorge, which gives a view of special natural look to this area. [4]

The artificial Lake of Radoniq is also recognized as a suitable space for the development of rural tourism. This lake with the natural beauty it offers becomes a place frequented by various visitors. [6]

2.1.2 Aegean Sea catchment

The catchment of the Aegean Sea belongs to the rivers that originate from the mountains of Sharri, which is also why they have rare river flows, they are mountain rivers and they have a large flow of water that are suitable for the development of tourism, especially rural and attractive tourism. The most important rivers of the city of Ferizaj have their source from the mountains of Sharri, which have a great slope and are noted for waterfalls and cataracts, and in the future with the nature and the water potentials that they have, it is thought to be a more frequented tourist place in the municipality of Ferizaj, especially rural tourism. [3]

The most important river of this catchment is Lepenci, which flows from the mountains of Sharri through Zhupae Siriniq and that there are many sources and rivers that enable this river to there is a large flow of water. It is a mountain river and suitable for mountain tourism and with the beauties it has, therefore with the noise it possesses, it will be amazing for every visitor. Lepenci with its branches is also rich in trout, which enables the development of fishing tourism. [3]

What the did Kosovo's hydrography special is the Bifurcation of the Nerodime River, which originates from Mount Nerodime and flows in two directions, the left branch to the Black Sea and the right in the Aegean Sea. The bifurcation of the Nerodime river is located near the town of Ferizaj, and is known as a rare natural phenomenon and is the only one in Europe. The separation and flow of the Nerodime river in two directions makes this part of this municipality attractive, interesting and offers educational knowledge for tourists, pupils and students from all countries. [7]

The bifurcation of the Nerodime river is also known as artificial crotch, since with the influence of the human factor a dam was built, which made it possible to dividethe Nerodime river into two branches, one towards the Sitnica river, and the other direction in the Lepenci river, and this made it special and very curious to be visited by many tourists, as it is a rare phenomenon in the world and the only one in Europe. [4]

2.1.3 Black Sea catchment

The most important river of the Black Sea catchment is the Ibri river, which originates on the slopes of Hajla mountain, and the place where the river flows, creates an attractive nature to visit. The terrain that runs through this river has a great slope, which makes this river to be rapid and which makes this river to be fast and I rapturous. In the territory of Kosovo, a dam has been erected on the Ibri river and has formed the artificial lake of Gazivoda, which is one of the largest artificial lakes in Kosovo, and it is suitable for the development of recreational tourism, fishing and vacations. [4]

The Sitnica River, as a branch from Ibri, which is formed by the flows of the Matica, Sazli and Shtime rivers. Since it has a small slope, it is a lowland river. Often during the year there are floods that are caused, considering the rivers stature is not stable. Compared to other rivers, the Sitnica river is the most polluted out of all, and this brings damage to the population both from floods and from the pollution of this river. Due to this pollution, the river is not preferred for the development of tourism.

3. ANALYSIS OF FINDINGS

In the Republic of Kosovo, there are three marine catchments: The Adriatic Sea catchment, The Aegean Sea catchment and the Black Sea catchment.

In Kosovo, since all the forms of precipitation that feed the rivers are present, then during their flow they have eroded and accumulated rock material and different forms were given to the relief, and as a result the waterfalls and cataracts, have created good opportunities for the development of rural and attractive tourism in the country.

The Adriatic Sea Catchment is considered as the most favored marine catchment, this is because it collects the waters of rivers that have a greater flow. The rivers of this catchment are known as rivers with mountain and plain characteristics as well as for deep river valleys, canyons, gorges such as: Rugova Gorge, which is suitable for the development of tourism: rural, mountain, natural heritage, hiking, educational tourism, etc.

The marine catchment of the Aegean Sea and the Black Sea are known as catchment of the waters of rivers with a small flow compared to the Adriatic Sea catchment, but are known as watersheds of particular importance, since in these two marine watersheds in addition to others rivers, the Nerodime river is also where it flows. One branch through Lepenc flows into the Aegean Sea and the other branch through Sitnica to

the Black Sea. That is what makes the Nerodime River special and unique in Europe, and this rare natural phenomenon enables this country to offer opportunities for the development of different types of tourism, such as: natural tourism, natural heritage, recreational, fishing etc.

4. CONCLUSION

As a part of the research, the influence of river flows is taken on the development of different types of tourism, especially rural tourism, and a comparison of the three was made maritime catchments of the rivers of Kosovo.

The Republic of Kosovo as a country with a good geographical and natural position, with the proximity of the Adriatic Sea as well as its influence on the increase in the amount of precipitation in the western part of Kosovo has made the rivers of the Adriatic Sea to be richer in water flow and with greater water potential. Due to the large flow of natural waters in the western part of Kosovo, this part of Kosovo has become more frequented by tourists, offering natural beauty such as waterfalls, caves, stones, gorges, cataracts, that were formed as a result of mountain with water flow with great and rapide slope.

Black Sea and Aegean Sea catchment rivers compared to the Adriatic Sea catchment, have a denser network, but they have a smaller amount of water flow, but what makes these two catchments special is the Bifurcation of the Nerodime River. Bifurcation makes the city of Ferizaj unique and special and attractive to visit from different tourists, which offers good opportunities for the development of educational tourism, attractive, rural, and natural heritage.

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ABSTRACTS

The Value of Cultural Heritage and the Development of Tourism in Kosovo

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Abstract: Kosovo as a tourist destination has numerous natural attractions and beauties, a rich cultural heritage from different time periods and a favorable climate, which attract numerous tourists from all over the world and contribute to the development of various selective types of tourism. The rich cultural heritage in Kosovo represents a very significant potential for the development of cultural tourism.

The term cultural tourism is understood as tourism that is fully or partially related to the motivation of tourists to visit the cultural heritage that exists in a certain tourist destination, region or country.

Thus, in Kosovo, 1564 units of cultural heritage with temporary protection have been recorded (of which: 901 units belonging to the architectural heritage; 429 units belonging to the archaeological heritage; 212 units belonging to the movable cultural heritage; 10 units belonging to the spiritual (immovable) cultural heritage; 12 cultural areas), 23 units of cultural heritage under permanent protection; and 45 special protected zones that mainly belong to the Orthodox cultural heritage.

The subject of research in this paper is the cultural heritage in Kosovo and its role in the development of tourism in this tourist destination.

In order to determine whether and to what extent the cultural heritage in Kosovo is a factor for attracting foreign tourists, this research includes 300 foreign tourists, and the coefficient of determination and correlation between the attractiveness of the cultural heritage and the motivation of foreign tourists for visit to Kosovo.

Keywords: .cultural heritage, cultural tourism, Kosovo.

Water Desalination For Agriculture And Free Market Economics In San Quintin, Baja California, Mexico

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Abstract: In the absence of policies aimed at small agricultural producers, the adoption of market-oriented desalination technologies tends to favor medium and large producers. Small producers lack economic capacity to invest in cutting-edge technologies and are forced to leave the market. In San Quintin overinvestment and excess of installed water treatment capacity resulted in the overexploitation of the aquifer. Large private seawater desalination plants serving the agricultural sector are believed to be the key to the future expansion of the agriculture sector. This would provide a reliable source of water without the individual capital investments required nowadays. To prevent the concentration of capital and allow medium and small producers to remain in the market it is required that a national policy directed specifically to that sector, provides economic aid to those who have the least. This would allow exploitation of the water resource to be more equitable and efficient, resulting in a better distribution of wealth and better conditions of work for rural agricultural workers.

Keywords: desalination, Mexico, groundwater, agriculture, free market economy

Food economy in the shadow of international conflicts

András Schlett

Abstract: The crisis because of the war and the resulting drastic rise in energy and food prices refocused the attention on the issues of access to basic foodstuffs (e.g. grain), control of the food market and food sovereignty. In recent decades, agriculture has been able to show a significant increase in yields due to intensive fertilization, external material and resource input. Artificial systems were created trying to make production independent of environmental and biological determinations. This process, together with the rapidly globalizing international trade and division of labour, clearly created new dependencies and vulnerability.

Today, the price shock affecting agriculture is refocusing attention on the fact that for the successful and sustainable development of an area, it is essential to consider the optimal use and valorisation of the local resources. The question is, of course, what are considered local resources in a given locality, in what quality are they available, as well as whether they can be used successfully? To answer these questions, it is essential to take stock of local resources and to know their operating mechanisms. This is especially true for the elements of the so-called „social capital”, such as the ability to cooperate, trust, or civic activity.

Keywords: food economy, food market, food sovereignty, local resources, sustainable development

Auditing and Cyber Security at the Greek Banks during the first wave of COVID-19

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Abstract: The purpose of this paper is to examine the importance of Cyber Security and Internal Controls at Greek Banks during COVID-19 period. Cybersecurity is a significant issue that internal auditors must appropriately manage due to the growing challenges in the financial landscape. Internal auditors need to understand the new technologies and risks in financial institutions, in order to manage cybersecurity issues. We conducted a survey to Greek banks and more specifically, we distributed a large structured questionnaires to Audit Committee, Internal Audit members and bank managers to assess the impact of Cyber Security and Internal Audit operations. The findings of the study show the importance of Internal Audit (internal controls for risk management) in the Cybersecurity of Greek Banks, especially during the covid-19 period. This study contributes to the literature by providing the first empirical evidence on the effect of the COVID-19 pandemic. Results have implications for regulators and investors.

Keywords: Internal Auditing; Internal Controls; Cybersecurity; COVID-19; Risk management.

Acknowledgements and Declaration of Interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper

Key messages:

- Banks' internal control functions are more likely to detect and self-report cyberattacks if appropriate measures have been extensively studied and taken.
- Highlights the important function of risk management at all stages of risk management: such as detection, prevention and response.
- It appears that in times of intense circumstances such as the COVID-19 pandemic, efforts for cyberattacks may intensify. Corporate Governance and Internal Audit play a key role in banks' strategies and policies and their sustainability.

Autonomy of the will of contracting parties with a foreign element

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Abstract: In a relationship of obligations, specifically in the conclusion of a contract in case there is a foreign element in the subjects, then the subjects have the right to determine the elements of the contract in cases of creation, as well as in the event that if there is a dispute about that relationship of obligations, then the parties willingly determine the law that will resolve the concrete issue. This happens if the parties to the contract have different nationalities. This means that they have different laws and based on the free autonomy of their will they can choose the legislation that will deal with the solution of their legal case. Regarding the autonomy of the will as a very important element in private international law, it is discussed in more detail in the presentation of this paper.

Keywords: autonomy of will, contract, subjects, different citizenships, foreign element.

Organizational Culture, Leadership and Innovation Behavior of Employees

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Abstract - theoretically are many definitions about innovation; something different that creates values. By clarifying the words that are used to complete the definition of innovation: different – according to whom; innovation target – whether it be a costumer, a supervisor a spouse or a friend it should be for one consider as different; “value” – some kind of measurable result when it is profit, improve performance, measurable effect on someone’s life. Leadership is the ability on an individual or group that works together to influence and guide followers, group or industry. The studies and education of leading are oriented on explaining meaning of excellent leader/s and their behaviors with what have to do: initiate ideas, interaction, support, take responsibility, develop a group atmosphere, organize and structure work, communicate formally with subordinates, reward and punish subordinates, set goals, make decision, train and develop skills, solve problems, generate enthusiasm. The skills of a leader during leading an industry influence on innovation or make in innovative industry also by creating a comfort clime inside organization.

An innovation climate mean firm’s atmosphere that fosters and propagates creative mechanism to achieve the goal/s. Climate is considered as positive antecedent of creativity and learning.

Keywords: Innovation, Leadership, Climate, industry.

Stress to health workers during the Covid-19 Pandemic

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Abstract: This study analyzes the stress at work of health workers during the pandemic. The term "stress" comes from scientific research materials, where the phenomenon was defined as the cause of the effects of external forces, mainly of a physical nature, which is considered to act as material stimuli and is used as a definition of the corresponding impacts on the individual. Therefore, This study aims to explore the impact of the pandemic on the rise of work stress among health workers. The integration of quantitative methods was used in the methodology of this study. The data collected were analyzed using the Statistical Package for the Social Sciences (SPSS). In our research, we surveyed 100 health workers. The assessment was performed using the stress scale (Rosado, 2012) and the prevalence of symptom severity was scored. The results of the paper provide answers that the prevalence of stress among health workers was high during the covid-19 pandemic. Stress symptoms were higher in females than in males. In the end, it can be affirmed that the findings of the study can help health workers to be more informed about stress during the pandemic, and the study can also aid in comparing the results with future research in this field.

Keywords: stress; pandemic; health worker; job

Environmental education for environmental policymaking in rural communities

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Abstract: Environmental education is one of the main tools for environmental protection. Without proper education, environmental regulations and policies cannot fully achieve their goals. In the rural environment, characterized by relatively small communities, the environmental protection actions of the local public administration are closely related to the level of knowledge and understanding of the legislation by its members. One of the easy ways to educate the population is open educational resources - OERs. This paper presents the results of an international environmental education project of rural citizens in the development of environmental policies in accordance with environmental protection legislation.

Keywords: environmental education, rural communities, OERs, environmental policies.

The Importance of The Public Loan in The State Budget

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Abstract: A state's budget is created from public revenues. Public income is of special importance for the state treasury, because it can increase or decrease. Among the most important public revenues, apart from taxes, customs and contributions, are public loans. Public loans are considered unassigned revenues for which states can request in the event that it is not possible to cover the annual expenses that can be incurred by the institutions of a state from other public revenues. In these cases, when the state remains with a budget deficit, then public loans can be requested either by a legal entity or by a natural person. In the case of receiving public loans, it is important that they are properly managed, which means that they must manage where the loans received from other countries should be invested. In these cases, when public loans are received from other states, the deadline for their repayment is set and if they are not returned within the term defined in the contract, then the borrowing state is considered to be in debt to the state. from whom the loan was obtained. And in order not to go into debt, proper management of public loans must be done.

Key words: public revenues, public loans, management of public loans, importance of management, public debt.

The importance of the customs system in the formation of the budget

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Abstract: The state collects budget revenues through fiscal policy instruments. The increase of the social standard also depends on the proper management of a country's fiscal policy, which means that special emphasis should be given to fiscal instruments. Among these instruments from which the state budget is created are customs, which we can say represent public contributions that the state collects in the country's currency from the owners of goods received by natural or legal persons. Customs collection takes place in the border area, where even in the state of Kosovo they have a special importance in the state budget. Fiscal policy and customs as well as other public revenues are under the competence of the state and are managed by the state itself. In general, we can say that customs are the most reliable public revenue for the state and the permanent treasury. Customs and fiscal policies are discussed in more detail during the presentation of this paper.

Key words: budget revenue, fiscal system, management, customs.

Methods for evaluating the efforts and direct and indirect effects of public target programmes in the Republic of Moldova

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Abstract: The field of health care has become one of the basic pillars of the national economy as well as the world economy. At the current stage, health, like education, is a long-term investment in human capital, and trends in this field are intended for the provision of medical services based on both results and cost control, without compromising their quality.

A very important service provided to the population of the Republic of Moldova is the health protection. Such services aim at ensuring the health of society members, maintain and restore the capacity of labour force and thus are deeply involved in the creation of human's material existence conditions and in the improvement of quality of life. At the present stage, the main goal of the medical-sanitary institutions from the Republic of Moldova is to increase the quality of healthcare services provided by facilitating the access of all categories of beneficiaries to qualitative, cost-efficient healthcare services provided in a safe environment. The level of quality of services provided by the medical-sanitary institutions is influenced by the way of organization and operation. The economic component, which influences the conduct of managers of the medical institutions, is the obligation to respond to financial constraints.

Keywords: performance indicators, efficiency, medical services, resources, cost.

JEL Classification: H51

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Criminal liability and the difference with civil liability

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Abstract: The subject of the right, whether natural or legal person, bears responsibility for the actions caused, whether they are illegal under criminal law or under civil law. Based on the criminal law, the subjects of the law, specifically natural persons, have criminal liability in those cases when the criminal offense is committed by a person who has reached the age of fourteen (14). So, when the criminal offense is caused by a person of fourteen (14) years of age, then the judicial procedure begins against him, while in case the natural person is under the age of fourteen (14) at the time of committing the criminal offense, for the criminal offense, any criminal proceedings initiated must be withdrawn immediately and in this case the court must notify the guardianship body. In this case, when the guardianship body is mentioned, according to civil laws, these guardians are the legal representatives responsible for their child up to the age of eighteen (18). But according to the penal code of Kosovo, the legal representatives are only notified that their child has committed a criminal offense, unlike the civil law that in the event that a child under the age of eighteen (18) causes any damage, whether moral or material, the legal representatives must the guardian or the person who adopted the child is responsible for the damage. An exception to this rule of civil laws is when the child who caused the damage has inherited property or a gift, which enables the child to pay for the damage he caused with his wealth that he may have. This happens because every natural person upon reaching the age of fourteen (14) acquires the delictual capacity, according to which he can be responsible for the damage caused, but this responsibility does not include violations of the criminal code. So, according to the criminal law, the child bears the responsibility of the action and if he has not reached the age of eighteen years, unlike the civil law, the representative of the child is responsible for the illegal actions that the child may have caused. The differences between criminal and civil liability will be discussed in more detail in the presentation of the paper.

Key words: Criminal liability, civil liability, illegal action, natural persons.

Inflation Targeting Policy in Moldova

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Abstract: Transparency in conducting monetary policy has become important feature for central banks in the world. One of the issues in conducting monetary policy is credibility and transparency of the central bank. Inflation targeting policy is one of the credibility and transparency policies in the monetary policy framework. In line of many central banks in the world, the National Bank of Moldova (NBM) has started implementing inflation targeting policy. In 2010, Moldova implemented inflation targeting policy and targeted inflation rate at 5% with 1.5% wave. This study attempts to investigate recent monetary policy and monetary transmission mechanisms in Moldova.

Economic education – innovations and creativity

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Abstract: The development of techniques and technology, respectively digitization, digital transformation, the Internet and social networks in the last decade have had a major impact on the way and quality of life, economic opportunities, the improvement of working conditions, etc. The speed of information that is shared today, and the speed of knowledge that is become obsolete, categorically indicates that completing education after leaving university is not and cannot be a current model of behavior for success in the labor market. Lifelong learning and continuously acquiring knowledge are absolutely necessary to be competitive on the labor market nowadays.

The purpose of the research is to answer what economic education will look like in the future. In this regard, trends and models in economics education are analyzed. Special attention is given to the relationship “digital transformation-digital education”. An emphasis is laid on types of Self Learning Artificial Intelligence in the context of more creative economic education.

Keywords: economics, education, innovation, digital transformation, Artificial Intelligence (AI)

Wine Marketing Strategies Experimental Evidence from Greece

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Abstract: This study constitutes an attempt to define in which way and extend the new marketing strategies are implemented by Greek wine production enterprises. The interested is mainly focused on the infusion of marketing trends that are related with wine, its price and its packaging as means of promotion and transformation of perceived value. Wine, as a product and as a commodity, is highly affected by the changes and reformations of international market conditions. In wine market the competition among enterprises is getting on higher levels in an ever- reforming environment. The part of wine marketing which is thoroughly examined on this study is the product itself including all these elements that express its differentiation from products which belong to the same category. In addition to this it is examined the role of perceived value as an instrumental factor of determining the levels of consumer's satisfaction or displeasure.

The study was conducted by using the method of experiment. A pilot research predated the main research. During the pilot research a pre-experimental design was carried out, namely the measurement of one group's results at two time points, one before the treatment and one after the treatment. On the main research, the procedure that was followed on the experiment was modified in order to ensure precise measurements. They were two samples, the experimental group of 60 participants and the control group of 60 participants too. The two samples tasted the same wine in two different wine-tastings. After every wine –tasting the participants of each group had to fill an assessment questionnaire. Though, the wine that was tasted by the members of experimental group during the second wine tasting was served from another bottle with different packaging style and with higher price. Furthermore, it was not mentioned to the members of experimental sample that they had tasted the same wine in both wine- tastings.

Judging from the results of the experimental procedure, the internal cues of quality seems to have more important role in the configuration of perceived value of wine comparing to the packaging effects. Nevertheless, packaging has a very strong influence on the consumers' perceptions concerning the internal quality features and therefore the estimated quality of wine. Price, as rate of financial sacrifice for obtaining a wine product, is also conducive to the shaping of consumer's opinion with regard to the perceived value and the received satisfaction.

The main conclusions of the research are that packaging is proved to be a very useful instrument for creating notions about the quality and subsequently about the perceived value of a wine. The combination of packaging and price are factors of significant importance for the creation and establishment of high or low appreciated value for a wine, a value that reflects on consumers' satisfaction levels.

Keywords: Wine, perceived value, consumers' satisfaction

Eco-Tourism in the Kyrgyz Republic

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Abstract: This study investigates the eco-tourism potential of the Kyrgyz Republic. When the tourism statistics of the Kyrgyz Republic is analyzed, it can be noticed that tourists mainly come from countries of the former Soviet Union. The British Backpacker Society ranked Kyrgyzstan as the fifth best adventure travel destination on earth in 2018 and claimed that the country is an adventure travel secret. The Kyrgyz Republic has a great potential for eco-tourism. Ala Archa National Park, Köl-Suu, Lenin Peak, Arslanbob, Ala-Kul, Tash Rabat, Skazka Canyon, and Bokonbaevo are the most important tourist sites for eco-tourism in the Kyrgyz Republic. Upon joining The Region Initiative (TRI) in 2010, Kyrgyzstan found a way to utilize its eco-tourism potential. By joining TRI, Kyrgyzstan has improved its tourist range and has been able to attract tourists from other countries rather than the countries of the former Soviet Union.

The importance of the unification of European law in a European Civil Code

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Abstract: Building a modern European Union (EU) is almost impossible without a uniquely codified civil law for all EU states. This enables the free circulation of property values, what is called the free circulation of goods and services. The European Union, for legal issues from private law, has priority in its policy on the unification of legal issues from private law. Within the EU, several projects related to the contractual field are active, thus laying the foundations for the principles of European contractual law, thus achieving the final goal in the European Civil Code. So far these reformulations are academic products without official status, but if the European Commission's plan for the Common Framework of Reference (CFR) is implemented, it constitutes a semi-official instrument of non-binding law. In 1980 the International Institute for the Unification of Private Law drew up the principles the purpose of which according to its preamble is that they are a set of rules for international commercial contracts which can be used as model law to supplement domestic law where there is a gap. in national law. These principles were the principles of UNIDROIT, but together with these principles a parallel project to create the principles of European contract law (EPLC) led by Professor Ole Lando of the Copenhagen Business School, at the same time, a group another led by Prof. Giuseppe Gadolfi from Pavas created a preliminary draft of a European contract code. And today it is expected that all these rights will be unified in a European Civil Code, which will serve all EU member countries. More broadly related to the unification of European law in a European Civil Code, its relevance and applicability in EU member states.

Key words: European Law, European Civil Code, unification of private law; importance; implementation.

The importance of knowing the Laws of the European Union

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Abstract: The legal order created by the European Union (EU) has already become an ingrained component of our political life and society. Every year, based on the treaties and legal principles of the Union, thousands of decisions are taken that decisively affect EU member states and the lives of their citizens. It's been a while since individuals are no longer just citizens of their state, city or district, they are also citizens of the Union. For this reason alone, it is extremely important that they are informed about the legal order, which affects their daily lives. However, the complexity of the structure of the Union and its legal order are not so easily understood. This is partly due to the language of the treaties themselves, which is often somewhat vague, with hints that are not easily understood. An additional factor is the ignorance of the many concepts with which the treaties (rules) try to master the situation. All the laws that have been formulated in the European Union, whether they are binding or non-binding for their applying members, have always led to the resolution of numerous disputes between the entities participating in the dispute, so it is much more important. to know what are the values of these principles, ``of which we should be more aware in the state of Kosovo, which is a step before membership in the European Union, so it is also a good idea to familiarize ourselves with the principles, respectively with the laws of the European Union, so we must be aware of the advantages that the implementation of soft (non-binding) EU principles or laws can offer us.

Keywords: Laws of the European Union; Knowing the laws of the European Union, the importance of knowing the laws of the European Union;

The Interconnection Between Training and Job Performance in Hotel Organizations

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Abstract: This study aimed to assess the interconnection between professional training and employee performance. Considering that the professional training in our country is not at appropriate levels and in some companies they are not even present and knowing the importance and impact that training has on work performance, such a study should be carried out first. Therefore, the purpose of this study is to show the interconnection between professional training and employee performance among the employees of the Dukagjini hotel in Pejë and the Grand hotel in Pristina. 100 employees from the municipalities of Pristina and Peja participated in this study. Quantitative methods were used in the methodology of this study. In this study, two instruments were used, the one that measures the receipt of professional training and the instrument that measures performance at work.

The findings of this study have shown that there is a significant relationship between professional training and the performance of employees, also the results show that professional training has a significant impact on the work performance of employees and that respondents who have received professional training have better performance at work than respondents who did not receive professional training.

Finally, the findings of the study and the practical significance of the findings to health workers are discussed.

Keywords: training, performance, employees, management

Dilemmas of the sustainability of tourism development projects in Eastern European countries

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Abstract: Project sustainability is a multifaceted issue and is often interpreted in a restrictive sense, with negative effects on project selection and implementation. In the tourism field, characterized by long-term orientation, sectoral interdependence, high demand volatility and the need for major investments, sustainability takes on new meanings. Our research aims to identify sustainable projects, as examples of good practice, as well as unsustainable ones in the field of tourism in Eastern European countries, to highlight the factors that contributed to their success or failure. From a methodological point of view, the study is based on an extensive documentation, starting from the financing programs in the field of tourism. The conclusions of the study have implications at didactic, managerial and organizational level, proposing a systematization of success factors, sustainable development solutions and illustrating the contexts in which they can be applied.

Keywords: projects, sustainability, tourism development.

Teaching Performance Associated to V3SK Model of a 21st Century Teaching Professional

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Abstract: This study determined and evaluated the teaching performance associated to V3SK model of a 21st century teaching professional. Specifically, this study: Determined the teaching performance of the Don Mariano Marcos Memorial State University-South La Union Campus, College of Education faculty; Determined the relationship among the variables along with personal profile, teaching performance, and V1- Learner-centered values, V2- Teacher identity, V3- Service to the profession and community, Skills and Knowledge (V3SK model); and Determined if there is a significant correlation on the teaching performance as associated to V3SK model of a 21st century teaching professional. The respondents of this study was composed by the faculty members of the College of Education of Don Mariano Marcos Memorial State University-South La Union Campus (DMMMSU-SLUC), Agoo, La Union, Philippines Using SPSS, Correlation Analysis was used at $\alpha = 0.05$ determine and evaluate the correlation on the teaching performance as associated to V3SK model of a 21st century teaching professional. The study revealed a significant correlation of Educational Attainment to Teacher Identity (V2), Educational Attainment to Service to the Profession and Community (V3), Educational Attainment to Knowledge, Length in Service to Teacher Identity (V2), Employment Status to Teacher Identity (V2), Monthly Gross Income to Teacher Identity (V2), Monthly Gross Income to Skills.

Key Words: Teaching Performance; Teaching Professional; V3SK Model

Role Ambiguity in Small Enterprises

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Abstract: Small and Medium Enterprises (SMEs) in several countries represent even more than 90% of businesses, contributing up to 40% of GTP. They are primarily characterized by the number of employees (up to 250 employees for medium, and 50 for small ones). Another common characteristic between SMEs, compared to others, is the way they operate and deploy their employees. Specifically, given the limited resources they have, smaller enterprises that have a limited number of employees tend to assign tasks of wider scope to a given job position. This fact, on the one hand, enriches employees' work, making it more interesting and less tedious. On the other hand, it carries the risk of confusing employees, due to role ambiguity. Yet, role ambiguity, to the best of our knowledge, has been scarcely researched in the context of SMEs.

Therefore, the present research aims to investigate the effects of role ambiguity on employees' flourishing (a measure of an individual's social-psychological prosperity, falling under the notion of well-being). To gain a deeper understanding of the aforementioned relationship, the moderating role of two job resources (i.e. colleague support and authentic leadership) was also investigated.

Adopting the Job Demands-Resources (JD-R) theory, role ambiguity could be interpreted as a job demand and thus be regarded as a predictor of strain. On the contrary, the majority of research on the motivational path of JD-R focuses on the beneficial effects of job resources. In contrast, the impact of job demands has been quite neglected. While the dominant body of existing literature perceives job demands as hindering, some researchers argue that job demands could motivate employees when perceived as challenges.

The present study was conducted among Greek SMEs, in the Periphery of Thessaly. A total of 18 entrepreneurs, owners of small enterprises in the catering industry that operate in this Periphery, were approached in person by researchers, to allow a study among their employees. Twelve of them agreed to distribute questionnaires to their personnel, reaching a response rate of 66.6% percent. Overall, a total of 114 fully completed questionnaires were collected.

Data were analyzed with SPSS Process Macro model 2, to test for both the direct and the moderating effects.

Results confirm the hypothesis that SME's employees' role ambiguity affects their flourishing. More specifically, it is suggested that role ambiguity has a beneficial impact on individuals, employed by small SMEs, flourishing. Surprisingly, the role of leader/manager was overshadowed by that of colleagues. Authentic leadership's moderating role was significant only in the presence of colleagues' support.

Keywords: Role Ambiguity, Flourishing, Colleague Support, Authentic Leadership, Small Enterprises

Entrepreneurial intentions of Romanian students in the context of COVID-19 pandemic

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Abstract: The COVID-19 represented a global public health crisis that raised many challenges to the world's economies. Since, during time, the natural disasters, wars or terrorist acts lead to a sharp drop in investments and GDP, they have also negatively influenced the development of new businesses. Therefore, the impact of current COVID-19 pandemic might have a significant effect on the potential entrepreneurial intentions. This aspect presents a very high importance because fostering entrepreneurship is considered a key strategy to enhance a country's economic development. Using the Theory of Planned Behaviour (TPB) as a theoretical base, the objective of this study is to investigate if the entrepreneurial intentions of the Romanian students before and during the COVID-19 pandemic. The research methodology was based on a survey. The questionnaire was applied on students enrolled in the second semester of their final year of undergraduate studies, at the Faculty of Economics and Business Administration, "Alexandru Ioan Cuza" University of Iasi, Romania, during two periods of time: April-May 2018 and February-March 2022. The final sample included 826 students. The results of our research suggest that, before the COVID-19 pandemic, there is a positive relationship between the pro-entrepreneurial attitudes, subjective norms and perceived behavioural control, on one hand, and a person's entrepreneurial intentions, on the other hand. During the COVID-19, it was noticed that the respondents were less interested in being employed by others and more attracted to being entrepreneurs. In this context, risk-taking and creativity both significantly and positively predicted entrepreneurial intentions, but locus of control did not have a significant impact. Our findings offer relevant information which might help the university managers and the policy-makers understand the importance of encouraging student entrepreneurship, by nurturing creativity and offering educational resources that assist the young adults in reducing the perceived risk of entrepreneurship.

Keywords: entrepreneurial intentions, Romanian students, COVID-19 pandemic.

A policy perspective on unemployment in EU emerging economies

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Abstract: Keeping unemployment at a low level is one of the main goals of all governments in the world. However, despite all the efforts made by national governments and international institutions, many states still confront high rates of unemployment. Taking into account the analyzed period and the used methodology, studies regarding the impact of labor market regulations on unemployment can be grouped into three categories. While the first ones did not show a clear pattern regarding the efficiency of different active labor market programs, those of the second and third generation offer more conclusive results. One major finding of these latter studies is that more rigid employment regulations are associated with higher levels of unemployment. The relationship between business regulations and unemployment has not been extensively examined in the literature. However, some studies that indirectly investigated this link have concluded that a more burdensome business environment discourages small entrepreneurs and large investors, the consequence being an increase in unemployment. Considering these aspects, the present study intends to conduct a statistical investigation of the labor market and business regulations' effects on unemployment in 11 EU transition economies during the period 2000-2020. To achieve our purpose, we used the panel cointegration tests. The cointegration analysis revealed that, over the entire analyzed sample, neither labor market regulations nor business regulations had any significant effects on unemployment. However, the individual cointegration coefficients showed that market-oriented labor regulations diminished unemployment in Bulgaria, Poland and Romania, but raised it in Hungary, Latvia, Lithuania and Slovenia. Meanwhile, market-oriented business regulations decreased the unemployment in the Czech Republic, Latvia and Poland, but raised it in Croatia and Slovenia.

Keywords: unemployment, EU emerging economies, labor market regulations, business regulations.

Islamic Banks in Qatar: Are They the Most Efficient Islamic Banks in the World

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Abstract: The first Islamic bank was established in 1982 in Qatar. Islamic banks operate according to the Islamic banking and finance principles. Banking products and operations of Islamic banks are internally supervised by a Shari'a board of the bank. They are also regulated and supervised by a governmental institution. This study analyses the efficiency of Islamic banks in Qatar in a comparative manner to Islamic banks operating all over the world. The cost to income ratio is used for the calculation of the efficiency of Islamic banks. Four Islamic banks from Qatar are among the top 10 most efficient Islamic banks in the world in 2021.

Delinquency of civil servants and how to fight it: the case of the Hellenic Police

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Abstract: The police profession is largely based on interpersonal engagements, contacts and interactions at various levels and situations, which usually raise stressful situations and a high sense of responsibility to carry them out.

The diverse and complex nature of the interactions, as well as the way they will develop, depends on various factors, while their quality determines to a significant extent the effectiveness of the exercise of police work.

As in any organized management system, similarly in this one, there are internal rules that govern the daily involvement of employees in their strict application, determining both its proper functioning and the provision of quality services.

The strict application of these rules leads to the concept of "discipline", that is, to a type of exercise of power that includes a set of instruments, techniques, methods, procedures of levels of application as well as objectives.

We start from the official principle that the public administration includes in its ranks employees who are involved in illegal actions and deviate from the above internal rules. The Greek State, wanting to liquidate criminal elements working in public services, in 1999 established the Internal Affairs Service by law 2713/99. The specific service of the Hellenic Police, initially, placed great emphasis on the fight against crimes committed by police officers and then by legislative regulations defined as an additional scope the corresponding criminal acts of all civil servants.

In this article we will present on the one hand the work and on the other hand the evaluation of the findings regarding corruption cases, as they are recorded in the official data of the competent Ministry of Citizen Protection, additionally based on the experience of the author, who works in the Hellenic Police with the subject of Disciplinary Law.

Keywords: Hellenic Police, internal affairs service, discipline, corruption, delinquency of police officers

Efficiency of Commercial Banks in Bulgaria

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Abstract: Central Bank of Bulgaria, Development Banks and Commercial Banks are the types of banks in Bulgaria. According to their owners, commercial banks in Bulgaria can be classified as a state owned, foreign owned or privately owned. Most of the commercial banks in Bulgaria are foreign owned. About 75% of the total commercial banking sector is foreign owned while 25% of total commercial banking sector is domestically owned. The efficiency of commercial banks in Bulgaria is examined for the period of 1995-2021 in this study. Results of this study indicate that foreign owned commercial banks are the most efficient commercial banks operating in Bulgaria.

Abd Jeopolitiğinin Yeni Dünya Düzeni Üzerindeki Etkisi

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Özet: Modern dünyadaki jeopolitik durum değişken bir faktördür. 19. yüzyılın sonundan itibaren imparatorluklar ve ulus devletler siyasi coğrafyalarını tanımlamak için jeopolitik kavramını kullanmışlardır. İkinci Dünya Savaşı'ndan sonra soğuk savaşın ve iki kutuplu dünya düzeninin etkisiyle bu kavram daha ideolojik bir anlam kazanmıştır. Soğuk Savaş'ın sona ermesi, jeopolitik hakkındaki teoriler ve anlaşmazlıklar ve ABD'nin tek güç haline gelmesi jeopolitiğin gelişmesine ivme kazandırmıştır. Jeopolitiğin gelişimini iki aşamada (klasik jeopolitik ve yeni jeopolitik) düşünmek uygundur. Jeopolitik, uluslararası ilişkileri mekansal faktör çerçevesinde analiz eder ve devletler arası ilişkilerde jeopolitiğin stratejik temellerine odaklanır.

Jeopolitik kavramı farklı konumlardan açıklanmıştır. Örneğin coğrafya profesörü Colin Flint'e göre, "jeopolitik terimi, bir yandan savaş durumlarını ya da bölgesel güç için diplomasiyi hatırlatırken, diğer yandan teoride insanları ve devletleri bulundukları yere göre sınıflandırmak için kullanılıyor. Charles Darwin, jeopolitik terimini doğrudan kullanmamasına rağmen, evrim teorisini coğrafyaya uyguladı. İngiliz politikacı Halford J. Mackinder'e ait "Heartland" teorisi, jeopolitik çalışmalarında özel bir yere sahiptir.

26 Aralık 1991'de çöken Sovyetler Birliği'nin yerine kurulan Rusya Federasyonu, 69 yıllık varlığının ardından ABD'nin yeni jeopolitik hedef ve stratejileri doğrultusunda uluslararası ilişkiler sistemine entegre olmuştur. . Böylece Amerika'nın yeni dünya düzeninin hedefleri, "Amerika'nın büyük stratejisi" (barış, çoğulculuk ve refah) ilkeleri yeniden tanımlanmıştır. Yani ABD dış politikası, uluslararası barışı teşvik etmeyi, liberal demokrasinin gelişimini desteklemeyi, dünya çapında evrensel ortak değerler oluşturmayı ve ticareti teşvik ederek ulusal ve uluslararası refahı yaygınlaştırmayı amaçlamaktadır. Amerika Birleşik Devletleri'nin ünlü stratejist ve eleştirmenlerinden biri olan siyaset bilimci ve devlet adamı Zbigniew Brzezinski'ye göre, Soğuk Savaş sonrası dönemde Amerika bu tür hedefleri gerçekleştirecek küresel güce sahiptir.

ABD ve SSCB arasındaki rekabetin bu teorilerin Avrupa merkezinden Batı merkezine doğru gelişmesine yol açtığı ve bu teorilerin merkezinin de Avrasya olduğu sonucuna varılabilir. ABD'nin ve liberalizmin bu siyasi mücadeleden başarılı çıkışı, Soğuk Savaş sonrası ortaya çıkan jeopolitik teorilere de yansdı.

Anahtar Kelimeler: jeopolitik, dünya düzeni, strateji, barış, uluslararası ilişkiler

The Influence of United States Geopolitics on The New World Order

Abstract: The geopolitical situation in the modern world is a variable factor. Since the end of the 19th century, empires and nation-states have used the concept of geopolitics to define their political geography. After the Second World War, due to the influence of the cold war and the bipolar world order, this concept gained more ideological meaning. The end of the Cold War, the theories and disagreements about geopolitics, and the United States becoming the only power have given impetus to the development of geopolitics. It is appropriate to consider the development of geopolitics in two stages (classical geopolitics and new geopolitics). Geopolitics analyzes international relations within the framework of the spatial factor and focuses on the strategic foundations of geopolitics in relations between states.

The concept of geopolitics has been explained from different positions. For example, according to geography professor Colin Flint, "the term geopolitics, on the one hand, reminds states of war or diplomacy for regional power, on the other hand, it is used in theory to classify people and states according to their location. Although Charles Darwin did not use the term geopolitics directly, he applied his theory of evolution to geography. The "Heartland" theory belonging to the English politician Halford J. Mackinder occupies a special place in the study of geopolitics.

After 69 years of existence, the Russian Federation, which was established in place of the Soviet Union, which collapsed on December 26, 1991, has integrated into the system of international relations in the direction of the new geopolitical goals and strategies of the United States. Thus, the goals of America's new world order, the principles of "America's grand strategy" (peace, pluralism and prosperity) have been redefined. That is, US foreign policy is aimed at encouraging international peace, supporting the development of liberal democracy, establishing universal shared values around the world, and spreading national and international prosperity by stimulating trade. According to the political scientist and statesman Zbigniew Brzezinski, one of the famous strategists and critics of the United States, in the post-Cold War era, America has the global power to realize such goals.

It can be concluded that the competition between the USA and the USSR led to the development of these theories from the center of Europe to the center of the West, and the center of these theories is also Eurasia. The successful exit of the USA and liberalism from this political struggle was also reflected in the geopolitical theories that emerged after the Cold War.

Keywords: geopolitics, world order, strategy, peace, international relations

Tendencies In Health Self-Evaluation In Latvia

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Abstract: Health conditions of inhabitants are very important for all countries world - wide, also for Republic of Latvia. Each government contributes more or less for population health and make several steps to monitor it, analyse the attitude of the population to take possible the best available decisions. In European Union there are collected data on several aspects on health conditions as the analysis of those aspects are important for country development and for decision making by the respective country government and decision - making and best solutions preparation. Important there are self-evaluations by inhabitants on their health. Aim of the paper is to analyse use of health self-evaluation for decision making and how it is reflected in scientific research results and find the tendencies on health self-evaluations by inhabitants in Latvia and analyse those tendencies by gender, by territories (urban and rural), by income quintiles. Research results indicate that there are several aspects that have to be taken in consideration for decision – making and there is a lot of space for information for the inhabitants as only a small share of inhabitants use the opportunity to check their health offered by state financing.

Key Words: Health Self-Evaluation; EU-SILC; Health Self-Evaluation Levels

A review of the pandemic experience of tourism and hospitality sector in Albania. Methods to be followed for its recovery, towards sustainable tourism.

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Abstract: The COVID-19 disaster has brought various negative effects on human activities, including the tourism sector. Tourism industry suffered the greatest crisis on record in 2020. However, only a few studies have conducted to the development and governance of tourism by the stakeholders during the COVID-19 pandemic. The collapse of tourism caused by the COVID-19 pandemic is forcing many destinations to rethink their economic model, by focusing on sustainability and innovation. The purpose of this study is to give a review of the experience of the pandemic of the tourism and hospitality sector in Albania. The objectives of this study are (1) to describe the changes in the tourism industry that have occurred due to COVID-19; (2) explain the governance of sustainable tourism during the COVID-19 outbreak; (3) adaptation methods of tourism industry stakeholders to maintain the resilience of Albania tourism destination during the COVID-19 pandemic, and explain the government's strategy in supporting tourism industry stakeholders to maintain the sustainability of Albania tourism destinations during the COVID-19 pandemic. In Albania as well as in many other countries tourism is one of the hardest-hit sectors by this pandemic and will most likely be the last sector to recover once this story is over. It is clear that recovery requires coordinated actions by all stakeholders. Methodology is applied taking into account several priority issues like governance policies, tourism and hospitality stakeholder ideas for recovery of this industry. Data for this work were collected using a dual approach like materials published from a wide range of sources including, inter alia: academic literature, sector regulators, industry specialists, international organizations such as the OECD and governments abroad. To complement the existing conclusions, the paper conducted apperception survey, where representatives of hotels and accommodation units interviewed in Albania gave their perception on the potential impact of COVID-19 on the Albanian tourism sector, including operations and financial performance. Feedback was also obtained from open interviews with management of high level.

Key words: Tourism industry, Sustainable tourism, hospitality; stakeholders; recovery policies

Comparative Analysis of Jurisdiction of the Civil Courts in Industrial Property Disputes in the Republic of North Macedonia and in the Republic of Türkiye

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Abstract: The Republic of North Macedonia and the Republic of Türkiye as members of the World Trade Organization, and signees of the Agreement on Trade Aspects of Intellectual Property Rights (TRIPS), have been obliged to stipulate efficient and effective legal measures and legal instruments for preventing violations to intellectual property rights and legal instruments that deter from further violations. The procedures should be impartial and fair, not complicated and long, i.e., not to last unreasonably long and without unreasonable delays and lateness. The specialization and expertise of the courts/judges are of course very important factors for providing efficient and effective legal protection of the violated industrial property rights, especially taking into consideration that industrial property disputes are known as complex and complicated disputes, where broad foreknowledge and solid knowledge of the issue are necessary. This paper will include a comparative analysis of the judicial system and the jurisdiction of the courts in litigation procedures in industrial property disputes in the Republic of North Macedonia and the Republic of Türkiye, including their peculiarities, advantages, and disadvantages.

Key Words: Industrial property, Disputes, Specialized courts

Factors Affecting Agritourism Performance

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Abstract: The purpose of this paper is to examine the role of agritourism size, food and beverage service offered and agriprenuer's characteristics on agritourism performance. Quantitative data from an online survey conducted on 292 agritourism, are considered. To test the proposed hypotheses an ordinal regression with two link functions was applied. Results indicate that those agritourism that offer food and beverage services perform better in terms of gross income. The size of agritourism is positively associated with its performance. Regarding the agriprenuer characteristics, while gender has a significant influence on performance, by contrast, education and age are not significant. This paper practically contributes by guiding agriprenuers on their daily management decisions, and furthermore, to those who aim to invest in agritourism.

Keywords: Agritourism, agriprenuer, performance, ordinal regression.

The Role Of Location On Agritourism Success; Applying Hierarchical Regression Model

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Abstract: This study investigates the effect of location on agritourism performance, focusing on the Tuscany region, Italy. Data were driven from a survey conducted to 292 Tuscany agritourism farms, together with qualitative information gathered from 8 personal interviews. Hierarchical multiple regression model was employed to analyse the data. Results indicate that location typology matters in agripreneurs' decision where to start an agritourism enterprise. Results suggests opportunity for designing the support policy and framework for agritourism development in Tuscany region.

Keywords: Agritourism, agripreneur, performance, Italy.

Toplum 5.00: İstihdamın Geleceği

Dr. Öğretim Üyesi Cemile Evkaya¹

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Özet: Toplum 5.0 ile ilgili literatür incelendiğinde, konunun öncelikle teknolojik açıdan daha sonra ise insan kaynağı açısından ele alındığı görülmektedir. Teknolojik değişiklikler, internet kullanımı ve robotik uygulamalar, emek piyasasındaki işçilerin ve örgütlerin ihtiyaçlarını değiştirmektedir. Diğer taraftan yaşanan demografik değişim/dönüşüm bireylerin emek piyasasında muhatap oldukları işleri ve meslekleri de etkilemektedir.

Bu çalışmada ise istihdamın yapısında ortaya çıkaracağı değişimler özellikle yeni iş ve meslekler açısından ele alınacaktır. Bu amaçla öncelikle Endüstri 4.0 ve Toplum 5.0 kavramından bahsedilecektir. Daha sonra ise emeğin nitelik ve niceliksel değişimi, gig ekonomisinin gelişimi ve nüfusun yaşlanması konuları ele alınacaktır. Son bölümde ise, bu sürecin çalışma hayatında neden olduğu değişimler değerlendirilecektir

Anahtar Kelimeler: İşgücü, İşsizlik, Endüstri 4.0, Toplum 5.00.

Ekonomik Büyümenin ve Gelir Eşitsizliğinin Yoksulluğa Etkisi: Türkiye Düzey-1 Bölgeleri Örneği¹

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Özet: Günümüzde bir çok ülkede yaşanan ve çok yönlü etkilere sahip bir olgu olan yoksulluk; yaşamsal faaliyetlerin devamı için zorunlu olan beslenme, barınma, ısınma vb. gibi temel ihtiyaçların karşılanabilmesi için gerekli gelire erişememe durumu şeklinde tanımlanabilir. Yoksulluk ile başarılı şekilde mücadele edilebilmesi için öncelikli olarak yoksulluğun belirleyicilerinin tespit edilmesi gerekmektedir. Teorik ve ampirik literatürde, yoksulluğun belirleyicileri olarak çeşitli faktörler ele alınmakla birlikte, ekonomik büyüme ve gelir eşitsizliği ekonomik faktörler olarak öne çıkmaktadır. Bu çerçevede; hızlı ve sürdürülebilir bir ekonomik büyüme ve bu büyüme ile elde edilen ilave gelirin toplumdaki bireyler arasında eşit bir şekilde dağılımı, diğer bir deyişle gelir eşitsizliğinin azaltılması, yoksulluk ile mücadelede en etkin politikalar arasında yer almaktadır. Bu çalışmada, ikinci nesil panel veri tahmin yöntemleri aracılığı ile 2006-2019 dönemi için Türkiye'nin Düzey-1 bölgelerinde (İstanbul, Batı Marmara, Ege, Doğu Marmara, Batı Anadolu, Akdeniz, Orta Anadolu, Batı Karadeniz, Doğu Karadeniz, Kuzeydoğu Anadolu, Ortadoğu Anadolu ve Güneydoğu Anadolu) ekonomik büyümenin ve gelir eşitsizliğinin yoksulluğa etkisi araştırılmıştır. Bu amaçla gerçekleştirilen Westerlund ve Edgerton (2007) LM bootstrap panel koentegrasyon analizi, ekonomik büyüme, gelir eşitsizliği ve yoksulluk arasında uzun dönemli bir ilişkinin olduğunu göstermiştir. Ardından, uzun dönem katsayı tahmini için uygulanan genişletilmiş ortalama grup (AMG) tahmini sonucunda panel geneli (Düzey-1 bölgeleri) için ekonomik büyümenin yoksulluğu azalttığı, gelir eşitsizliğinin ise artırdığı belirlenmiştir. Bölgesel bazda farklılaşan AMG bulgularına göre ekonomik büyüme; Batı Karadeniz, Doğu Karadeniz, Doğu Marmara, Ege, Kuzeydoğu Anadolu ve Orta Anadolu bölgelerinde yoksulluğu azaltmakta, fakat Akdeniz, İstanbul, Batı Anadolu, Ortadoğu Anadolu, Batı Marmara ve Güneydoğu Anadolu bölgelerinde yoksulluk üzerinde anlamlı herhangi bir etki oluşturmamaktadır. Son olarak gelir eşitsizliği; Akdeniz, Kuzeydoğu Anadolu ve Doğu Marmara bölgelerinde yoksulluğu artırmakta, Ege bölgesinde azaltmakta, diğer bölgelerde ise etkilememektedir.

Anahtar Kelimeler: Ekonomik Büyüme, Gelir Eşitsizliği, Yoksulluk, Türkiye, Düzey-1 Bölgeleri

¹ Bu özet bildiri, birinci yazarın "Türkiye'de Ekonomik Büyümenin ve Gelir Eşitsizliğinin Yoksulluğa Etkisi: Düzey-1 Bölgeleri Örneği" başlıklı yüksek lisans tezinden yararlanılarak hazırlanmıştır.

Two Multi-Criteria Decision Making Methods for Selection of Wide-Body Passenger Aircraft

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Abstract: Aircraft acquisition can be stated as a strategic activity as it affects the long-term plans of an airline. Aircraft selection is an important decision requiring a major investment and a detailed assessment process. In the selection of an aircraft there are several factors to consider; thus, multi-criteria decision making (MCDM) methods are often used in such problems. In this study, we address the wide-body passenger aircraft selection problem using combinations of three different MCDM methods, namely Analytic Hierarchy Process (AHP), Decision Making Trial and Evaluation Laboratory (DEMATEL), and Technique for Order Preference by Similarity to Ideal Solution (TOPSIS). First, we identify a comprehensive set of criteria associated with aircraft selection, and utilize AHP and DEMATEL methods to obtain two sets of criteria weights based on expert judgments, which are then combined with TOPSIS method to determine the best wide-body passenger aircraft for airlines. We also use DEMATEL method to investigate the interactions among aircraft selection criteria and prepare the impact relation maps. The use of AHP-TOPSIS and DEMATEL-TOPSIS approaches enables to examine the effects of the criteria independency assumption in the aircraft selection context. The results of the study show that the ranking of alternatives change across the approaches, which is attributed to the effect of criteria independency assumption in AHP method when determining criteria weights.

Keywords: Aircraft selection, Multi-Criteria Decision Making, AHP, DEMATEL, TOPSIS

This study is based on the MBA thesis of Hüseyin Gökalep Güneş (Middle East Technical University, Graduate School of Social Sciences, 2022).

The Impact of Immigration on Unemployment: The Case of Türkiye

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Abstract: Political and economic instability and conflict environments at the level of developing countries have increased immigration significantly in the last decade. The economic, political, and cultural impacts of immigration are intensely the subject of scientific research. In this study, the impact of immigration on unemployment, which is one of the economic effects, was examined in the period of 2000-2021 in Turkey. After confirming the existence of a long-term relationship between immigration and unemployment with the co-integration test, the impact of immigration on unemployment is analyzed employing the Vector Error Correction Model (VECM). In the model immigration and real output are the independent variables while unemployment rate is the dependent variable. The outcomes of the VECM indicate that a 1% increase in immigration leads to an increase of 0.50% in the unemployment rate, and a 1% increase in real output reduces the unemployment rate by 2.34%.

Key Words: Immigration, unemployment, Türkiye

Population Sensitivity Properties Of Internally Stable Solution In Hedonic Coalition Formation Games

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Abstract: We consider a hedonic coalition formation game that consists of a finite set of agents and their preferences such that each agent has preferences over all coalitions that contain her. So, an agent's preferences depend only on the identity of the other agents in her coalition, this is called the hedonic aspect of preferences by Drèze and Greenberg (Hedonic coalitions: optimality and stability, *Econometrica* 48:987–1003, 1980). Examples of a hedonic coalition formation game are forming research groups, producing local public goods, and forming clubs and organizations. An outcome of a hedonic game is a partition of the set of agents into pairwise disjoint coalitions. A partition is core stable if there exists no coalition of agents each of whom gets strictly better off by leaving their coalitions and forming a new coalition together. A coalition is internally stable if there exists no sub-coalition of it whose members get strictly better off when they form a new coalition together. A partition is internally stable if every coalition of the partition is internally stable. A partition is Pareto optimal if there does not exist another other partition at which each agent gets weakly better off and some agents get strictly better off. A core stable partition is internally stable and Pareto optimal, however, the converse is not true.

A solution is a correspondence that assigns each hedonic coalition formation game a non-empty subset of partitions. A solution is core stable if it only assigns core stable partitions, and the Core is the solution that always assigns all core stable partitions. A solution is internally stable if it only assigns internally stable partitions, and the IntS is the solution that always assigns all internally stable partitions. A solution is Pareto optimal if it only assigns Pareto optimal partitions, and the PO is the solution that always assigns all Pareto optimal partitions. Karakaya and Klaus (Hedonic coalition formation games with variable populations: core characterizations and (im)possibilities, *International Journal of Game Theory* 46:435–455, 2017) studied the characterization of the Core with variable populations. In their characterizations, they used the population sensitivity properties of competition sensitivity and resource sensitivity introduced by Klaus (Competition and resource sensitivity in marriage and roommate markets, *Games and Economic Behavior* 72:172–186, 2011). A solution satisfies competition sensitivity if the following holds: When some newcomers are added to incumbent agents, if a coalition that contains only incumbents newly forms after newcomers have arrived, then one of these incumbents suffers from the increased competition by the newcomers and is worse off. A solution satisfies resource sensitivity if the following holds: When some newcomers are added to incumbent agents, if a coalition that contains only incumbents splits up after newcomers have arrived, then one of these incumbents benefits from the increase of resources by the newcomers and is better off.

In this study, we focus on an internally stable solution and check whether it satisfies competition sensitivity or resource sensitivity. We show that an internally stable solution satisfies none of these population sensitivity properties, and hence neither IntS (which assigns all internally stable partitions) nor IntS-PO (which assigns all internally stable and Pareto optimal partitions) can be characterized by using these properties.

Keywords: Coalition Formation, Competition Sensitivity, Hedonic Games, Internal Stability, Resource Sensitivity,

Kitleseel Fonlama: Yenilenebilir Enerjinin Finansmanı Açısından Bir Değerlendirme

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Özet: İklim değişikliğinin neden olduğu çevre sorunları, yeşil duyarlılığa sahip enerji yatırımlarını özendirilmektedir. Bu bağlamda yenilebilir enerji yatırımlarında dikkat çekici artışlar yaşanmaktadır. Yenilenebilir enerji yatırımlarındaki artışlar, aynı zamanda finansal araçların çeşitlenmesiyle sonuçlanmaktadır. Çeşitlilik, finansal araçların inovasyonunu tetiklemektedir. Bunlardan birisi olan kitleseel fonlama, yenilenebilir enerji yatırımlarının finansmanında kullanılan alternatif bir araç olarak karşımıza çıkmaktadır. Kitleseel fonlama küçük miktarlardaki fonların internet tabanlı platformlar üzerinden bir araya gelerek bir projeyi finanse etmesi olarak tanımlanabilir. Birçok küçük yatırımcı için tek başına bir yenilenebilir enerji projesinin finansmanı yapılabilir değilken; kitleseel fonlama ile birlikte bu mümkün hale gelmektedir. Yenilenebilir enerji yatırımlarının ilerleyen yıllarda cazibesinin daha da yükseleceği göz önünde bulundurulduğunda, alternatif bir finansman aracı olarak kitleseel fonlamanın payının giderek artacağı belirtilebilir. Her ne kadar şu anda bazı gelişmiş ülkelerde kullanımı daha yaygın olsa da, gelişmekte olan ülkelerde de kullanımı zamanla yükselecektir. Kitleseel fonlamanın özellikle küçük yatırımcılar için uygun bir araç olması önemini daha da arttırmaktadır.

Anahtar Kelimeler: Kitleseel Fonlama, Yenilenebilir Enerji, Finansman Araçları

Sert, Yumuşak ve İstihdam Edilebilirlik Becerilerinin İş Dünyasında Önemi

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Özet: Hızlı iletişim ve teknolojik gelişimle birlikte piyasa ve endüstri yapılarının değişimi ve rekabet, günümüz örgütlerini daha yenilikçi çalışma yöntemlerine ve yüksek performanslı işyerlerine dönüştürmeye zorlamaktadır. Özellikle örgütlerde otomasyona yönelik eğilimin artması, çalışanların örgütlerdeki rol ve sorumluluklarını da değişime uğratmaktadır. Örgütlerin temel rekabet gücü ise entelektüel sermayesine bağlı olmaktadır. Çalışanların ise, bu değişen rol ve sorumluluklara uyum sağlayacak bir donanıma sahip olmaları gerekmektedir. Bu uyumu sağlayacak yetenek ve becerilere sahip çalışanlar, örgütlerin performansını arttırarak rekabet gücünü daha elverişli hale getirmektedir. Bu bağlamda çalışanların sahip olduğu sert ya da yumuşak beceriler düzeyi, örgütsel performansın yapı taşı haline gelmektedir. Özellikle son dönemde örgütler, çalışanların sahip olduğu yumuşak becerileri verimliliğin kilit unsuru olarak görmektedir. Bu nedenle günümüzde örgütler, teknik ya da bilişsel beceriler olarak bilinen salt bilgiye dayalı sert becerilerden ziyade teknik olmayan, kişiliğe özgü kişisel ve kişilerarası niteliklere vurgu yapan yumuşak becerilere daha fazla önem vermektedir. Ayrıca yeni mezunların işe girebilmelerini daha da kolaylaştıran yumuşak becerilerin diğer bir boyutu olan istihdam edilebilirlik becerileri de örgütlerin işe alım esnasında adaylardan beklediği diğer becerilerdir. Araştırmanın temel problemiği ulusal literatürde daha önce nerdeyse hiç ele alınmamış adı geçen becerilerin tanımlanması, sınıflandırılması ve yeni mezunların daha kolay işe girebilmelerini sağlayacak yumuşak becerilerin neler olduğuna yöneliktir. Bu bağlamda çalışmada sert ve yumuşak becerilerin yanı sıra istihdam edilebilirlik becerileri derinlemesine ele alınması amaçlanmıştır ve bu becerilerin sınıflandırılması yapılmıştır. Ayrıca, yeni mezunların daha kolay işe girebilmelerini sağlayacak yumuşak becerilerin neler olduğunun ortaya konması da amaçlanmıştır. Detaylı bir literatür incelemesi sonrasında, yumuşak becerilerin tanımlanması ve sınıflandırılmasında genel bir fikir birliğinin olmadığı ve yeni mezunların istihdam edilebilirlikleri açısından hem sert hem de yumuşak becerilerin bir kombinasyonunu gerektiği ancak performanslarını daha da artıracak ve kariyer yollarında ilerlemelerini sağlayacak temel faktörün yumuşak beceriler olduğu sonucuna varılmıştır.

Anahtar Kelimeler: Sert Beceriler, Yumuşak Beceriler, İstihdam Edilebilirlik Becerileri.

Sermaye Azaltımı Vergilemesi

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Özet: Sermaye, bir ticaret işletmesinin faaliyetlerini sağlıklı yürütebilmesi için gerekli olan para ya da paraya çevrilmesi mümkün bulunan değer ve malların tümü olarak belirtilmektedir. Ticari yaşamın bir gereği olarak kimi zaman şirketlerce çeşitli kaynaklar kullanılarak aynı ya da nakdi sermaye artışı yapılabilmekte, kimi zaman da oluşan kar/kazançlar vergisel avantajlardan da yararlanmak suretiyle sermaye artışına konu edilebilmektedir.

Özellikle enflasyonist ortamlarda oluşan bazı kazançlar sermaye artışına konu edilmeleri halinde vergi dışı bırakılmakta ya da beyannamelerde indirim konusu yapılabilmektedir. Nakdi sermaye artışlarında faiz indirimi, sermayenin bir cüzü olarak pasifte bir fonda tutulan ve sermayeye eklenmeleri halinde vergilendirilmeyen yeniden değerlendirme fonu, taşınmaz veya iştirak hissesi satış kazançları, enflasyon düzeltmeleri olumlu farkları, yurtdışı varlıkların sermayeye eklenmesi sonucu oluşan lehe kur farkları, geçmiş yıl karları gibi unsurlar sermaye artışına neden olabilmektedir. Sermaye şirketleri çeşitli nedenlerle de anılan sermaye artışlarının ortaklara yeniden dağıtılması suretiyle sermaye azaltımına da gidebilmektedir. Sermaye azaltımlarının nedenleri olarak yasal zorunluluklar, vergi planlaması, bilançoların iyileştirilmesine çalışılması, kullanımının gereksiz olduğuna karar verilen sermaye, kısmi bölünme gibi hususlar gösterilebilir. Mali idare, bu tür sermaye azaltımlarının vergilendirilmesi konusunda hazine lehine (hazineci) bir görüşü özlgeleler vermek suretiyle benimsemiştir. Buna göre ortaklarca işletmeye konulan nakdi veya aynı sermaye dışında kalan önceki tüm sermaye artışlarının öncelikle en çok vergi ödenebilecek kaynaklardan oluştuğu varsayımı üzerine vergilendirilmesi gerektiği belirtilmektedir. Gelir idaresinin bu görüşünün aksine yargılama makamlarınca bu tür sermaye azaltımlarının hangi unsurlardan kaynaklandığının belirlenemeyeceği, vergi yasalarında açıkça buna yönelik bir düzenleme bulunmadığı gerekçeleriyle iptal edilmektedir. Bir başka ifade ile yargılama makamları sermaye azaltımı konusunda verginin yasallığı ilkesine vurgu yapmaktadırlar.

Türkiye Büyük Millet Meclisi'ne (TBMM'ne) 07.10.2022 tarihinde sunulan bir kanun teklifinde ise Kurumlar Vergisi Kanunu'na 32/B maddesi eklenmek istenmektedir. Bu madde "Sermaye Azaltımında Vergileme" başlığını taşımakta olup, konunun yasal zemine oturtulması amaçlanmaktadır. TBMM'nin tüm komisyonlarından geçen bu düzenleme pek muhtemel yasalaşacaktır.

Yeni getirilmek istenen yasal düzenleme ile sermaye azaltımının sermayeye ilaveden sonraki beş (5) yıl içinde yapıp yapılmamasına göre bir ayırma gidilmiştir. Sermaye artışı yapıldıktan sonra beş (5) yıl geçtikten sonra yapılan sermaye azaltımlarının işletmeye konulan sermaye ile diğer artışlar arasında bir oranlama yapılarak vergilendirileceği, beş (5) yıl geçmeden yapılması halinde ise gelir idaresinin önceki yıllardaki görüşüne uygun olarak en çok vergi ödenecek işlemlerden yapıldığı varsayımı üzerine vergilendirileceği hüküm altına alınmaktadır.

Getirilmesi öngörülen yasal düzenleme; yargı kararlarının yasallık ilkesine aykırılığı vurguladığı görüşüne bir yanıt niteliğinde görünmektedir. Çalışmamız; sermaye azaltımı vergilemesinin mevcut durumu ile yaratacağı olası sorunları ve bunlarla ilgili çözüm önerilerini sunma amacını taşımaktadır.

Anahtar Kelimeler: Sermaye Azaltımı, Sermaye Artışı, Vergilendirme

Kamuda Teknoloji ve Yenilik Yönetiminde Hukuk

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Özet: Devam eden “dijital devrimin” son aşaması, bilgisayar bilimi, robotik ve yapay zekâ alanlarında kendi kendini güçlendiren yeniliklerle devam etmektedir. Teknolojik gelişmeler, politika yapıcılar tarafından ele alınması gereken karmaşık yeni sorunlar yaratmakta, teknolojik yenilikler ve dijital araçlar devletleri sürekli olarak her düzeyde iç süreçleri ve yapıları, hizmet sunumunu, şeffaflık gerekliliklerini ve vatandaşlarla iletişimi değiştiren yenilikçi stratejiler keşfetmeye itmektedir. Kamu sektörü, kamu hizmet sunumu kapsamında; bilgi paylaşımı, vatandaşlarla iletişim ve etkileşim, bütçeleme, şeffaflık ve yolsuzluğun azaltılması vb. nedenlerden ötürü teknolojiyi kullanmakta ve yeniliği benimsemektedir. Bu nedenle kamu kurumlarının dijital dönüşümü ve dijitalleşmesi bir zorunluluk halini almaktadır. Fakat bu zorunlu süreç içinde yapılması gerekenler ve atılması gereken adımlar ile ilgili bazı hukuki düzenlemelere ihtiyaç vardır. Bu çalışma kapsamında kamu sektöründe teknoloji ve yenilik yönetimi için hukuki sürecin nasıl geliştiğinin incelenmesi planlanmaktadır.

Anahtar Kelimeler: Teknoloji ve Yenilik Yönetimi, Hukuk, Bilgi İletişim Teknolojileri, Kamu Yönetimi,

Bankacılık Sektörü Ağırlıklı Ortalama Kredi Faiz Oranlarının Makro Ekonomik Göstergeler Üzerindeki Etkisi: 2002-2022 Türkiye Örneği

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Özet: Ekonomik kalkınma ve ekonomik büyümenin en belirleyici faktörlerinden biri de üretimin finansmanıdır. Bu kapsamda istenen ekonomik büyüme ve kalkınma düzeyinin gerçekleştirilebilmesi için reel sektörün ve finansal sektörün eşanlı gelişmesi büyük önem arz etmektedir. Sağlıklı işleyen finansal sektör, reel sektörün finansmanına daha hızlı ve görece düşük maliyetle katkıda bulunabilecektir. Özellikle son çeyrek yüzyılda artan finansal küreselleşme ve beraberinde artan finansal çeşitlilik firmalara üretimin finansmanında her ne kadar yeni imkânlar ve yeni araçlar sunsa da, Türkiye ekonomisinde reel sektörün finansman ihtiyacının karşılanmasında banka kredilerinin toplam finansman kaynakları içindeki payını ve önemini koruduğu görülmektedir. Finansal çeşitliliğe rağmen Türkiye ekonomisinde reel sektörün yeni finansal ürünlerden beklenen düzeyde faydalanamaması finansal sektör ve reel sektör arasında beklenen etkileşimin gerçekleşmediğinin önemli bir göstergesidir. Bu kapsamda bu çalışmada Türkiye ekonomisinde reel sektörün geleneksel finansman kaynağı olan banka kredilerinin toplam üretim ve dolayısıyla diğer makroekonomik göstergeler üzerindeki etkileri test edilmiştir. 2002-2022 dönemi Türkiye ekonomisi için yapılan ARDL Sınır Testi kapsamında yapılan analiz ile bankacılık sektörü ağırlıklı ortalama kredi faiz oranları ile enflasyon, sanayi üretim endeksi ve efektif döviz kuru arasında ki ilişki tahminlenmeye çalışılacaktır.

Anahtar Kelimeler: Bankacılık Sektörü, Ağırlıklı Ortalama Kredi Faiz Oranları, ARDL Sınır Testi, Fiyat Endeksi

Metaverse’te Sağlık Bilişim Sistemlerinin Geleceği: Fırsatlar ve Zorluklar

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Özet: Web 3.0 ile birlikte hayatımıza giren Metaverse kavramı birçok açıdan ütöpik kavramlar sunmaktadır. Metaverse’in geleceği artırılmış gerçeklik sunan giyilebilir teknolojilerdeki ilerlemeler kadar, hızlı veri iletimini sağlayacak alt yapıların da teknolojik gelişmeleri desteklemesine bağlıdır. Metaverse kullanıcılarının dijital kimliklerini kullanarak girdikleri sanal dünyalarda eğlence, oyun, alışveriş gibi pek çok uygulamanın güvenliği blokzincir mimarisi ile sağlanmaktadır. Sağlık alanı da metaverse’te ilgi çeken araştırma ve girişim alanlarından biri olarak öne çıkmaktadır. Yapay zeka yöntemleri ile artırılmış gerçeklik, sanal gerçeklik teknolojileri sağlık alanında çözümler üretmek adına yapılan araştırmalar metaverse’te gerçekleştirilmek istenmektedir. Ancak, metaverse’te kişiselleştirilmiş sağlık verileri izlenirken, analizleri yapılırken kullanıcıların veri mahremiyeti ve yüksek teknoloji kullanımının getirdiği maliyetler gibi zorluklar öne çıkmaktadır. Sağlık, küresel ölçekte önemli bir başlık olduğundan veri mahremiyeti ve güvenliği olduğu kadar etik ve ahlaki değerleri koruyabilmek genel sorunlardır. Bu çalışmada Metaverse’te sağlık alanındaki fırsatlar, çözümler ve zorluklar ortaya konmaktadır.

Anahtar Kelimeler: Blokzincir, Metaverse, Sağlık, Yapay zeka

Zeytinyağı Üreticisi Aile İşletmelerinde Süreklilik Sorunsalı: İzmir İli Örneği

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Özet: Zeytinyağı üretimi ve işletmeciliği kuşaktan kuşağa aktarılan mesleki faaliyetlerdendir. Son yıllarda faaliyetlerini geçici olarak durduran, faaliyet sahasını değiştiren veya faaliyetlerine son veren işletmelerin sayıca arttığı izlenmektedir. Bu araştırmanın amacı, zeytinyağı işletmelerinin sürekliliklerini sağlamak için süreklilik sorununu çözmüş aile işletmelerindeki vakalar üzerinden ortak görüş ve önerileri belirlemektir. Araştırmanın verileri Türkiye'nin önemli tarımsal üretim merkezlerinden biri olan İzmir ilinde, zeytinyağı üretimi yapan ve doğal sürekliliğini sağlamış tarıma dayalı sanayi işletmelerinden 15 aile işletmesinde yapılan vaka çalışması mülakatları ve anketler üzerinden elde edilmiştir. Araştırma sonucunda sürekliliğini sağlamış zeytinyağı üreticisi aile işletmelerinde, kurucularının ortak özellikleri ve aile sermayesi unsuru olarak kabul edilmiş ortak aile ve iş değerleri ile örgütsel yedekleme, iş/işletme stratejileri, kurumsallaşma ve yeniden yapılanmaya yönelik tutumları belirlenmiştir. Sürekliliğini sağlamış işletmelerde kişisel itibar, yenilikçilik, girişimcilik, hayırseverlik, stratejist ve paternalist davranış biçimi kurucuların saptanan ortak kişisel özellikleridir. Aile içi bağlılık, ataerkil aile yapısı, işe adanmışlık, işletmenin çevreyle uyumu, etik davranış ve gelecek kuşakların eğitime verilen önem ise işletmelerin ortak aile ve iş değerleridir. İkinci kuşağın eğitiminde kurucunun etkisi önemli düzeyde olduğu ve erkek varislerin eğitime daha fazla önem verildiği tespit edilmiştir. İş ve işletme stratejileri açısından yöreye uyum, başlangıçta öncü olma ve yenilikçilik genel kabul görürken, olgunlaşma sonrasında kontrollü büyümeye öncelik verilmektedir. Ayrıca yeniden yapılanma ve kurumsallaşma gibi çözümler ise temkinli yaklaşılan ve orta düzeyde önem verilen çözümler olarak saptanmıştır. Süreklilik sorununun çözümüne yönelik görüş ve öneriler oldukça değerlidir. Geçmişin deneyimlerini dikkate alarak mevcut işletmelerin geleceğe güvenle taşınması, kısaca sürekliliklerinin sağlanması hem zeytincilik sektörü sorunlarının çözümü hem de ülke ekonomisine oluşacak katkılar açısından önemlidir.

Anahtar Kelimeler: Aile İşletmeleri, Süreklilik Sorunsalı, Zeytinyağı Üretimi ve İşletmeciliği, Zeytincilik Sektörü