

Varazdin Development and Entrepreneurship Agency and University North
in cooperation with
Faculty of Management University of Warsaw
Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat
Polytechnic of Medimurje in Cakovec



Economic and Social Development

51st International Scientific Conference on Economic and Social Development Development

Book of Proceedings

Editors:

Khalid Hammes, Mustapha Machrafi, Vladimir Huzjan



ISSN 1849-7535



9 771849 753006 >

Rabat, 26-27 March 2020

Varazdin Development and Entrepreneurship Agency and University North
in cooperation with
Faculty of Management University of Warsaw
Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat
Polytechnic of Medimurje in Cakovec

Editors:

Khalid Hammes, Economics and Social Sciences Sale - Mohammed V University in Rabat, Morocco
Mustapha Machrafi, Economics and Social Sciences Sale - Mohammed V University in Rabat, Morocco
Vladimir Huzjan, Croatian Academy of Sciences and Arts, Croatia

Economic and Social Development

51st International Scientific Conference on Economic and Social Development Development

Book of Proceedings

Rabat, 26-27 March 2020

Title ■ Economic and Social Development (Book of Proceedings), 51st International Scientific Conference on Economic and Social Development

Editors ■ Khalid Hammes, Mustapha Machrafi, Vladimir Huzjan

Scientific Committee / Programski Odbor ■ Marijan Cingula (President), University of Zagreb, Croatia; Sannur Aliyev, Azerbaijan State University of Economics, Azerbaijan; Ayuba A. Aminu, University of Maiduguri, Nigeria; Anona Armstrong, Victoria University, Australia; Gouri Sankar Bandyopadhyay, The University of Burdwan, Rajbati Bardhaman, India; Haimanti Banerji, Indian Institute of Technology, Kharagpur, India; Victor Beker, University of Buenos Aires, Argentina; Asmae Benthani, Mohammed V University, Morocco; Alla Bobyleva, The Lomonosov Moscow State University, Russia; Leonid K. Bobrov, State University of Economics and Management, Novosibirsk, Russia; Rado Bohinc, University of Ljubljana, Slovenia; Elisabeth de Jesus Oliveira Brito, University of Aveiro, Portugal; Adnan Celik, Selcuk University, Konya, Turkey; Angelo Maia Cister, Federal University of Rio de Janeiro, Brazil; Mirela Cristea, University of Craiova, Romania; Taoufik Daghr, Mohammed V University, Morocco; Oguz Demir, Istanbul Commerce University, Turkey; T.S. Devaraja, University of Mysore, India; Onur Dogan, Dokuz Eylul University, Turkey; Darko Dukic, University of Osijek, Croatia; Gordana Dukic, University of Osijek, Croatia; Alba Dumi, Vlorë University, Vlorë, Albania; Galina Pavlovna Gagarinskaya, Samara State University, Russia; Mirjana Gligoric, Faculty of Economics - Belgrade University, Serbia; Maria Jose Angelico Goncalves, Porto Accounting and Business School - P.Porto, Portugal; Mehmet Emre Gorgulu, Afyon Kocatepe University, Turkey; Klodiana Gorica, University of Tirana, Albania; Aleksandra Grobelna, Gdynia Maritime University, Poland; Liudmila Guzikova, Peter the Great Saint-Petersburg Polytechnic University, Russia; Anica Hunjet, University North, Koprivnica, Croatia; Khalid Hammes, Mohammed V University, Morocco; Oxana Ivanova, Ulyanovsk State University, Ulyanovsk, Russia; Irena Jankovic, Faculty of Economics, Belgrade University, Serbia; Myrl Jones, Radford University, USA; Hacer Simay Karaalp, Pamukkale University, Turkey; Dafna Kariv, The College of Management Academic Studies, Rishon Le Zion, Israel; Hilal Yildirim Keser, Uludağ University, Bursa, Turkey; Sophia Khalimova, Institute of Economics and Industrial Engineering of Siberian Branch of Russian Academy of Science, Novosibirsk, Russia; Marina Klacmer Calopa, University of Zagreb, Croatia; Igor Klopota, Medjimursko Veleučilište u Čakovcu, Croatia; Vladimir Kovsca, University of Zagreb, Croatia; Goran Kozina, University North, Koprivnica, Croatia; Dzenan Kulovic, University of Zenica, Bosnia and Herzegovina; Robert Lewis, Les Roches Gruyere University of Applied Sciences, Bulle, Switzerland; Ladislav Lukas, Univ. of West Bohemia, Faculty of Economics, Czech Republic; Mustapha Machrafi, Mohammed V University, Morocco; Pascal Marty, University of La Rochelle, France; Vaidotas Matutis, Vilnius University, Lithuania; Daniel Francois Meyer, North West University, South Africa; Marin Milkovic, University North, Koprivnica, Croatia; Abdelhamid Nechad, Abdelmalek Essaadi University, Morocco; Gratiela Georgiana Noja, West University of Timisoara, Romania; Zsuzsanna Novak, Corvinus University of Budapest, Hungary; Tomasz Ochowski, University of Warsaw, Poland; Barbara Herceg Paksic, University of Osijek, Croatia; Vera Palea, Università degli Studi di Torino, Italy; Dusko Pavlovic, Libertas International University, Zagreb, Croatia; Igor Pihir, University of Zagreb, Croatia; Dmitri Pletnev, Chelyabinsk State University, Russian Federation; Mirosław Przygoda, University of Warsaw, Poland; Karlis Purmalis, University of Latvia, Latvia; Nicholas Recker, Metropolitan State University of Denver, USA; Kerry Redican, Virginia Tech, Blacksburg, USA; Humberto Ribeiro, University of Aveiro, Portugal; Robert Rybníček, University of Graz, Austria; Joanna Stawska, University of Łódź, Poland; Elżbieta Szymanska, Białystok University of Technology, Poland; Katarzyna Szymanska, The State Higher School of Vocational Education in Ciechanów, Poland; Ilaria Tutore, University of Naples Parthenope, Italy; Claudia Miranda Veloso, University of Aveiro, Portugal; Ilko Vrankic, University of Zagreb, Croatia; Stanisław Walukiewicz, Białystok University of Technology, Poland; Thomas Will, Agnes Scott College, USA; Li Yongqiang, Victoria University, Australia; Peter Zabielskis, University of Macau, China; Silvija Zeman, Medjimursko Veleučilište u Čakovcu, Croatia; Tao Zeng, Wilfrid Laurier University, Waterloo, Canada; Snezana Zivkovic, University of Nis, Serbia.

Review Committee / Recenzentski Odbor ■ Marina Klacmer Calopa (President); Ana Aleksic; Sandra Raquel Alves; Ayuba Aminu; Mihovil Andjelinovic; Josip Arneric; Lidija Bagaric; Tomislav Bakovic; Sanja Blazevic; Leonid Bobrov; Ruzica Brecic; Anita Ceh Casni; Iryna Chernysh; Mirela Cristea; Oguz Demir; Stjepan Dvorski; Robert Fabac; Ivica Filipovic; Sinisa Franjic; Fran Galetic; Mirjana Gligoric; Tomislav Globan; Anita Goltnik Urnaut; Tomislav Herceg; Irena Jankovic; Emina Jerkovic; Dafna Kariv; Oliver Kesar; Hilal Yildirim Keser; Martina Dragija Kostic; Tatjana Kovac; Vladimir Kovsca; Angelo Maia Cister; Katarina Marosevic; Vaidotas Matutis; Marjana Merkac Skok; Daniel Francois Meyer; Natanya Meyer; Josip Mikulic; Ljubica Milanovic Glavan; Guenter Mueller; Ivana Nacinovic Braje; Zlatko Nedelko; Gratiela Georgiana Noja; Zsuzsanna Novak; Alka Obadic; Claudia Ogorean; Igor Pihir; Najla Podrug; Vojko Potocan; Din ko Primorac; Zeljka Primorac; Sanda Renko; Humberto Ribeiro; Vlasta Roska; Souhaila Said; Armando Javier Sanchez Diaz; Tomislav Sekur; Lorena Skuflic; Mirko Smoljic; Petar Soric; Mario Spremic; Matjaz Stor; Tomasz Studzieniecki; Lejla Tijanic; Daniel Tomic; Boris Tusek; Rebeka Daniela Vlahov; Ilko Vrankic; Thomas Will; Zoran Wittine; Tao Zeng; Grzegorz Zimon; Snezana Zivkovic; Berislav Zmuk.

Organizing Committee / Organizacijski Odbor ■ Domagoj Cingula (President); Djani Bunja; Marina Klacmer Calopa; Spomenko Kesina; Erlino Koscak; Tomasz Ochowski; Mirosław Przygoda; Michael Stefulj; Rebeka Danijela Vlahov; Sime Vucetic.

Publishing Editor ■ Spomenko Kesina, Mario Vrazic, Domagoj Cingula

Publisher ■ Design ■ Print ■ Varazdin Development and Entrepreneurship Agency, Varazdin, Croatia / University North, Koprivnica, Croatia / Faculty of Management University of Warsaw, Warsaw, Poland / Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat, Morocco / Polytechnic of Medimurje in Čakovec, Čakovec, Croatia

Printing ■ Online Edition

ISSN 1849-7535

The Book is open access and double-blind peer reviewed.

Our past Books are indexed and abstracted by ProQuest, EconBIZ, CPCI (Web of Science) and EconLit databases and available for download in a PDF format from the Economic and Social Development Conference website: <http://www.esd-conference.com>

© 2020 Varazdin Development and Entrepreneurship Agency, Varazdin, Croatia; University North, Koprivnica, Croatia; Faculty of Management University of Warsaw, Warsaw, Poland; Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat, Morocco; Polytechnic of Medimurje in Čakovec, Čakovec, Croatia. All rights reserved. Authors are responsible for the linguistic and technical accuracy of their contributions. Authors keep their copyrights for further publishing.

CONTENTS

ORGANIZED CRIMINAL ACTIVITIES IN THE FIELD OF INSURANCE IN RUSSIA AND ABROAD.....	1
Roman N. Borovskikh, Nadezhda I. Verchenko	
THE SOCIAL AND ECONOMIC FACTORS OF THE REHABILITATION OF A POST-STROKE PATIENT	8
Elena Sevostyanova, Irina Trushina, Mark Loskutnikov, Natalia Kurenkova	
ACTIVE LABOUR MARKET POLICIES, THE BUSINESS CYCLE AND LABOUR FORCE SHORTAGES	14
Katarina Moravcikova, Vladimir Balaz	
USER PREFERENCES IN THE EXPERIENCE ECONOMY	28
Aija Freimane	
AUDIT OF ASSETS OF LOCAL AND REGIONAL SELF-GOVERNMENTS	38
Dubravka Mahacek, Aleksandar Vcev, Kristina Peic	
VALUATION AND CLASSIFICATION OF FIXED ASSETS IN SELECTED LOCAL GOVERNMENT	47
Magdalena Glebocka, Ewa Mackowiak	
SECULAR RITUALS AND THEIR ECONOMIC EFFICIENCY	62
Alexandr Shmakov	
REGIONAL ASPECTS OF 2024 NATIONAL PROJECTS ON STRATEGIC DEVELOPMENT IN RUSSIA	70
Anatoly Pleslov, Olga Lukashenko	
THE ANALYSIS OF THE ELECTRONIC COMMERCE IN THE CONTEXT OF BUYERS' BEHAVIOR	80
Andzela Veselova	
THE EU UNEMPLOYMENT UNDER THE RECENT DEVELOPMENTS OF THE GLOBAL ECONOMIC GLOBALIZATION	89
Athanasios G. Panagopoulos	
SLOVAK R&D STRATEGIC INFRASTRUCTURES AND SMART SPECIALIZATION.....	101
Miroslav Balog	
ENTREPRENEURSHIP IN RENEWABLE ENERGY AND THE POWER OF INNOVATION	110
Maria-Floriana Popescu	

FACTORS INFLUENCING ONLINE SHOPPING BEHAVIOR WITH MEDIATING ROLE OF CUSTOMER PERCEIVED VALUE	121
Samar Rahi, Maheen Ishaq	
CREATIVE ENVIRONMENT FOR DEVELOPMENT OF ENTREPRENEURIAL IDEAS IN TOURISM – MASH-UP EVENT AS AN INNOVATIVE EVALUATION MODEL	135
Tamara Floricic, Irena Sker	
ZERO WASTE CONCEPT IN TOURISM.....	150
Daniela Soldic Frleta, Dora Zupan	
PREDICTION OF FINANCIAL HEALTH OF BUSINESS ENTITIES OF SELECTED SECTOR USING IN05 AND VERIFICATION OF ITS PREDICTIVE ABILITY THROUGH ROC	161
Dusan Karpac, Viera Bartosova, Filip Rebetak	
EARNINGS MANAGEMENT PHENOMENON	166
Susana Cristina Rodrigues Aldeia	
FORMULATION OF MOTIVATION POLICY IN A GENERAL EDUCATION ORGANIZATION APPLYING PERSONNEL MARKETING TECHNOLOGIES	172
Elena V. Kolnik, Yuliya A. Masalova	
THE PARTNER LOANS' MULTIDISCIPLINARY ANALYSIS - PORTUGUESE'S CASE STUDY.....	180
Susana Cristina Rodrigues Aldeia	
FAIR TRADE: A CRITIC IN ETHICS	186
Essakhi Adam	
FORTHCOMING REFORM OF UNIVERSITY HOSPITAL FINANCING AND POSSIBILITIES FOR EFFICIENCY IMPROVEMENT IN LATVIA.....	193
Mara Petersone, Karlis Ketners, Ingars Erins	
THE ROLE OF TNCS AS INNOVATIVE LEADERS IN THE GLOBAL ECONOMY	201
Kovtun Olga, Lihovitskaya Darya	
THE APPLICATION GIS AND REMOTE SENSING DATA TO THE DEVELOPMENT OF A MULTISCALE SOIL INFORMATION SYSTEM	211
Anna Pavlova	
WILL FRESH GRADUATES EXPERIENCE DIFFERENT STYLES OF MENTORING WHEN THEY ENTER LABOUR MARKET	219
Gabriela Kalinova	
RURAL HOUSEHOLD DECISION TO PARTICIPATE IN OFF FARM WORK: USING A DOUBLE HURDLE MODEL.....	229
Hussein N. Nassoro	

THE ROLE OF 'ORIENT' AS 'OTHER' IN EUROPE'S VISUAL COMMUNICATION STRATEGIES	244
Ilze Loza	
MEDIA INDUSTRY IN A POST-INDUSTRIAL SOCIETY: MEDIA INDUSTRY REVENUE CONVERGENCE AND BLURRED BOUNDARIES IN MEDIA SECTOR	254
Josko Lozic	
PRICE RISK AND ITS IMPACT ON PRICE DECISION-MAKING AND PRICING OF A COMPANY	263
Anna Kubjatкова, Jana Kliestikova, Lubica Gajanova	
THE RELATIONSHIP BETWEEN TERRITORIAL COHESION AND REGIONAL COMPETITIVENESS IN THE EUROPEAN UNION	269
Lela Tijanic, Ines Kersan-Skabic, Daniel Tomic	
LINKING TRANSFORMATIONAL LEADERSHIP, SENSE OF BELONGING AND INTRAPRENEURSHIP	279
Fahd Slamti	
ANALYSIS OF THE PAY AMOUNT IN THE RUSSIAN ECONOMY BY TYPES OF ACTIVITY AND EMPLOYMENT OF HIRED LABOR	287
L. Fyodorova	
ASSESSMENT OF MORTGAGE AVAILABILITY FOR THE POPULATION OF THE RUSSIAN FEDERATION	296
Lyudmila Rudy, Tatyana Tropnikova	
ENTERPRISE INTEGRATION AND MARKET PERFORMANCE RESULTS	306
Sofia Lyubyashenko	
THE BRAIN DRAIN OF PEOPLE FROM SLOVAKIA	313
Martina Chrancokova, Gabriel Weibl, Dusana Dokupilova	
ECONOMIC THEORY AND THE CONSTRUCTION OF REALITY	323
Maxim Petrenko	
GLOBAL FINANCIAL CRISIS AND ITS IMPACT ON NIGERIAN ECONOMY	329
Ayuba A. Aminu, Yahaya Yunusa Malgwi	
AXIOLOGICAL BASIS OF ENTREPRENEURIAL ACTIVITY	336
Natalya Rubtsova	
EXPERIENCE IN REFORMING TEACHER TRAINING SYSTEMS IN EUROPE (EXAMPLE OF GERMANY AND FRANCE)	344
Natalya Nos, Uiliia Ostrovaya	

THE CONCEPT OF TRUST WHEN INTEGRATING LABOR MIGRANTS INTO SMALL FAMILY BUSINESSES	350
Pal Zoltan Bite, Marta Konczosne Szombathelyi, Zoltan Baracska	
ANALYSIS OF THE IMPACT OF MARKETING ONLINE AND OFFLINE COMMUNICATION CHANNELS ON CUSTOMER PURCHASING BEHAVIOR ..	358
Peter Jucha, Simona Jaculjakova, Dominik Laitkep, Tatiana Corejova	
DETERMINATION OF SOME HEAVY METALS IN VARIETY OF WATERMELON SAMPLES CULTIVATED IN KAGA LOCAL GOVERNMENT AREA, BORNO STATE, NIGERIA	370
Kolo B. G., Shugaba A., Kagu M.	
SOCIAL PROGRAMMING IN THE CONTEXT OF SOCIAL ECONOMY DEVELOPMENT IN BULGARIA.....	380
Venelin Terziev	
ATTITUDES TOWARDS ENVIRONMENTAL PROTECTION ADOPTED BY THE BUSINESS SUBJECTS IN THE REPUBLIC OF CROATIA	390
Ivan Kovac, Kristina Petljak, Dora Naletina	
THE CONCEPT OF ADAPTIVE INFORMATION SECURITY MANAGEMENT IN DIGITAL ORGANIZATIONS BASED ON THE ANALYSIS AND MONITORING OF BUSINESS PROCESSES.....	402
Zinaida Rodionova, Irbulat Utepbergenov	
THE DYNAMIC OF INDICATORS OF THE FINANCIAL MARKET IN THE PROCESS OF CYCLICAL DEVELOPMENT IN THE NATIONAL ECONOMY	409
Viktor Barkhatov, Ekaterina Lymar, Ivan Koptelov	
QUALITATIVE STUDY OF THE INCLUSIVE COMPETENCE OF TEACHERS OF VOCATIONAL EDUCATION INSTITUTIONS	417
Svetlana Kurnosova, Nikolai Kokanov, Tatyana Lushnikova, Linara Battalova, Yulia Petrova, Elena Martynova	
VALUE AND PRICE OF NETWORK COMMUNICATIONS OF PERSONNEL	421
Yuri Startsev, Alexander Taradanov	
METHODOLOGY FOR ASSESSING WORKER'S BEHAVIORAL OPPORTUNISM IN RUSSIAN CORPORATIONS	426
Elena Kozlova, Dmitri Pletnev	
FINANCIAL DEVELOPMENT INDICATORS AND ECONOMIC GROWTH: A COMPARATIVE STUDY BETWEEN MOROCCO, COMOROS, MAURITIUS, RWANDA, TUNISIA AND SENEGAL.....	435
Saanyane Moussa Omar, Hammes Khalid	
CURRENT STATE AND DEVELOPMENT PERSPECTIVES OF CSR PERFORMANCE IN AZERBAIJAN	443
Shahla Gahramanova	

TRENDS AND CONTRADICTIONS OF ECONOMY GLOBALIZATION	451
Shafa Guliyeva	
SOCIAL MEDIA COMMUNICATION STRATEGY FOR HEALTH AND WELLBEING PROVIDERS – MAJOR ELEMENTS THAT KEEP CONSUMERS ENGAGED	459
Orindaru Andreea, Caescu Stefan-Claudiu	
CRISIS MANAGEMENT IN TOURISM – LITERATURE REVIEW	466
Dora Smolcic Jurdana, Daniela Soldic Frleta, Romina Agbaba	
HUMAN PERSONAL TIME: APPEALING TO ITS DUALITY AND HARMONIZATION	476
Svetlana Sotnikova, Elena Razomasova, Elena Mikhailova	
SOCIAL MEDIA MARKETING AS TOOL OF BUSINESS SUCCESS	485
Veronika Paurova, Anna Krizanova, Margareta Nadanyiova	
DATING THE GROWTH CYCLE OF MOROCCO AND ITS SYNCHRONIZATION WITH THE CYCLES OF THE MAIN TRADING PARTNERS	492
Soussi Noufail Outmane, Abdelghani Bensaid	
RISK IN SOCIAL PRACTICES: «NORMALIZATION» AND «HABITUALIZATION»	499
Svetlana Ilynykh, Svetlana Rovbel, Elena Naumova, Evgeniya Komf	
DIVERGENCES AND THEIR EVIDENTIAL VALUE IN THE PROCESS OF MAXIMIZING EARNINGS FROM TRADING OF FINANCIAL MARKETS.....	506
Jan Chutka, Ladislav Vagner	
THE WORLD ECONOMY ON THE EVE OF A NEW CRISIS.....	512
Mushfig Feyzullaev, Ramiz Javadov, Nazim Hajiye	
MUNICIPAL SOCIAL RESPOSIBILITY.....	521
Kristina Afric Rakitovac, Mojca Tavcar Bencic	
CONCEPT OF BUSINESS ACCOUNTING AND INTEGRATED REPORTING	532
Victor Plotnikov, Olesya Plotnikova	
INTERCULTURAL LEARNING THROUGH THE ERAMUS STUDENT MOBILITY PROGRAMME	538
Violeta Vidacek-Hains, Amalija Parlaj	
PRICE FENCES AS A MECHANISM OF COMPANY’S DIFFERENT PRICING TO CUSTOMERS WITH DIFFERENT WILLINGNESS TO PAY.....	547
Zdenka Vidrova, Margareta Nadanyiova, Jana Kliestikova	
THE IMPORTANCE OF WELL-TARGETED MARKETING ON SELECTED BRANDS	554
David Vrtana, Anna Krizanova, Juraj Kolencik	

DIRECTIONS AND PROBLEMS OF INVESTMENT ACTIVITY IN THE NOVOSIBIRSK REGION	562
Vyacheslav Markelov	
MANAGEMENT OF NON-PROFIT ORGANIZATIONS	571
Zuzana Rosnerova, Dagmar Hraskova	
THEORETICAL BACKGROUND OF SIMPLE ACCOUNTING AND COMPARISON OF THE USE OF SIMPLE ACCOUNTING IN THE CONDITIONS OF SLOVAK REPUBLIC AND CZECH REPUBLIC	581
Filip Rebetak, Dusan Karpac, Viera Bartosova	
THE IMPORTANCE OF TIME MANAGEMENT IN NON-PROFIT ORGANIZATIONS.....	587
Emilia Gresakova, Darina Chlebikova	
SOCIAL EFFECTIVENESS AS METER IN THE DEVELOPMENT OF SOCIAL ECONOMY	594
Venelin Terziev	
INTERNATIONALIZATION, CONCENTRATION AND BUSINESS SUCCESS OF RETAILERS: THE CASE OF CROATIA.....	604
Ivan Kovac	
TAXATION OF LUXURY GOODS.....	615
Maris Juruss, Janis Brizga, Liga Gasune, Valerijs Skribans	
TESTING THE IMPACT OF GLOBAL FINANCIAL CRISIS ON GLOBAL TRADE INTEGRATION	624
Ahliman Abbasov	

ORGANIZED CRIMINAL ACTIVITIES IN THE FIELD OF INSURANCE IN RUSSIA AND ABROAD

Roman N. Borovskikh

*Professor at the Department of the Criminal Law and National Security,
Novosibirsk State University of Economics and Management
Novosibirsk, Russia
borovskih80@yandex.ru*

Nadezhda I. Verchenko

*Associate Professor at Criminal Law and National Security Department,
Novosibirsk State University of Economics and Management, Candidate of Law
Novosibirsk, Russia
n.verchenko@yandex.ru*

ABSTRACT

Based on the results of the analysis of data obtained through the method of expert assessments of information, as well as on the materials of the existing law enforcement practices, the article discusses typical mechanisms of organized criminal activities in the field of insurance.

Keywords: *crimes in the field of insurance, fraud, organized criminal activities*

1. INTRODUCTION

Currently, the law enforcement practices addressing crimes in the insurance sector in Russia is characterized by the following criminalistically significant trends:

1. such practices focus on the insurance fraud detection and investigation (article 159.5 of the RF Criminal Code);
2. other crimes in the insurance industry (including fraud associated crimes) often have no adequate criminal law response (remain undisclosed, not identified, analysed in the framework of civil law relations as non-criminal torts, etc.);
3. the result of addressing insurance frauds in the vast majority of cases is the neutralization of individually committed (simple, household, non-group) frauds, as well as frauds committed as a part of group of persons (group fraud);
4. cases of neutralized group fraud in the insurance industry are characterized by a rather primitive content of the criminal activity group nature: such groups, as a rule, consist of amateur swindlers, and are formed spontaneously, often on the basis of family and friendly ties, they do not have a corruption cover-up, and are aimed at committing a single fraud, etc.

At the same time, the significant manifestations of organized criminal activity in the insurance sector can be reviewed through some indirect signs. In particular, the study of law enforcement practices show that quite often the court's sentences on the conviction of amateur criminals contain the information about unidentified persons who in a certain way assisted in the commission of the crime (for example, by mediation in the production of false documents or by promising mediation in the documents processing by the insurance companies, or by promising to produce falsified expert opinions, documents on road accidents, etc.). Thus, the "chain" of organized and organized corrupt criminal activities in the sphere of insurance, as a rule, remain undisclosed, and only the final link of the chain – the direct perpetrator of fraud (a dilettante criminal) - is neutralized. That said, it is not always possible either to curb or address expeditiously the coordinating activities of the persons, carrying out single or group criminal activities in the sphere of insurance.

The results of the analysis of data, obtained through the method of expert assessments of information, as well as the materials of the existing law enforcement practice, make it possible to identify typical mechanisms of organized criminal activities in the field of insurance.

2. A FINANCIAL PYRAMIDS SCHEMES MECHANISM OF ORGANIZED CRIMINAL ACTIVITIES WITH LARGE-SCALE EMBEZZLEMENT

The essence of such typical mechanism of organized criminal activities in the field of insurance is associated with the malicious use of legislative gaps and contradictions concerning the legal status of certain subjects of the insurance business (for example, mutual insurance companies, etc.) and the legal regulation of advertising and marketing activities in the field of insurance (the network method of sales of insurance policies in particular). Here is a good example. In early 2009, the media reported that yet another pyramid disguised as a mutual insurance company had collapsed. Nadezda (Hope) financial pyramid offered financial support to pensioners and promised to assist young people with employment. To get a job in the company, potential candidates had only to bring in their friends and relatives. Customers came to Nadezda to insure their life and health at high interest. According to the investigators, among the victims of the pyramid there were citizens of Mari El, Chuvashia, Kirov region, Moscow and other regions of Russia¹. The sentence of the court, delivered in 2012, stated that Mr S. and Mr B., leaders of this financial pyramid, had been carrying out criminal activities under the guise of the mutual insurance company since 2005. Mr S. and Mr B. were convicted by the court under part 4 of article 159 of the RF Criminal Code (109 episodes) for committing a large scale fraud by an organized group (the total amount of the stolen property amounted to 5,510,500 rubles) and sentenced them to the imprisonment for 9 years and 6 months, 8 years and 6 months, respectively². In this regard, large-scale illegal activities of the so-called "insurance consultants", "brokers" deserve special attention. About 20 firms were engaged in similar activities in Russia and abroad, the most noticeable being SiSaveInvest. SiSaveInvest advertised and sold life insurance policies of foreign insurance companies such as Fortuna (Switzerland), Grave (Austria), Medlife (Cyprus), Clerical Medical International (UK), ALICO (USA) and American Security Life (Liechtenstein). Potential policyholders were tempted by the opportunity to accumulate funds in reliable foreign banks (mainly Swiss) or in foreign insurance companies, usually registered offshore. However, insurance contracts are designed in such a way that when an insured event occurs, it is extremely difficult to achieve fulfillment of obligations from the insurer (for example, under the terms of one of the contracts, in order to receive an insurance payment, the policyholder has to submit original criminal procedural documents to the foreign insurer at its registered address). SiSaveInvest sells policies both in its offices, and through the system of multilevel network marketing³. In the Russian forensic literature, SiSaveInvest is described as one of the possible schemes of fraud and money laundering. As L. Y. Drapkin and Y. M. Zlochenko note, the criminal scheme was that the employees of SiSaveInvest, having no license, distributed insurance policies of foreign companies in Vladimir, Tula, Rostov and Tyumen regions, which is prohibited by the legislation of the Russian Federation. The entry fee for individuals amounted \$US 1,000. But the bulk of the money came from large enterprises, whose employees were insured by the heads of these organizations, quite often the employees were insured and charged without their

¹ Nadezda mutual insurance company. *Fininstruktor website*. Retrieved 01.10.2019 from <http://www.fininstruktor.ru/nadejda.html>

² The sentence of the Industrial district court of Izhevsk № 1-1 / 12 of 24.04.2012. *Website Judicial and regulatory acts of the Russian Federation*. Retrieved 01.10.2019 from <http://sudact.ru/regular/doc/fBY3zJPefhdw>

³ The system of multi-level-marketing is widely used in order to sell goods or services. See details: Barber D. *Just What is...Network Marketing?* M.: Fair Press, 2001, 192 p.; Kardava A. *Is Network marketing a pyramid scheme? A Scam? Or ... a system of distribution of goods and services*. M.: PROMIS International, 2002, 304 p.; Rakhimova L. *We start MLM: network marketing*. M.: 2003, 208 p.

consent and knowledge. Thus, a lot of Togliatti VAZ employees of were 'insured' for almost \$US 6,000,000. Even greater sums were 'collected' by the insurers at Magnitogorsk Iron & Steel Works, and company Vneshtorgbank (Moscow) – \$US 50,000, Moscow post office – more than 756 million rubles, JSC Semikarakorsknefteprodukt (Rostov) - \$US 140 000, MIG-Svyaz (Urengoy), Fiber-Optic plant (Vologda) and many others, including high-security and sensitive enterprises. To conceal the embezzlement of budget money, corrupt officials concluded fictitious repair and construction works contracts with commercial companies. The insurance premiums of the overwhelming majority of insured individuals were appropriated under the pretext of violation of contractual obligations or on other far-fetched excuses. In 1998-2000 SiSaveInvest employees started transferring money abroad under quite a plausible pretext – they allegedly sign insurance contracts and finalize them in Austria. After the money had been transferred to SparkasseHartberg-Vorau Bank in Austria, the money could have been transferred either to BudapestBank (Hungary), or to Hansabank-Latvia (Riga). In addition, the money was laundered through the Swiss bank ShweizerisjerBankverein and BankofCyprus. According to operational data, banks located in offshore zones were used to mask the illegal origin of the "insurance" money. It is estimated that in 1996-2000 the money outflow amounted at least \$US 3 billion in Russia⁴. In modern practice, we managed to find an example of effective criminal prosecution of heads of SiSaveInvest structural divisions. Therefore, in 2008-2009 the officers of the Department of Internal Affairs for Orenburg region detected and investigated two fraudulent criminal schemes. According to the first scheme, the SiSaveInvest financial adviser targeted customers, willing to conclude contracts of cumulative pension insurance. When the customer consented to conclude the contract of pension insurance, the life insurance contract was signed on behalf of a foreign insurance company (for \$US 2,500). The sum was paid in cash to the financial adviser, who later provided the client with confirmation that their money was transferred to the account opened in the client's name with the insurance company. In fact, the confirmation was a cheque issued by a foreign bank, where G. had opened a personal account. At the same time, SiSaveInvest had never been licensed to carry out insurance activities, this organization was neither listed in the register of subjects of insurance business, nor it was registered in the tax register.

3. A TYPICAL MECHANISM OF ORGANIZED CRIME ACTIVITIES, ASSOCIATED WITH THE LARGE-SCALE INTRA-CORPORATE THEFT IN THE INSURANCE SECTOR

These are typically high-ranking employees of insurance companies who organise and carry out crimes in the sphere of insurance in a group of subordinate agents and heads of agency departments. The striking example is a criminal case of embezzlement in the Vector insurance company, initiated against A. Kondratenkov, the beneficiary of a number of large insurance companies in Russia⁵. The subject of theft are the premiums that are not partially credited to the insurer's cash register, for example, by manipulating the agency commissions payments. The study of foreign experience in combating insurance crimes was based on the analysis of the media, published court decisions and specialized scientific literature. According to the results, it can be concluded that the main type of criminal encroachments in this area is insurance fraud. The study of foreign practice shows that the global average level of insurance fraud is about 10%⁶.

⁴ The Drapkin L. Ya., Y. M. Zlotchenko Criminal ways of the legalization of proceeds derived from crime. In *Organized crime and corruption. Special edition. No. 1*. Yekaterinburg: Zashchita-Ural, 2001.

⁵ O. Kutasov, T. Grishina *They have come for the insurer from the Crimea*. Retrieved 01.10.2019 from <https://www.kommersant.ru/doc/4073761>

⁶ Koshkin D. S. Insurance fraud: foreign and domestic practices. *Finance 2006, No. 10*. Retrieved 01.01.2018 from <http://www.lawmix.ru/bux/78877/>

Thus, the European Insurance Committee estimates losses from fraud in Europe at €8 billion, constituting 2% of all insurance premiums in the EU⁷. In Germany, 7.5 to 9 thousand of insurance frauds are committed annually, at a total amount of approximately 6-8% of all insurance payments, and in monetary terms, insurers lose from 4 to 6 billion Deutsche marks⁸. In the UK, insurance fraud is the most profitable risk-return type of crime, and its main danger is that the proceeds from insurance fraud are used to finance other criminal activities. According to the Financial Services Authority (FSA), fraudsters in the UK receive about 10% of auto insurance premiums and about 15% of property insurance premiums. Insurance company Norwich Union published the results of a synthesis study conducted on the basis of various reports on the scale of fraud in the UK. According to the company's calculations, the damage to the economy made by insurance fraudsters amounted to £15.8 billion (\$8,5 billion) in 2004. Overall, it says, damage amounts to 1.4% of the UK's GDP, or £650 per household⁹. The Association of British insurers (ABI) spends about £200 million a year to fight insurance fraud¹⁰. In France, losses caused by unscrupulous customers of insurance companies are estimated at about \$ 3 billion. According to official data, the disclosed fraud cases only account for a total of 10% of the insurance indemnity paid.¹¹ In Holland, payments to fraudsters account for approximately 5% of all insurance payments, reaching about \$ 300 million¹². Car insurance fraud is one of the most common crimes in China¹³. A striking example is 334 established facts of insurance fraud committed during the period from late 2010 to May 2013 by a law breaker from Shenzhen. According to the South China Morning Post newspaper, the fraud was carried out by the criminal by staging road accidents¹⁴. There are manifestations of a high degree of organization of this criminal business in China. In 2012, Chinese police stopped the activities of a criminal group that included 95 people. The group specialized in the staging of road accidents and received illegally insurance payments. The damage to insurance companies from criminal activity is estimated at ¥13 million or \$2 million¹⁵. In Canada, the experts estimate that fraudsters damage the insurance industry amounting to about \$1.3 billion a year. It is believed that 10 to 15 cents per each dollar of the premium are paid to fraudulent claims. In the United States, insurance fraud is recognized as one of the most common crimes. According to the FBI, the insurance industry consists of more than 7,000 companies that collect over \$1 trillion in premiums each year. At the same time, FBI experts note that the total cost of insurance fraud (non-health insurance) is estimated to be more than \$40 billion per year¹⁶. The study of foreign literature shows that insurance fraud is the main, but not the only type of organized criminal activity in the field of insurance abroad. The work of the American author B. Zalm, published by the American Bar Association Publ., examines briefly the issues of criminal liability for insurance fraud, as well as the identification, disclosure and investigation of such crimes. The author presents these questions taking into account the fact that this crime can be committed by a wide range of subjects involved in insurance.

⁷ Ibid.

⁸ Ibid.

⁹ Vide Koshkin D. S. The work cited

¹⁰ City of London police. Insurance Fraud Enforcement Department (IFED). *Annual Review 2012*. Retrieved 01.01.2018 from <https://www.cityoflondon.police.uk/advice-and-support/fraud-and-economic-crime/ifed/Pages/Annual-review.aspx>

¹¹ Vide Koshkin D. S. The work cited

¹² Vide Koshkin D. S. The work cited

¹³ *Chinese motorist arrested for insurance fraud*. Retrieved 01.01.2018 from <http://www.rg.ru/2013/07/05/strahovka-anons.html>

¹⁴ P. Boehler *Shenzhen insurance scammer arrested for 334 car crashes, police say*. Retrieved 01.01.2018 from <http://www.scmp.com/news/china/article/1275886/shenzhen-insurance-scammer-arrested-334-car-crashes-say-police>

¹⁵ *In China, an insurance fraudster, who provoked 334 road accidents in 3 years and received \$58 thousand from insurers, was arrested*. Retrieved 01.01.2018 from <http://forinsurer.com/news/13/07/08/29534>

¹⁶ Insurance fraud. Retrieved 01.01.2018 from www.fbi.gov/stats-services/publications/insurance-fraud/insurance_fraud

In this sense, the study of B. Zalm, as one of the few, reflects the author's broad view on the problem of fraud in the insurance industry¹⁷. In the reference manual published in New York, L. Hymes and J. Wells examine the issues of criminological characterization, criminal liability and fraud investigation in various types of insurance¹⁸. The work is characterized by a pronounced victimological aspect. Another example of this kind of investigations is the work of Wolff A. "The case of the insurance fraud sacrifices"¹⁹. It is necessary to single out some studies of the American experts (J. Kuller, G. Reinhard, J. Lichtor, D. Morse, L. Ackling, etc.), which deal with the organization of insurance companies activities in order to fight insurance fraud²⁰. In particular, J. Lichtor's work on the identification of signs of fraud in the field of life and health insurance presents a practical guide for employees of insurance organizations, as well as insurance investigators and private detectives²¹. There are other works of a similar kind²². The practical manual by D. Morse and L. Ackling is even more meaningful from the point of view of the addressee of the given recommendations – employees of an insurance organization²³. The analysed studies contain brief applied reference manuals aimed at the other participants of insurance process – insurers as consumers of the insurance services²⁴. In addition, all the studies contain victimological aspect of the problem under consideration. For example, A. Lewis addresses his research on insurance fraud prevention potential to victims of this crime²⁵. In the American literature, there are studies of insurance fraud phenomenon in different sectors. For example, the monograph by R. Dubois describes the issues of detection and prevention of fraud in the field of auto insurance; expert methods of this crime detection are studied by the author²⁶. The work of the American expert, B. Sawyer, deals with the detection of fraud in the field of marine insurance²⁷. The study of R. Bourhis discusses some issues of criminalistic characteristics and prevention of fraud in the field of personal insurance²⁸. Thus, the undertaken comparative law research shows that in Russia and other countries considerable attention is paid to the fraud detection and investigation of and other crimes committed in the field of insurance.

LITERATURE:

1. *A Consumer Guide to Insurance Fraud Maryland Insurance Administration*. Balrimore, 2009, 10 p.
2. Bourhis R. *Insult to Injury: Insurance, Fraud, and the Big Business of Bad Faith*. R. Bourhis. San Francisco: Berrett-Koehler Publishers, 2005, 263 p.
3. *Chinese motorist arrested for insurance fraud*. Retrieved 01.01.2018 from <http://www.rg.ru/2013/07/05/strahovka-anons.html>

¹⁷ Zalma, B. *The Insurance Fraud Deskbook*. Chicago: ABA Book Publishing, 2015, 486 p.

¹⁸ *Insurance Fraud Casebook: Paying a Premium for crime*. L. Hymes, T. J. Wells. New York, 2004, 288 p.

¹⁹ Wolff A. *The Case of The Insurance Fraud Sacrifices*. V. 13: *Zen and the Art of Investigation*. Indiana: AutorHouse, 2014, 186 p.

²⁰ *Insurance Fine Art, Insurance Fraud and the Need for Reform Within the Insurance Industry Following the Case of Dr. Steven G. Cooperman*. California, 2008, 136 p.; *Defending Against Insurance Fraud Claims: Leading Lawyers on Representing Insurers in Investigating and Preventing Fraudulent Activity*. J. M. Kuller, G. R. Reinhardt. Boston, Mass.: Aspatore, 2011, 308 p.; *Models of Insurance Fraud: Build-up, Ex Post Moral Hazard and Optimal Contracts*. USA, 1998, 308 p.

²¹ Lichtor, J. M. *Personal Injury Insurance Fraud: The Process of Detection : a Primer for Insurance and Legal Professionals*. NY: Lawyers & Judges Publishing Comp., 2002, 190 p.

²² *Introduction to Insurance Fraud: An Investigator's Manual*. USA, 1978, 187 p.

²³ *Insurance Fraud: Law and Practice. Practical insurance guides*. D. Morse, L. S. Ackling. New York, 2004, 178 p.

²⁴ *A Consumer Guide to Insurance Fraud Maryland Insurance Administration*. Balrimore, 2009, 10 p.

²⁵ Lewis, Albert B. *Danger! Insurance Fraud in Progress: How to Avoid Becoming a Victim*. USA: Carriage House Pr., 1987, 381 p.

²⁶ DuBois, Robert A. *Insurance Fraud and Motor Vehicle Collisions*. Robert A. DuBois. Washington: Institute of Police Technology and Management, 1993, 128 p.

²⁷ Soyer, B. *Marine insurance fraud*. B. Soyer. New York: Informa Law from Routledge, 2014, 378 p.

²⁸ Bourhis R. *Insult to Injury: Insurance, Fraud, and the Big Business of Bad Faith*. R. Bourhis. San Francisco: Berrett-Koehler Publishers, 2005, 263 p.

4. City of London police. Insurance Fraud Enforcement Department (IFED). *Annual Review 2012*. Retrieved 01.01.2018 from <https://www.cityoflondon.police.uk/advice-and-support/fraud-and-economic-crime/ified/Pages/Annual-review.aspx>
5. DuBois, Robert A. *Insurance Fraud and Motor Vehicle Collisions*. Robert A. DuBois. Washington: Institute of Police Technology and Management, 1993, 128 p.
6. Ibid.
7. *In China, an insurance fraudster, who provoked 334 road accidents in 3 years and received \$58 thousand from insurers, was arrested*. Retrieved 01.01.2018 from <http://forinsurer.com/news/13/07/08/29534>
8. *Insurance Fine Art, Insurance Fraud and the Need for Reform Within the Insurance Industry Following the Case of Dr. Steven G. Cooperman*. California, 2008, 136 p.; *Defending Against Insurance Fraud Claims: Leading Lawyers on Representing Insurers in Investigating and Preventing Fraudulent Activity*. J. M. Kuller, G. R. Reinhardt. Boston, Mass.: Aspatore, 2011, 308 p.; *Models of Insurance Fraud: Build-up, Ex Post Moral Hazard and Optimal Contracts*. USA, 1998, 308 p.
9. *Insurance Fraud Casebook: Paying a Premium for crime*. L. Hymes, T. J. Wells. New York, 2004, 288 p.
10. Insurance fraud. Retrieved 01.01.2018 from www.fbi.gov/stats-services/publications/insurance-fraud/insurance_fraud
11. *Insurance Fraud: Law and Practice. Practical insurance guides*. D. Morse, L. S. Ackling. New York, 2004, 178 p.
12. *Introduction to Insurance Fraud: An Investigator's Manual*. USA, 1978, 187 p.
13. Koshkin D. S. Insurance fraud: foreign and domestic practices. *Finance 2006, No. 10*. Retrieved 01.01.2018 from <http://www.lawmix.ru/bux/78877/>
14. Lewis, Albert B. *Danger! Insurance Fraud in Progress: How to Avoid Becoming a Victim*. USA: Carriage House Pr., 1987, 381 p.
15. Lichtor, J. M. *Personal Injury Insurance Fraud: The Process of Detection : a Primer for Insurance and Legal Professionals*. NY: Lawyers & Judges Publishing Comp., 2002, 190 p.
16. Nadezda mutual insurance company. *Fininstructor website*. Retrieved 01.10.2019 from <http://www.fininstruktor.ru/nadejda.html>
17. O. Kutasov, T. Grishina *They have come for the insurer from the Crimea*. Retrieved 01.10.2019 from <https://www.kommersant.ru/doc/4073761>
18. P. Boehler *Shenzhen insurance scammer arrested for 334 car crashes, police say*. Retrieved 01.01.2018 from <http://www.scmp.com/news/china/article/1275886/shenzhen-insurance-scammer-arrested-334-car-crashes-say-police>
19. Soyer, B. *Marine insurance fraud*. B. Soyer. New York: Informa Law from Routledge, 2014, 378 p.
20. The Drapkin L. Ya., Y. M. Zlotchenko Criminal ways of the legalization of proceeds derived from crime. In *Organized crime and corruption. Special edition. No. 1*. Yekaterinburg: Zashchita-Ural, 2001.
21. The sentence of the Industrial district court of Izhevsk № 1-1 / 12 of 24.04.2012. *Website Judicial and regulatory acts of the Russian Federation*. Retrieved 01.10.2019 from <http://sudact.ru/regular/doc/fBY3zJPefhdw>
22. The system of multi-level-marketing is widely used in order to sell goods or services. See details: Barber D. *Just What is...Network Marketing?* M.: Fair Press, 2001, 192 p.; Kardava A. *Is Network marketing a pyramid scheme? A Scam? Or ... a system of distribution of goods and services*. M.: PROMIS International, 2002, 304 p.; Rakhimova L. *We start MLM: network marketing*. M.: 2003, 208 p.

23. Wolff A. The Case of The Insurance Fraud Sacrifices. V. 13: *Zen and the Art of Investigation*. Indiana: AutorHouse, 2014, 186 p.
24. Zalma, B. *The Insurance Fraud Deskbook*. Chicago: ABA Book Publishing, 2015, 486 p.

THE SOCIAL AND ECONOMIC FACTORS OF THE REHABILITATION OF A POST-STROKE PATIENT

Elena Sevostyanova

*Chelyabinsk State University
Bratiev Kashirinykh str., 129, Chelyabinsk, Russia
elena-krka@mail.ru*

Irina Trushina

*Chelyabinsk State University
Bratiev Kashirinykh str., 129, Chelyabinsk, Russia
trushina_ia@mail.ru*

Mark Loskutnikov

*Iron&Steel Hospital
Naberezhnaya str., 18, Magnitogorsk, Russia
losmark@mail.ru*

Natalia Kurenkova

*GBUZ Regional Clinical Hospital №3
Prospekt Pobedy, 287, Chelyabinsk, Russia
nataliakurenkova@mail.ru*

ABSTRACT

Diseases in the circulatory system of the brain are not only a medical but also a social and economic problem at present, as a stroke patient needs long-term rehabilitation while remaining disabled until the restoration of the lost functions. The study identified psychological factors that prevent the rapid and complete rehabilitation of patients after the ischemic stroke. The neurologic status was assessed on the modified mRS Rankin Scale as well as on the NIHSS Bartel Scale. Beck Depression Inventory (BDI) has helped to identify features of depression in patients with various clinical manifestations of stroke. The practical significance of the work is the possibility of developing psychological support programs based on the results of the study, which would provide an optimized rehabilitation process for patients after ischemic stroke.

Keywords: *Psychological features of the post-stroke patients, rehabilitation, stroke*

1. INTRODUCTION

Diseases in the circulatory system of the brain are issues of great medical and social importance, and a global epidemic that endangers the lives and health of people around the world. Over thirty million people around the world have had a stroke. The number of deaths from stroke is 6.2 million annually. More than 80 percent of people who have had a stroke become disabled. Stroke is the leading cause of disability among all diseases. Patients who have had a stroke need constant care. More than 80% of stroke patients have a speech disorder. People who care for stroke patients are likely to be depressed and have a feeling of having to bear a heavy burden. In 2019, the U.S. spent \$48 billion on post-stroke care (4% of healthcare costs), and Finland spent \$1.2 billion (6.1% of healthcare costs). In the Russian Federation, 450 thousand new strokes occur every year. The Russian Federation spends \$0.9 billion (57.2 billion rubles) annually on rehabilitation after stroke. The cost of treatment of one stroke patient in Russia, including inpatient treatment, rehabilitation, and secondary prevention, is 127 thousand rubles per year. High rates of becoming a disabled person after having a stroke lead to loss of working capacity, limitations in everyday life, long-term rehabilitation.

Post-stroke depression (PSD) has an adverse impact on the functional outcome of rehabilitation, quality of life, leading to longer and more expensive rehabilitation. A quarter (25.4%) of stroke survivors have experienced post-stroke depression (PSD). The percentage of occurrence of PSD is 46% during the first week of the acute phase of the stroke. The percentage of patients who suffer from PSD may be significantly higher, as most cases may be neglected due to various comorbid and post-stroke clinical conditions that may conceal the depression. Scientists from Chile and Spain have revealed that dysarthria is an acquired motor speech disorder of neurological origin that significantly decreases the degree of social interaction. Patients who experience problems with social interaction are three times more likely to become depressed than patients who do not experience such problems. Prevention of the PSD requires the participation of both the society and the family. Aphasia was significantly associated with PSD in the first six months after stroke. The consequences of a stroke affect both the patient and his social environment. There is a growing need for verbal communication and emotional regulation, as the patient needs assistance due to movement disorders, but dysarthria prevents this from happening. De Ryck et al. (Belgium) emphasizes the importance of rigorous and long-term monitoring and support of stroke patients and their caregivers. The aim of this study is to evaluate the features of the manifestation of PSD, depending on clinical disorders.

2. RESEARCH PARTICIPANTS AND METHODOLOGICAL BASIS

The research involved 50 post-stroke patients in total. The criterion for including patients into the research was the first case of experiencing the atherothrombotic ischemic stroke in an internal carotid art system confirmed by a C.T. scan of the brain. 50 post-stroke patients were separated into two groups. The first group (25 patients with movement and speech disorders) consisted of 11 women (average age – 52 ± 2.1 years) and 14 men (average age – 61 ± 3.5 years). The second group (25 patients with movement and speech disorders) consisted of 12 women (average age – 59.6 ± 2.5 years) and 13 men (average age – 62.2 ± 3.4 years). The dynamics were assessed by the modified Rankin Scale (mRs), the results of the National Institute of Health Stroke Scale (NIHSS) and the Montreal Cognitive Assessment (MoCa) were used, the Beck Depression Inventory (BDI) and the Barthel Index (B.I.) was applied, and D. Amirkhan's coping strategy was applied as well (adapted by N.A. Sirot and V.M. Yaltonsky). Test results and quantitative criteria are described with the help of arithmetical mean (M), standard deviation (S.D.). The reliability was taken at a 95% confidence interval. A comparison of the values between the groups on each visit was carried out using the non-parametric Mann-Whitney U test.

3. RESULTS AND DISCUSSION

Both groups were comparable in the assessment of the modified Rankin Scale (mRs) ($p=0.289$), the National Institute of Health Stroke Scale (NIHSS) ($p=0.756$), Index Bartel ($p=0.305$), the Montreal Cognitive Assessment (MoCa) ($p=0.066$). No significant differences were found on these scales, which revealed that there are no significant differences in neurological status between the first and second groups. Testing according to the coping strategy of D. Amirkhan (adapted by N.A. Sirot and V.M. Yaltonsky) did not reveal any statistically significant differences between the groups in the value of the sum of point of the "Problem solving" and "Avoidance" scales (Table 1.). When the tests were conducted with the use of the Beck Depression Inventory (BDI) the statistically significant difference between the groups in terms of the sum of points was observed: in the first group the average value was higher and amounted to 26.6 ± 3.5 points, in the second group – 11.8 ± 1.7 points ($p=0.001$). When comparing groups in terms of depression severity, a statistically significant difference was also revealed: Group 1 scored 3.1 ± 0.6 , and Group 2 scored 1.4 ± 0.5 ($p=0.002$) (Table 1). During the testing, according to D. Amirkhan's "Coping Strategies Indicator" method (adapted by N.A. Sirot and V.M.

Yaltonsky) statistically significant difference between the groups was observed: in the first group the average value was lower and amounted to $17,7 \pm 3,8$ points, while in the second group – $24,7 \pm 4,1$ points ($p=0,044$) (Table 1.).

Table 1: Psychological and clinical conditions of post-stroke patients

(M \pm SD)	First group	Second group	(p) Comparison of the values between groups according to Mann-Whitney
The modified Rankin Scale (mRs), points	$3,5 \pm 0,5$	$3,4 \pm 0,5$	0,479
The National Institute of Health Stroke Scale (NIHSS), points	$11,4 \pm 1,8$	$11,2 \pm 1,7$	0,942
The Montreal Cognitive Assessment (MoCa), points	$19,4 \pm 5,4$	$22,6 \pm 5,8$	0,056
Index Bartel, points	$37 \pm 9,6$	$38,4 \pm 9,4$	0,335
The Beck Depression Inventory (BDI), points	$26,6 \pm 3,5$	$11,8 \pm 1,7$	0,002
The Beck Depression Inventory (BDI), the severity of depression	$3,1 \pm 0,6$	$1,4 \pm 0,5$	0,001
A coping strategy "Problem solving" scale points	$20,2 \pm 0,7$	$23,2 \pm 1,3$	0,204
A coping strategy "Seeking social support" scale points	$17,7 \pm 3,8$	$24,7 \pm 4,1$	0,044
A coping strategy "Avoidance" scale points	$18,4 \pm 0,9$	$17,1 \pm 0,4$	0,736

There was a significant difference in the proportion of patients without depression: in the first group – 16% (4 patients), in the second group – 60% (15 patients), while the proportion of patients with severe depression in the first group was 52% (13 patients), in the second group – 8% (2 patients) ($p=0.002$) (Figure 1).

Figure 1: Proportion of patients with various degrees of depression

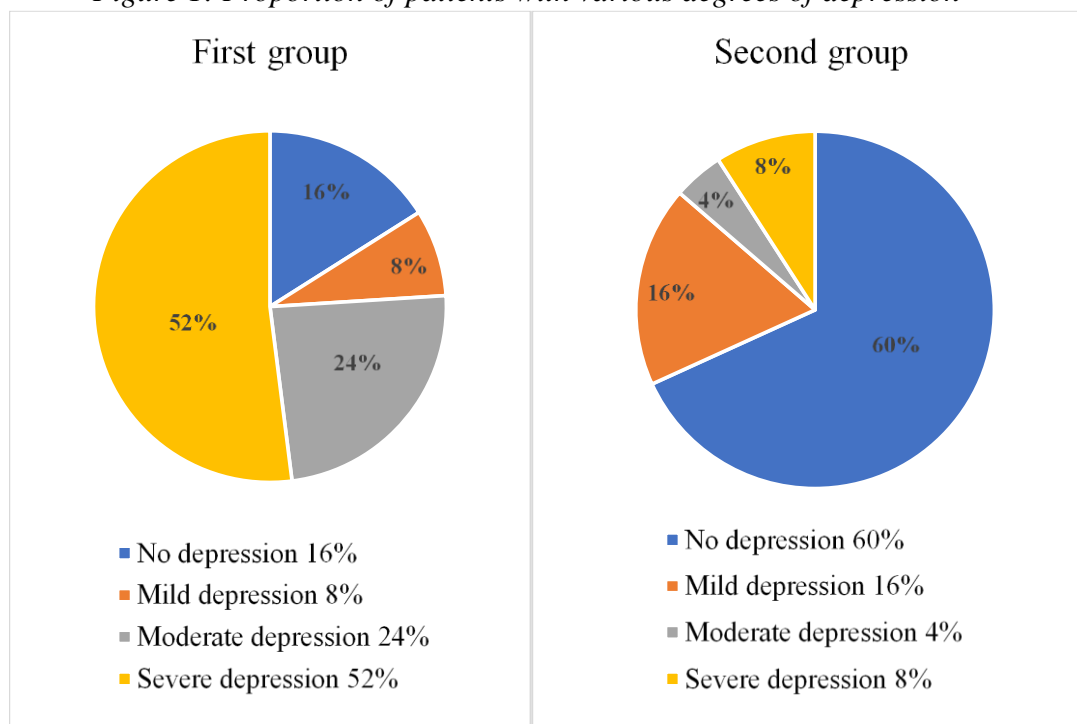
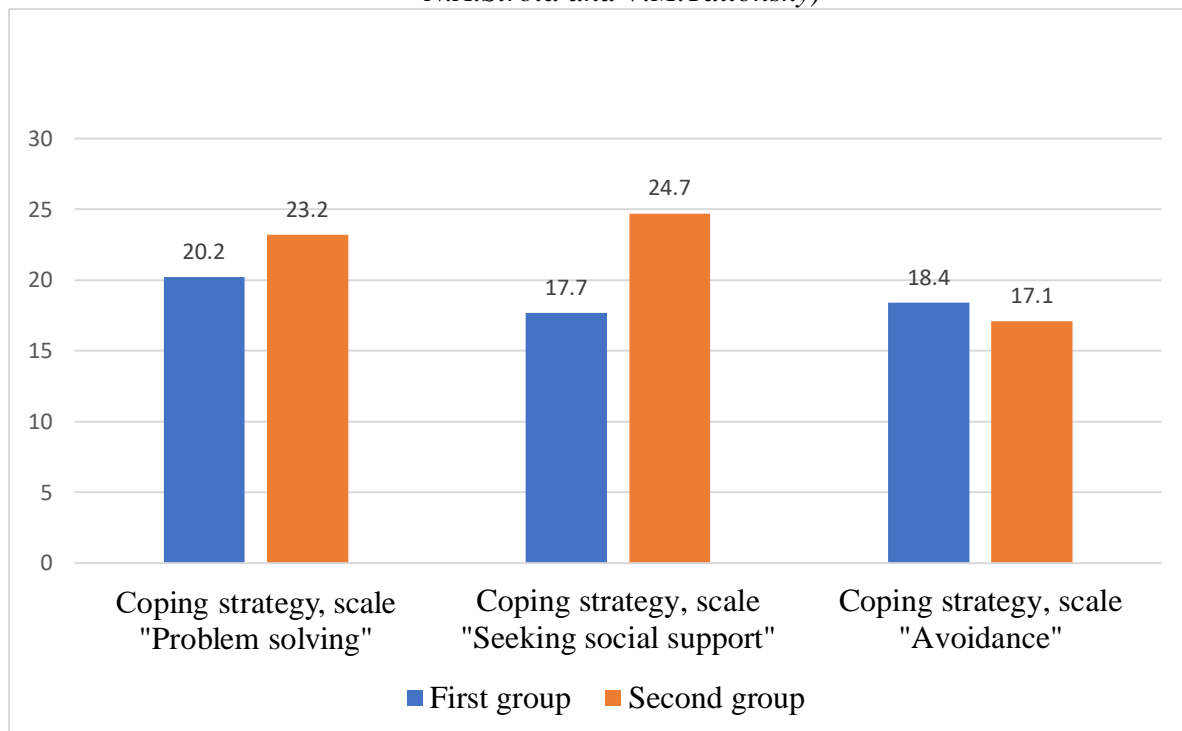


Figure 2: Results of empirical data on the test of D. Amirkhan's coping strategies (adapted by N.A.Sirota and V.M.Yaltonsky)



Patients of the first group had almost equal average values on all of the three scales, i.e., they did not have a strongly expressed coping strategy (Figure 2), while values on the scale of "Seeking social support" were significantly lower compared to patients of the second group ($p=0.044$). The strategy of "Seeking social support" and "Problem solving" dominated insignificantly among the patients of the second group, but there were also patients using the strategy of "Avoidance" (Figure 2). In summary, Beck's questionnaire revealed depression in patients in both groups, i.e., stroke became an excessive psychological burden for all the patients. However, patients with different clinical manifestations of early hemispheric stroke revealed different degrees of depression (both movement and speech disorders resulted in severe depression, whereas only movement disorders caused mild depression). Patients of the first group showed a lack of ability to express their emotions and wishes, as well as the inability to interact with others, which led to the refusal to seek help and social support. The main psychological factor affecting the rehabilitation of patients is PSD. Speech disorder was related to the more severe manifestations of the PSD and reduced use of the coping strategy of "Seeking social support" and "Problem solving". In order to reduce the severity of PSD in patients with speech disorders, we suggest the use of sand tray therapy for the patient himself and caregiver (emotion response) and tablet pc technology (with a single click, the patients choose their needs from the available options), which simplifies the contact between the patient and the caregiver, thus improving the quality of life of the patient and his environment. These simple methods lead to significant economic benefits, and their further development and control of the dynamics of patients are necessary for the long term.

4. CONCLUSION

During the analysis of the results obtained with the help of Beck's questionnaire, more than half of all patients included in the study had PSD manifestations with varying degrees of severity. According to the literature, approximately a quarter of patients have PSD. This discrepancy may be due to the sampling features (inclusion of patients with three or more Rankin Scale

points) and insufficient diagnosis of PSD during the acute phase of stroke. Severe depression of patients with speech disorders can be related to the particular importance of the communicative function in conveying emotions and socialization of the person. Speech disorders affect the ability to express wishes and thoughts, and the helping process becomes difficult as well as social participation decreases. Post-stroke patients need help due to movement disorders, and verbal communication is becoming increasingly important. The obtained data coincide with De Ryck, Aceituno, Cooper. Cooper C.L. et al. (United Kingdom) found that stroke survivors have great difficulty with emotional regulation, and emotional regulation itself affects social participation and quality of life more than movement disorders. The presence of speech disorders increases the reduction in social participation. Optimization of interaction between post-stroke patients and their caregivers leads to a reduction in PSD among patients and depression among caregivers, which improves the quality of life and rehabilitation outcomes and saves up to 60 thousand rubles or more that are spent on each patient during rehabilitation. The authors declare that there is no conflict of interest.

LITERATURE:

1. Aceituno C. et al. (2019). Quality of life in people with dysarthria. *Revista de Logopedia; Foniatría y Audiología*, 2019 (Volume 39, Issue 1), pages 27-31.
2. Cooper C., Phillips L., Johnston M., Whyte M., Macleod M. (2015). *The role of emotion regulation on social participation following a stroke. The British Journal of Clinical Psychology*, 2015 (54(2)), pages 81-99.
3. De Ryck A. et al. (2014). Poststroke depression and its multifactorial nature: Results from a prospective longitudinal study. *Journal of the Neurological Sciences*, 2014 (Volume 347, Issue 1-2), pages 159-166.
4. Evers S., Ament A., Blaauw G. (2000). Economic Evaluation in Stroke Research. *Stroke*, 2000 (31(5)), pages 1046-1053.
5. Gaio M. et al. (2019). Effect of a Passive Intervention on Carers of Stroke Survivors during the Early Poststroke Period. *Journal of Neuroscience Nursing*, 2019 (Volume 51, Issue 6), pages 299-304.
6. Jiang X., Lin, Y., Li Y. (2014). Correlative study on risk factors of depression among acute stroke patients. *European Review for Medical and Pharmacological Sciences*, 2014 (18(9)), pages 1315-1323.
7. Jorgensen, T. et al. (2016). Incidence of depression after stroke and associated risk factors and mortality outcomes in a large cohort of Danish patients. *JAMA Psychiatry*, 2016 (Volume 73, Issue 10), pages 1032-1040.
8. Kotov S., Isakova E., Sheregeshev V. (2020). Possibilities for Correcting Emotional and Behavioral Impairments in Stroke Patients during Rehabilitation Therapy. *Neuroscience and Behavioral Physiology*, 2020 (Volume 50, Issue 2), pages 156-161.
9. Liu Z., Zhou X., Zhang W., Zhou, L. (2019). Factors associated with quality of life early after ischemic stroke: the role of resilience. *Topics in Stroke Rehabilitation*, 2019 (Volume 26, Issue 5), pages 335-341.
10. Nakase T., Tobisawa M., Sasaki M., Suzuki A. (2016). Outstanding Symptoms of Poststroke Depression During the Acute Phase of Stroke. *PLoS One*, 2016 (11 (10)). Retrieved 10.02.2020 <https://pubmed.ncbi.nlm.nih.gov/>
11. Shi Y., Yang D., Zeng Y., Wu W. (2017). Risk Factors for Post-stroke Depression: A Meta-analysis. *Front Aging Neurosci*, 2017 (9), pages 218.
12. Stroke. (2018). *Guide for doctors: Edited by Stakhovskaya L.V., Kotov S. V.2-e ed., rev.and extra*. Moscow: LLC «Medical informative agency».

13. Trusova N., Levin O. (2019). Clinical significance and possibilities of therapy of post-stroke depression. *S.S. Korsakov Journal of Neurology and Psychiatry*, 2019 (Volume 119, Issue 9), pages 60-67.
14. Yagudina R, Kulikov A, Krylov V, Solovieva E, Fedin A. (2019). Pharmacoeconomic analysis of the neuroprotective medicines in the treatment of ischemic stroke. *S.S. Korsakov Journal of Neurology and Psychiatry*, 2019 (119(7)), pages 74-82.

ACTIVE LABOUR MARKET POLICIES, THE BUSINESS CYCLE AND LABOUR FORCE SHORTAGES

Katarina Moravcikova

*Institute for Forecasting, Centre of Social and Psychological Sciences,
Slovak Academy of Sciences, Slovak Republic
katarina.moravcikova@savba.sk*

Vladimir Balaz

*Institute for Forecasting, Centre of Social and Psychological Sciences,
Slovak Academy of Sciences, Slovak Republic
vbalaz@yahoo.com*

ABSTRACT

Most studies on active labour market policies (ALMP) concentrate on ALMP performance by instrument type. Some studies analyse ALMP performance during recession and/or excessive supply of labour over demand. There is little research on ALMP performance in periods of economic boom and a shrinking supply of labour. This paper analyses large-scale databases relating to jobseekers and ALMP instruments in 2014-2018 in Slovakia. It evaluates the effects of ALMP on increases in employment and employability. The period studied was notable for two concurrent developments: economic boom and a shrinking labour supply. The authors analyse the performance of ALMP on an annual basis so as to explore effects of business cycles and labour shortages. The unemployment figures were quite high in 2014. Access to jobs was difficult for all kinds of jobseekers, including those with a good education and skills. A booming economy and demographic transitions eased the pressures on the Slovak labour market over time. The demand for job seekers with acceptable levels of human capital increased significantly after 2015. By 2018, the typical unemployed person had low skills and a low level of education. The jobseekers supported by the ALMPs in place actually found it more difficult to find employment than jobseekers outside of the ALMP system after 2015 in Slovakia. Future ALMP instruments will have to concentrate on boosting the employment rates within specific socio-demographic groups (women, elderly workers) and strengthening the social and employment inclusion of marginalised communities.

Keywords: *active labour market policies, business cycle, labour shortages*

1. INTRODUCTION

1.1. Literature review

The rationale for active labour market policies (ALMP) is based on the market failures that individuals and firms may encounter in relation to the labour market. Plenty of factors, both internal and external to labour markets, may affect market operation. The most common market failures include poor labour market opportunities, imperfect matching process relating to workers and jobs, wage rigidities, information asymmetry between job-seekers and potential employers, and discrimination against minorities (Blanchard and Katz, 1997). Expenditure on ALMP by developed OECD Member States is substantial, but assumptions that high spending on ALMPs will generate more jobs and decrease unemployment rates often proved naive (Martin, 2015, p. 2). Brown and Koettl, (2015) found little support for the belief that high expenditure on ALMP means a high number of jobs created/sustained by the ALMP instruments. Van Vooren et al, 2018, p. 3) conducted a meta-analysis of 57 experimental and quasi-experimental studies on ALMP. Their findings were generally positive, but also generally that ALMPs had relatively minor effects on their participants. Card, Kluve and Weber, 2010) performed a meta-analysis of 199 ALMPs across 26 OECD countries which were operational

in the period 1996 – 2007. They concluded that different specific categories of ALMP varied in their ability to generate sustainable jobs. Card, Kluve and Weber (2017) also surveyed 526 ALMP instruments from 47 countries operational in the period 1980 – 2012. The ALMP differed in their ability to generate short-term as opposed to long-term effects. In the long-term, the ALMP instruments which targeted the classroom, on-the-job development and the accumulation of human capital performed best. Card, Kluve and Weber (2017) found above-average performance for ALMP targeting specific socioeconomic groups, e.g. female and elderly job seekers. Escudero (2018) reviewed ALMP which were operational across 31 OECD countries in the period 1985. She found that ALMPs targeting vulnerable population groups were more efficient than other ALMP instruments (Escudero 2018, p. 1).

1.2. Research gap

Most research on ALMP concentrates on performance by specific ALMP instruments. The main targets for ALMP instruments are job broking activities, labour market training; and/or job creation via subsidised employment. Some studies have focused on ALMP designed for specific socio-economic and socio-demographic groups (female jobseekers, elderly workers, workers with health disabilities). Relatively few studies have concentrated on ALMP performance over the business cycle. Nordlund (2011, p. 51) found some evidence that ALMP-based training had more positive effects during recessions than during booms, in Sweden. Andersen and Svarer (2012, p. 17) analysed the performance of Danish ALMPs during recessions. They argued that early intervention may prevent the lock-in effect and decrease the costs of ALMPs. The abovementioned studies concentrate on ALMP performance in the course of recessions and/or periods of excessive supply of labour over demand. There is little research on ALMP performance in periods of economic boom and a shrinking supply of labour. The availability of labour has become a major issue across the entire central and eastern European region in the late 2010s (Galgóczy 2017, p. 12). Shrinkage of labour supply results from rapidly ageing populations (caused by low fertility rates in particular) and massive emigration by young people (Baláž, and Karasová, 2017). Stehrer and Leitner (2019) explored future trends in labour supply and demand across the European Union. They found that, in the EU29, labour demand would exceed the active working-age population by around 2029, but the critical point will be reached by 2025 in the Czech Republic, Lithuania, Poland, Bulgaria, Slovenia, Germany, Estonia, Hungary, and the Slovak Republic' (Stehrer and Leitner 2019, p. 35). They came to the conclusion that problems with labour shortages would loom large in the future. The general demographic and labour force scenarios foreseen by the International Monetary Fund indicate that the supply of labour in central and eastern Europe will decrease significantly over the next three decades. The increasing participation rates as regards women and older workers will 'ameliorate but not fully offset the decline in the labour force' (IMF 2019, p. 15). In Slovakia, the labour force will decline by 20 percent by 2050. This current study analyses large-scale databases related to jobseekers and the ALMP instruments operational in 2014-2018 in Slovakia. It evaluates the effects of ALMP in terms of increases in employment and employability. The studied period was notable for two concurrent developments: economic boom and the shrinkage of the labour supply. The authors analyse the performance of the available ALMPs on an annual basis, so as to explore the effects of the business cycle in relation to labour shortages.

1.3. Active labour market policies through the business cycle and demographic transition

In Slovakia, ALMPs have received significant support from national and European resources in the period 2014-2018. The ALMP instruments were implemented via national projects and supported by the European Social Fund. Total support for ALMP was €785.21m in the abovementioned period (COLSAF, 2015-2019). The Slovak labour market underwent a

thorough transformation in the period 2014-2018. The transformation resulted from (a) an improved economic situation and increasing rates of economic growth; and (b) demographic transition. The strong demographic cohorts born in 1950-1955 went to retirement and were replaced by weak cohorts born in 1990-1995. This replacement of cohorts and the effects of a great deal of emigration by the youth population resulted in significant labour shortages. These shortages were reflected in rapid decreases in the numbers of unemployed and in unemployment rates (Figures 1 and 2), substantial growth in job vacancies (Figures 1 and 3) and big hikes in average wages. These trends were very visible both at the national and regional levels (Figures 1, 2 and 3). Some 0.0149 vacancies per one unemployed were available by December 2013, but by December 2018 there were 0.5347. The annual average growth in real wages was 4.2% in the period 2014-2018.

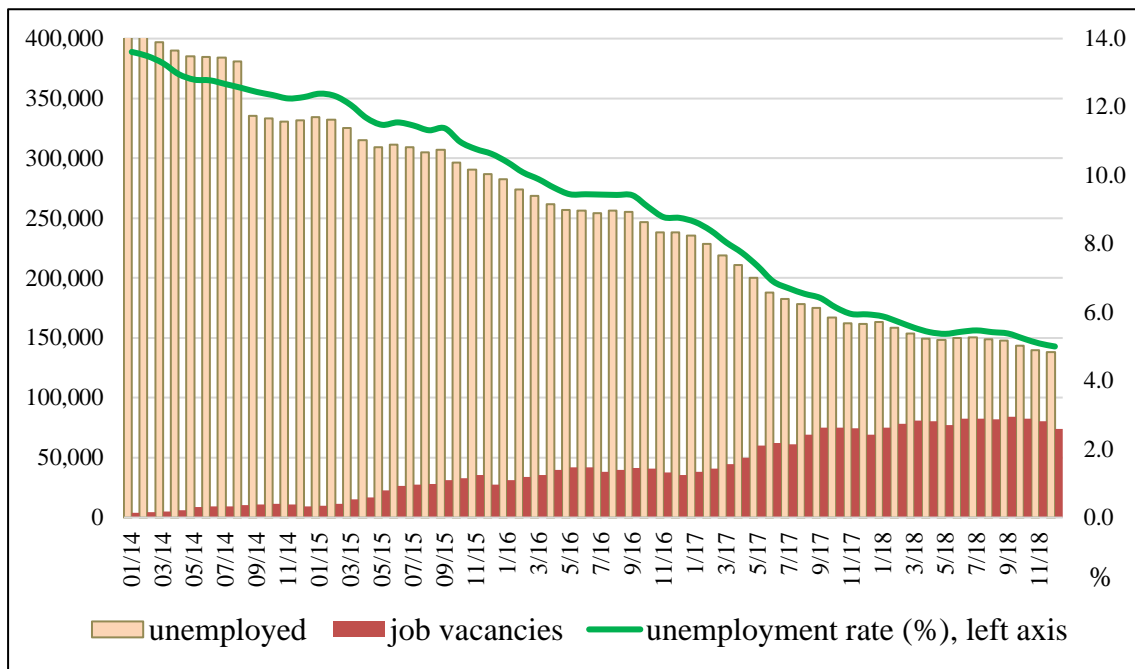


Figure 1: The Slovak labour market in 2014-2018: unemployment figures, job vacancies figures and unemployment rates (%), monthly data (COLSAF)

Figure following on the next page

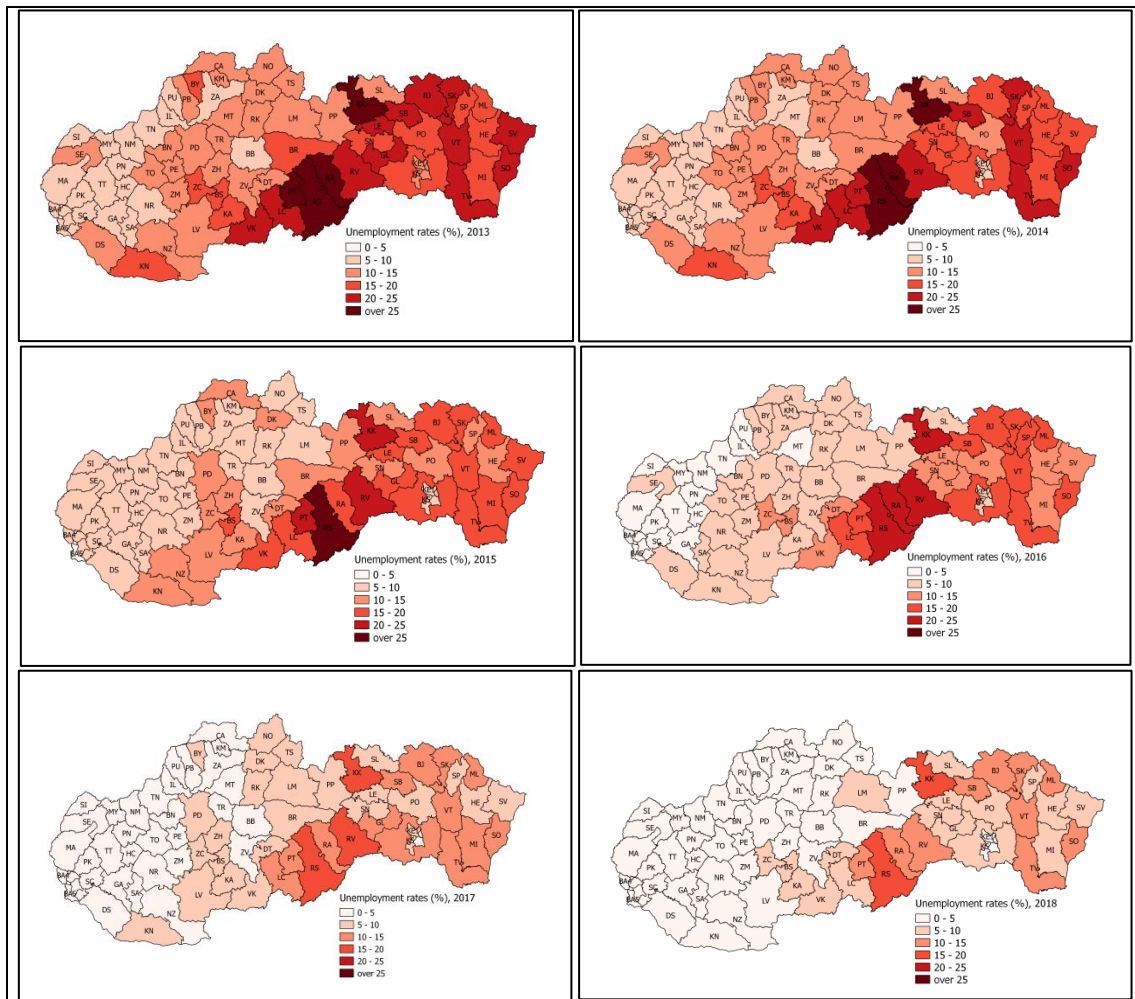


Figure 2: Unemployment rates at the regional level (%), 2013-2018 (COLSAF and authors' computations)

Figure following on the next page

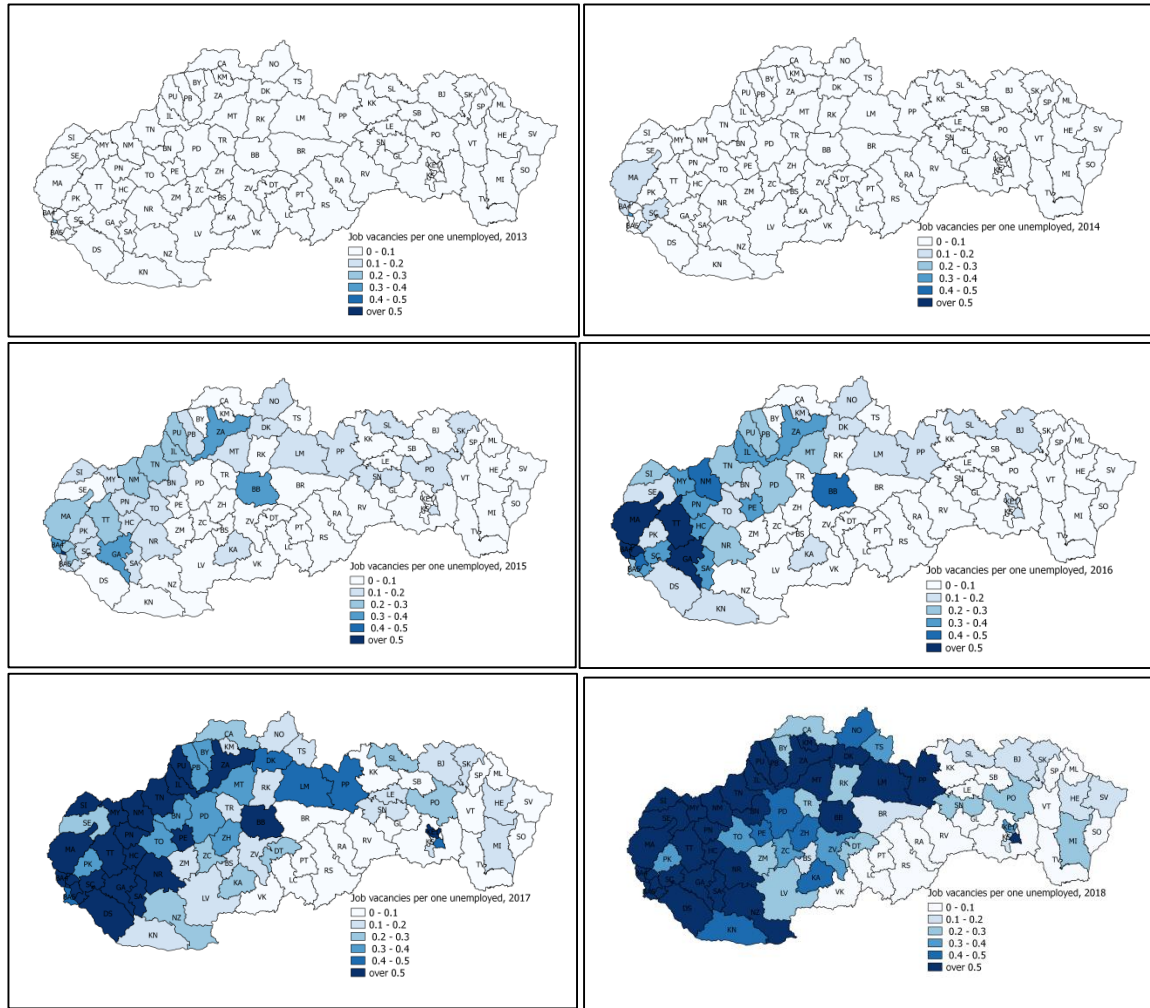


Figure 3: Job vacancies per one unemployed at the regional level, 2013-2018 (COLSAF and authors' computations)

2. DATA SOURCES, DATA STRUCTURE AND DATA PROCESSING

2.1. Data sources and data structure

The Central Office for Labour, Social Affairs and Family (COLSAF) provided the authors of the present study with two large-scale databases on jobseekers. The first database contained data on individual jobseekers registered with regional labour offices in the period 1st January 2014 to 31st December 2018. The database contained data on 2,426,065 registrations. The number of jobseekers was lower than the number of registrations because the same jobseeker could have multiple repeater registrations with the regional labour office over the above mentioned period. Data cleaning was performed. Formal and logical consistency was checked. The following types of entry were removed from the database:

- Duplicate entries, entries with a missing client ID, and/or illogical data (0.002% of all registrations);
- Registrations starting before 01.01.2014 or ending after 31.12.2018 (22.31% of all registrations);
- Registrations with the same ALMP participation start date and end date (0-day ALMP length; 0.10% of all registrations),
- Registrations with missing jobseeker personal data (age, education, gender, place of living; 0.83% of all registrations).

- Registrations indicating the jobseeker's age as being lower than 15 or higher than 62 years. These jobseekers were not eligible for support from the ALMP (0.06% of all registrations).

Some 1,866,711 registrations remained after cleaning. As indicated above, one jobseeker may have had several registrations over time. As many as 39 repeated registrations per individual jobseeker were identified. Only the first registration was considered in further analysis. There were 897,249 individual jobseekers in the database, registered over the period 01.01.2014 - 30.6.2018. The second database contained data on jobseekers supported by one or more ALMP instruments. There was a total of 699,593 registrations in the period 1st January 2014 - 31st December 2018. In fact, only a minority of the jobseekers were supported by ALMP instruments. The same jobseeker, on the other hand, could benefit from several ALMP instruments, and/or from repeated participations in the same ALMP instruments. The ALMP database contained the following information on jobseekers supported by specific ALMP instruments: client ID, type of ALMP instrument (section of the 5/2004 Law on Employment Services) and the start and end date of participation by the individual jobseeker in a specific ALMP instrument. Formal and logical checking of the data was performed. The following entries were removed from the database:

- Duplicate entries (1.55% of all registrations).
- Registrations starting before 01.01.2014 or ending after 31.12.2018 (9.08% of all registrations).
- Registrations with the same ALMP participation start and end dates (0 day ALMP length) or registrations with a length of participation other than those specified by the 5/2004 Law on Employment Services (3.95% of all registrations).

Some 614,436 registrations of jobseekers supported by ALMP instruments were retained after data cleaning. It was possible for one jobseeker to have participated in several ALMP instruments, and/or benefited from repeated participation in the same ALMP instrument. As many as 22 ALMP-supported repeated registrations per individual jobseeker were identified. After data-cleaning the number of individual ALMP-supported jobseekers was 313,932 in the period 01.01.2014-30.06.2018.

2.2. ALMP instruments targeted at improving the likelihood of employment and enhancing employability

The ALMP instruments targeted at improving the likelihood of employment and enhancing employability accounted for 70.33% of all such instruments while instruments targeting job retention were in effect with respect to 29.67% of total jobseekers in the period 2014-2018. The ALMP in the former category focused on the open labour market, while the ALMP in the latter category supported protected labour markets (e.g., protected workplaces for handicapped people). The ALMPs in the latter category were closely associated with social programmes for disadvantaged people; thus, these were excluded from further analysis. The Slovak ALMP instruments are labelled according to specific Sections of the 5/2004 Law on Employment Services. We analysed six major ALMP instruments targeted at improving the likelihood of employment and enhancing employability:

- 1) Section 50j, subsidised jobs with local governments;
- 2) Section 51, subsidised traineeships after graduation;
- 3) Section 52, public works;
- 4) Section 52a, public works based on voluntary opportunities;
- 5) Section 54, national projects, mostly on job subsidy;
- 6) Section 54 REPAS, retraining and courses.

A total of 32 ALPM instruments were implemented in the period 2014-2018, in Slovakia. The abovementioned six ALMP instruments (i)-(vi) accounted for 49.6% of the total supported jobseekers, and 69.8% of the ALMP instruments aiming at improving the likelihood of employment in the period 2014–2018. Some of the abovementioned six ALMP instruments targeted specific socio-demographic groups (graduates, long-term unemployed, elderly workers, inhabitants of deprived regions). The specific group targeted impacted the success rate of the ALMP. The key socio-demographic statistics for specific ALMP are given in Table 1. Participants in the ALPMs were generally older and had lower educational levels (except as regards the Sec. 51 ALMP for graduates) than jobseekers not supported by ALMPs. Socio-demographic disparities between supported jobseekers versus non-supported jobseekers widened over the period 2014-2018. The ALPM increasingly supported jobseekers who were older and who had lower levels of education.

Table 1: Descriptive statistics for jobseekers in 2014 – 201 (authors' computations)

	gender	age in years		education level	
	% females	average	st dev	average	st dev
All jobseekers (N = 897,249)	49.14	34.47	12.32	2.83	0.99
<i>jobseekers supported by the ALMP</i>					
section 50j (N = 5,315)	38.87	43.91	11.31	2.33	1.09
section 51 (N = 22,412)	64.86	20.97	2.22	3.36	0.49
Section 52 (N = 40,592)	46.71	38.71	11.58	1.62	1.15
section 52a (N = 19,564)	74.48	38.08	12.20	2.84	0.96
section 54 (N = 15,030)	45.56	38.92	12.79	2.48	1.06
section 54 REPAS (N = 26,429)	60.71	36.20	11.15	3.03	0.81

Notes: Section 54 REPAS was not included in Section 54. Education levels: 0 = incomplete primary, 1 = primary; 2 = lower secondary; 3 = upper secondary with 'Abitur'; 4 = 1st and 2nd level of tertiary education, 5 = PhD and equivalent; st dev = standard deviation

3. THE MODEL

3.1. Dependent variable

ALPM performance through the business cycle was measured via logistic regression. The success of an ALMP, in theory, should be reflected in higher employment rates among jobseekers supported by that ALMP, as compared with the employment rates of jobseekers unsupported by the ALMP. The COLSAF databases, unfortunately, do not provide data on the employment of jobseekers. The databases only provide data on the registration of jobseekers with regional branches of the labour office. The success or failure of an ALMP (in terms of securing employment) can be measure only indirectly, via the repeated registration of jobseekers. If a jobseeker registers again with a regional labour office after a specific time period, then s/he has failed to find a permanent job. Dropping out of the COLSAF database, on the other hand, does not necessarily mean that a jobseeker has found such a job. In addition, Jobseekers can, in addition, drop out of the database either because of natural causes (death, retirement, pregnancy) or because of non-co-operation and non-compliance with the provisions of the 5/2004 Law on Employment Services. The COLSAF annual reports states that finding a job was behind 66.41 – 69.89% of the total dropouts in 2014-2018, and other jobseekers dropped out of the COLSAF database for natural and legal causes (COLSAF 2015-2019). The dependent variable, therefore, was the repeated registration by a jobseeker after six months of participation in one of the six ALMP instruments (0 = no repeated registration, 1 = repeated

registration). If a jobseeker ended his/her participation in an ALMP by June 2018, for example, the model could follow the pattern of his/her registration with regional labour offices until December 2018.

3.2. Independent variables

The choice of explanatory variables was both theory- and data-driven. Findings by major studies on ALMP guided the theory-driven choice of explanatory variables. The choice of explanatory variables also had to acknowledge some data limitations (the limitations of the COLSAF database and the lack of availability of contextual data on regional labour markets). The following data sources (A to F) were used:

- a) The COLSAF database on individual jobseekers provided a vector of socio-demographic variables (gender, age, education).
- b) The COLSAF database on ALMP provided data on participation in specific ALMP (sections 50j, 51, 52, 52a, 54, and 54 REPAS); the same database also provided data on the number of days spent involved in ALMP instruments – by jobseekers. Some studies on ALMP indicate that time spent involved in an ALMP may be a proxy for building human capital (Card et 2017).
- c) The DataCube database constructed by the Statistical Office of the Slovak Republic provided a vector of regional variables (general population data, data on enterprise density, data on wages, housing, urban population and marginalised population).
- d) The COLSAF regional statistics provided data on unemployment rates, vacancies and material deprivation.
- e) The Ministry of Education, Science, Research and Sports provided data on early school leavers and the effects of ninth-graders' final exams on regional levels.
- f) The Deputy Prime Minister Office for Investment and Informatisation provided data on the regional allocation of the European Investment and Structural Funds (ESIF).

A vector of regional variables (from sources C to F) was computed for 79 Slovak districts (LAU 1 level). The vector included the following 16 variables:

- 1) population density per square km;
 - 2) enterprises per 1000 population;
 - 3) foreign enterprises per 1000 population;
 - 4) proportion of urban population, %;
 - 5) proportion of adult population with tertiary education, %;
 - 6) average wage, EUR;
 - 7) proportion of marginalised Roma population in total population %;
 - 8) proportion of population in material deprivation, %;
 - 9) proportion of early school leavers in total school leavers, %;
 - 10) unemployment rates, %;
 - 11) average success rate of primary schools in terms of ninth-graders' final exams, %;
 - 12) distance of district capital to Bratislava, km;
 - 13) internal immigration rate, per 1000 population;
 - 14) new flats completed, per 1000 population;
 - 15) ESIF spending on demand-driven projects, per EUR inhabitant¹;
 - 16) job vacancies per one unemployed.
- Variables 1 - 6, as well as 14 - 15 indicate the overall developmental level of a specific district. The higher the values for population density, urban population, population with

¹ The ALMP spending was excluded from the ESIF spending

tertiary education, average wage, enterprise density, new flats and immigration are, the better the performance of regional labour market.

- Variables 7 to 12, as well as variable 16 indicate the level of human and social capital inhering in a specific district, and the performance of the regional labour market respectively. Variable 15 (ESIF spending on demand-drive projects per inhabitant) indicates the developmental level of a specific district. The ESIF projects allocate higher support to deprived regions.

3.3. Factor analysis

The logistic regression was performed despite certain conditions relating to multicollinearity and the distribution of residuals by explanatory variables. Multicollinearity is an unwelcome situation in which one predictor variable can be linearly predicted from the others with a substantial degree of accuracy. The collinearity tests generated high correlation coefficients between variables like unemployment rates, material deprivation levels and/or wage levels. Such multicollinearity problems can be mitigated via factor analysis. A high number of individual variables is reduced to a low number of factors. The results of the factor analysis are reported in Table 2. The factor analysis established four factors. The four factors explained 76.3% of the total variance in the exploratory variables:

- Factor 1, ‘Development’ covers the overall developmental level of a district with regard to population density, enterprise density, wage levels, and urbanisation and education levels.
- Factor 2, ‘Poverty’ includes variables representing unemployment; material deprivation rates; the proportion of marginalised Roma populations in relation to the total population; peripheral location; and the performance of the regional education system.
- Factor 3, ‘Mobility’ included variables representing internal immigration rates and the construction of new housing.
- Factor 4, ‘ESIF support’ includes the levels of ESIF spending, and partially also the job vacancies reported on the regional labour market².

Table following on the next page

² Variable 16 ‘job vacancies per one unemployed’ loads all on four factors.

Table 2: Factor analysis for regional correlates of employment (authors' computations)

	Rotated component matrix			
	Factor 1 43.7%	Factor 2 15.5%	Factor 3 10.0%	Factor 4 7.1%
population density per square km;	0.936	-0.059	0.054	0.073
enterprises per 1000 population;	0.885	-0.156	0.288	0.105
foreign enterprises per 1000 population;	0.803	-0.026	0.277	0.216
share of urban population, %;	0.779	-0.352	-0.133	-0.073
adult population with tertiary education, %;	0.772	-0.313	0.157	-0.152
average wage, EUR;	0.702	-0.384	0.197	-0.354
share of marginalised Roma %;	-0.105	0.942	-0.127	-0.042
population in material deprivation, %;	-0.208	0.917	-0.189	0.100
share of early school leavers, %;	-0.085	0.870	-0.136	-0.113
unemployment rates, %;	-0.234	0.805	-0.218	0.274
success in ninth-graders' final exams, %;	0.220	-0.604	-0.060	-0.039
distance of district capital to Bratislava, km;	-0.177	0.572	-0.497	0.039
internal immigration rate	0.139	-0.049	0.917	-0.032
new flats completed, per 1000 population;	0.169	-0.254	0.864	-0.046
ESIF spending in demand-drive projects,	0.194	-0.065	0.061	0.814
job vacancies per one unemployed	0.265	-0.220	0.302	-0.488

Notes: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.809. Bartlett's Test of Sphericity: Approx. Chi-Square: 15,013,051.886; df: 120; Sig.: 0.000

3.4. Logistic regression

Variables representing specific ALMP instruments, a vector of socio-demographic variables, and the factor scores for Factors 1 to 4 were the explanatory variables in the logistic regression models. The multicollinearity and residual distribution tests established that there were no potential problems for the logistic regression.

Three models were tested with the logistic regression:

- 1) Model 1 considers the ALMP effects only (participation in ALMP: 0 = no, 1 = yes) and the length of participation in days;
- 2) Model 2 builds upon Model 1, adding three socio-demographic variables which relate to jobseekers (age, education, and gender: 0 = male, 1 = female);
- 3) Model 3 builds upon Model 2, adding 16 regional variables – reduced to four factors: F1 'Development', F2 'Poverty', F3 'Mobility' and F4 'ESIF support'.

Testing these models separately enabled the exploring of the impact of specific variables on repeated jobseekers' registrations with regional labour offices. The results yielded by the models are presented in Table 3. The signs on the *B* coefficient indicate the impacts of the exploratory variables on the dependent variable. A positive sign indicates a higher probability of repeated registration with the local labour office after six months since the end of the ALMP support. In other words, a positive sign points to fact that jobseekers failed to find jobs. The Sig. coefficient indicates the level of statistical significance of the *B* coefficient.

The majority of the *B* coefficients were significant at the 0.001 level. The Wald statistics test whether and how much an explanatory variable in a model is significant - High Wald statistics indicate robustness in the estimates.

3.5. Model 1

All ALMP variables had negative signs in Model 1, for 2014. Model 1 indicates that jobseekers participating in ALMPs under sections, 50j, 51, 52, 52a, 54, and 54 REPAS had a *lower* probability of repeated registration with the regional labour office after six months than jobseekers with no ALMP support. The unemployment rates (12.3%) and unemployed numbers (331,733) were quite high in 2014 (Figure 2). And also, in 2014, the ALMP instruments supported jobseekers with both high and low levels of employability. All ALMP variables had positive signs as regards Model 1 in the period 2015-2018. This means that jobseekers participating in ALMP under sections, 50j, 51, 52, 52a, 54, and 54 REPAS had a *higher* probability of repeated registration with the regional labour office after six months than jobseekers with no ALMP. This change in the efficiency of ALMP resulted from a profound transformation of the Slovak labour market in the period 2015-2018. The unemployment rate dropped to 10.6 percent by December 2015 and to 5.0 percent by December 2018. The unemployed numbers decreased from 286,825 to 138,198 in the same period. The labour shortages were reflected in a dramatic increase in the number of job vacancies: from 9,169 in 2014 to 73,890 in 2018. The number of job vacancies rose rapidly despite a significant increase in the stock of foreign workers in Slovakia over the same period. The Slovak employers preferred jobseekers with a higher stock of human capital. Jobseekers with a higher stock of human capital were more likely to maintain their employment and less likely to register with their regional labour office. Jobseekers with lower levels of human capital, on the other hand, tended to continue to register with the regional labour offices. These jobseekers were repeatedly selected for one or more ALMPs, but nevertheless found it difficult to find a job because of their low employability levels. Labour shortages and a cohort of jobseekers with low employability levels explain why all the ALMP instruments had positive signs in the period 2015-2018³. The variable related to the length of time a jobseeker is involved with an ALMP has a positive sign: the higher the number of days a jobseeker is supported by an ALMP, the higher the likelihood of repeated registration with the regional labour office. Jobseekers supported by the section 52 ALMP instrument (public works) accounted for the highest average number of days of support. This ALMP was designed for people with the lowest levels of education and/or those living in underdeveloped regions. Many participants in the section 52 ALMP instrument were assigned to the same ALMP repeatedly for several years. This explains why the length of stay in an ALMP is positively correlated with repeated registrations at the regional labour office.

3.6. Model 2

Model 2 includes all the variables from Model 1, but uses in addition gender, age and the educational level of jobseekers. The education variable had a negative sign across all years. This means that the higher the educational level the lower the probability of repeated registration with the regional labour office. The gender variable had a negative sign for the years 2014 and 2015, but positive one in 2016, 2017 and 2018. Females had a higher probability of repeated registration than males in the period 2016-2018. The age variable had a positive sign for the period 2014-2016, but a negative sign in the years 2017 and 2018 (the younger the jobseeker, the lower the probability of repeated registration). The overall interpretation is that elderly workers and females remained the least employable jobseekers in a shrinking market.

³ The section 54 REPAS was not significant on 0.05 level for 2018.

3.7. Model 3

Model 3 includes all the variables from Models 1 and 2, but involves, in addition the four factor scores for factors 1, 2, 3 and 4. Factor 1 (developmental level) scores had negative signs, while the factor 2 (poverty level scores) had positive ones. The signs indicate that jobseekers from more developed regions had lower probabilities of repeated registration with the regional labour office, while those coming from poorer regions had higher probabilities of repeated registration⁴. Factor 3 (mobility) scored had negative signs across all the years. This can be interpreted as meaning that higher numbers of new houses and higher proportions of internal immigration are typical for regions with low unemployment rates and higher numbers of job vacancies. Jobseekers from such regions had a lower probability of repeated registration with the regional labour office. Factor 4 (ESIF investment per capita) had a positive sign for all years. Less developed regions with higher unemployment rates receive greater ESIF investments than developed ones in Slovakia, and Jobseekers from the less developed regions had a higher probability of repeated registration.

Table 3: Logistic regression for ALMP performance (authors' computations)

year	2014			2015			2016			2017			2018		
	B	Wald	Sig.	B	Wald	Sig.	B	Wald	Sig.	B	Wald	Sig.	B	Wald	Sig.
Model 1	R² = 0.098			R² = 0.088			R² = 0.063			R² = 0.047			R² = 0.032		
constant	-1.65	570893	0.000	-1.78	83835	0.000	-1.98	77359	0.000	-2.20	691280	0.000	-2.81	24198	0.000
sec 50j	-0.81	143.66	0.000	2.45	2263.09	0.000	2.39	787.48	0.000	2.51	594.34	0.000	2.90	359.42	0.000
sec 51	-2.15	1702.31	0.000	0.67	405.20	0.000	0.84	667.50	0.000	1.25	1272.01	0.000	0.53	46.48	0.000
sec 52	-1.85	2551.09	0.000	1.24	2253.60	0.000	1.10	1740.70	0.000	1.05	595.69	0.000	0.68	51.89	0.000
sec 52a	-1.90	1274.52	0.000	1.38	1824.11	0.000	1.07	1396.00	0.000	1.13	744.62	0.000	0.80	76.56	0.000
sec 54	-1.14	329.20	0.000	2.12	3643.55	0.000	2.12	2899.39	0.000	1.28	587.45	0.000	1.29	237.53	0.000
sec 54R	-20.08	0.00	0.999	0.13	11.84	0.001	0.21	52.99	0.000	0.18	29.19	0.000	-0.02	0.07	0.787
length	0.02	6611.56	0.000	0.00	8.66	0.003	0.00	47.74	0.000	0.00	10.27	0.001	0.00	14.48	0.000
Model 2	R² = 0.102			R² = 0.089			R² = 0.064			R² = 0.051			R² = 0.039		
constant	-1.96	5074.67	0.000	-1.77	5475.52	0.000	-1.88	4829.367	0.000	-1.63	2718.32	0.000	-2.09	1091.79	0.000
sec 50j	-0.76	125.93	0.000	2.38	2118.89	0.000	2.36	764.93	0.000	2.54	599.53	0.000	2.95	360.51	0.000
sec 51	-1.83	1198.12	0.000	0.75	497.97	0.000	0.87	675.21	0.000	1.16	1021.94	0.000	0.44	29.17	0.000
sec 52	-1.78	2283.68	0.000	1.15	1779.72	0.000	1.02	1347.32	0.000	0.93	432.66	0.000	0.46	21.76	0.000
sec 52a	-1.77	1117.76	0.000	1.36	1776.21	0.000	1.05	1312.85	0.000	1.15	761.33	0.000	0.82	78.55	0.000
sec 54	-0.90	206.33	0.000	2.07	3478.83	0.000	2.09	2772.13	0.000	1.31	598.84	0.000	1.29	224.57	0.000
sec 54R	-20.02	0.00	0.999	0.14	12.57	0.000	0.22	55.41	0.000	0.20	38.97	0.000	0.00	0.00	0.997
length	0.02	5773.89	0.000	0.00	11.12	0.001	0.00	48.20	0.000	0.00	10.98	0.001	0.00	14.46	0.000
age	0.01	536.03	0.000	0.00	97.80	0.000	0.00	2.52	0.113	-0.01	207.22	0.000	-0.01	64.48	0.000
gender	-0.02	2.69	0.101	-0.02	3.51	0.061	0.05	17.21	0.000	0.07	20.79	0.000	0.14	18.66	0.000
educ	-0.02	13.41	0.000	-0.05	86.76	0.000	-0.05	68.47	0.000	-0.10	183.14	0.000	-0.15	90.98	0.000
Model 3	R² = 0.111			R² = 0.103			R² = 0.077			R² = 0.069			R² = 0.049		
constant	-2.14	5670.96	0.000	-1.99	6442.27	0.000	-2.04	5412.11	0.000	-1.77	2869.36	0.000	-2.23	1049.28	0.000
sec 50j	-0.77	129.41	0.000	2.31	1985.60	0.000	2.27	697.27	0.000	2.38	517.37	0.000	2.90	343.28	0.000
sec 51	-1.85	1212.33	0.000	0.71	446.36	0.000	0.82	596.71	0.000	1.11	908.71	0.000	0.36	19.65	0.000
sec 52	-1.88	2498.20	0.000	0.95	1174.09	0.000	0.80	780.56	0.000	0.74	271.11	0.000	0.28	7.85	0.005
sec 52a	-1.82	1171.09	0.000	1.24	1451.51	0.000	0.90	944.43	0.000	1.03	591.53	0.000	0.75	65.52	0.000
sec 54	-0.94	224.46	0.000	1.97	3094.88	0.000	1.94	2353.49	0.000	1.15	443.52	0.000	1.14	173.74	0.000
sec 54R	-19.94	0.00	0.999	0.11	7.69	0.006	0.20	48.18	0.000	0.17	26.71	0.000	-0.04	0.32	0.570
length	0.01	5488.73	0.000	0.00	3.24	0.072	0.00	36.38	0.000	0.00	4.36	0.037	0.00	9.44	0.002
age	0.01	595.44	0.000	0.01	160.55	0.000	0.00	19.53	0.000	-0.01	116.80	0.000	-0.01	45.02	0.000
gender	0.00	0.08	0.783	0.00	0.10	0.753	0.08	35.24	0.000	0.09	37.96	0.000	0.16	24.78	0.000
educ	0.00	0.22	0.643	-0.02	11.16	0.001	-0.01	4.01	0.045	-0.05	34.18	0.000	-0.09	29.88	0.000
F1	-0.14	336.09	0.000	-0.18	518.74	0.000	-0.13	298.24	0.000	-0.11	119.39	0.000	0.00	0.03	0.864
F2	0.13	477.28	0.000	0.19	1234.01	0.000	0.19	981.88	0.000	0.23	854.37	0.000	0.24	186.29	0.000
F3	-0.18	420.21	0.000	-0.17	560.02	0.000	-0.15	414.33	0.000	-0.13	201.18	0.000	-0.10	30.76	0.000
F4	0.21	163.79	0.000	0.07	204.47	0.000	0.15	98.74	0.000	0.16	133.61	0.000	0.08	8.10	0.004

Notes: 2014: N = 188,448; 2015: N = 248,326; 2016: 214,321; 2017 = 180,364; 2018: 65,790. 54 R = section 54 REPAS.

⁴ Factor 1 was not significant on 0.05 level for 2018.

4. CONCLUSIONS

This paper has analysed the performance of the active labour market policies operational in 2014-2018 in Slovakia. The sample consisted of 897,249 individual jobseekers, of which 209,480 (23.35%) benefited at least once from ALMP support. The ALMP instruments analysed in this paper accounted for a substantial proportion of the total ALMPs targeting improvements in the probability of employment and enhancements in employability in 2014-2018 – in Slovakia. The six ALMP instruments (Sections 51, 52, 52a, 50j, 54, and 54 REPAS) covered 125,170 jobseekers, some 59.75% of all ALMP-supported jobseekers. The role of these ALMP instruments in relation to job generation, however, was limited. The proportion of ALMP-supported jobseekers who remained unemployed indicates that most jobs were generated by the market, outside of the direct ALMP interventions. The participation of jobseekers in ALMP was limited by the amount of support available for market interventions, but also by the low level of interest in ALMPs expressed by jobseekers. Most of the new jobs which emerged in the studied periods were generated by the (booming) economy. Incentives for participation in ALMP decreased over the period 2014-2018. Labour shortage was another important factor effecting employability. Demographic transition made it much easier for job seekers to find jobs in 2018 – as compared to 2014. The unemployment figures were quite high in 2014. Access to jobs was difficult for all kinds of jobseekers, including those with a good education and skills. A booming economy and demographic transition eased pressures on the Slovak labour market. As indicated by the high numbers of vacancies, there was substantial demand for job seekers with acceptable levels of human capital. By 2018, a typical unemployed person had low skills and low levels of education. The jobseekers supported by ALMP instruments actually found it more difficult to find employment than jobseekers outside of the ALMP instruments, after 2015 in Slovakia. This finding is not an argument for the cancellation of the ALMP instruments, but rather for the modification of their design and focus. The Slovak structure of ALMP spending is rather different from that in developed OECD economies. The current structure of the ALMP spending concentrates on short-term courses, training and re-training (Sec. 54, Sec. 54 REPAS). The ALMPs which focus on the human capital account offer the best performance (Card et al., 2010). This analysis indicated that education was an important predictor of employability. Here, there were no ALMP instruments supporting education and the long-term building of human capital. Slovakia also ranks among the EU member countries with the lowest levels of participation in life-long learning (LLL). The participation rates in LLL were 11.1% in the EU28, but 4.0% in Slovakia in 2018 (Eurostat, 2019). The Slovak population is rapidly ageing. The old age dependency ratio is projected to rise at a greater pace in Slovakia than in the developed EU countries over the next few decades (EC, 2018). The current orientation of the ALMP instruments towards short-term courses and re-training does not address the challenges of ageing and labour shortages. Future ALMP instruments will have to concentrate on boosting employment rates across specific socio-demographic groups (women, elderly workers), and on strengthening the social and employment inclusion of marginalised communities.

ACKNOWLEDGEMENT: *This research was supported by VEGA grant No. 2/0002/18 and the APVV grant No. APVV-14-0324.*

LITERATURE:

1. Andersen, T. M. and Svarer, M. (2012). *Active labour market policies in a recession*. *IZA Journal of Labor Policy*, 2012, 1: 7.
2. Baláž, V. and Karasová, K. (2017). *Geographical Patterns in the Intra-European Migration before and after Eastern Enlargement: The Connectivity Approach*. *Ekonomický časopis*, 65(1): 3 - 30.

3. Brown, A. J. and Koettl, J. (2015). *Active labor market programs-employment gain or fiscal drain?*. *IZA Journal of Labor Economics*, 4(1): 12.
4. Blanchard, O. and Katz, L.F. (1997). *What we Know and do not Know about the Natural Rate of Unemployment*. *Journal of Economic Perspectives*, 11 (1): 51 – 72.
5. Card, D., Kluve, J. and Weber, A. (2010). *Active labour market policy evaluations: A meta-analysis*. *The economic journal*, 120(548): F452 - F477.
6. Card, D., Kluve, J. and Weber, A. (2017). *What works? A meta analysis of recent active labor market program evaluations*. *Journal of the European Economic Association*, 16(3): 894 - 931.
7. COLSAF (2015-2019). *Vyhodnotenie uplatňovania aktívnych opatrení na trhu práce v rokoch 2014-2018 {Evaluation of the ALMP implemented in 2014-2018}*. Retrieved 8.11.2019 from https://www.upsvr.gov.sk/statistiky/aktivne-opatrenia-tp-statistiky.html?page_id=1248.
8. Escudero, V. (2018). *Are active labour market policies effective in activating and integrating low-skilled individuals? An international comparison*. *IZA Journal of Labor Policy*, 7(4): 1 – 26.
9. European Commission (2018). *The 2018 Ageing Report: Economic and Budgetary Projections for the EU Member States (2016-2070)*. Institutional Paper 07, 9. May 2018. Luxembourg: Publications Office of the European Union.
10. Eurostat (2019). *Lifelong learning, Participation rate in education and training (last 4 weeks) by sex and age*. Retrieved 8.11.2019 from <https://ec.europa.eu/eurostat/data/database>.
11. Galgóczi, B. (2017): *Why central and eastern Europe needs a pay rise*. Working Paper 2017.01. Brussels: European Trade Union Institute.
12. International Monetary Fund (2019): *Demographic Headwinds in Central and Eastern Europe*. IMF European Departmental Paper Series. No. 19. Washington: International Monetary Fund, Publication Services.
13. Martin, J. P. (2015). *Activation and active labour market policies in OECD countries: stylised facts and evidence on their effectiveness*. *IZA Journal of Labor Policy*, 4(1): 4.
14. Nordlund, M. (2011): *What works best when? The role of active labour market policy programmes in different business cycles*. *International Journal of Social Welfare*, 20(1): 43 – 54.
15. Stehrer, R. and Leitner S.M.(2019): *Demographic Challenges for Labour Supply and Growth*. Research Report 439. The Vienna Institute for International Economic Studies.
16. Vooren, M., Heaermans, C., Groot, W. and van den Brink, H. M. (2018). *The Effectiveness of Active Labor Market Policies: A Meta-Analysis*. *Journal of Economic Surveys*. First published. Retrieved 8.11.2019 from <https://onlinelibrary.wiley.com/doi/abs/10.1111/joes.12269.a>

USER PREFERENCES IN THE EXPERIENCE ECONOMY

Aija Freimane

Art Academy of Latvia, Latvia

aija.freimane@lma.lv

ABSTRACT

User preferences in the experience and service economy are complicated due to oversaturated market offerings ranging from material-based products to e-services and digital technology solutions. Every business has its own objectives, but all their products and services must offer promises that persuade users to buy and consume them. Products and services primarily fulfil physiological and safety needs, but their value in everyday life may differ across generations. Product and service promises affect people of all generations, while the business objectives of companies and manufacturers generally are indifferent to the users who purchase and use their products and services. Across generations, many users are unwilling to pay more for products and services whose origins are known or whose resources have been responsibly sourced to reduce environmental and social problems. The findings of this paper are based on in-depth structured online interviews with 250 respondents and reveal the perceived design value preferences for three options: a wood product, an e-service and a digital technology solution. The survey asks which solution is used the most often in everyday life, is the most comfortable to use, saves resources, has the longest-lasting use, most effectively fulfils user needs and creates the most positive experience, satisfaction and sense of well-being. This study analyses what users value and prefer among these three design solutions, what their perceived design value preferences indicate and what they predict or imply about the development of the experience and service economy. The study results show that among all generations, wood products are the most often valued and preferred; they are the most comfortable to use and create the most positive experience, satisfaction and sense of well-being. Wood products provide longest-lasting use, and their usage saves the most resources. Digital technology solutions, on the other hand, most effectively fulfil the users' daily needs. E-services were not preferred in any category in comparison to wood products and digital technology solutions. The study indicates the differences and similarities in user-perceived design value preferences among generations and has implications for the design of new and improved products and services.

Keywords: *design value, experience economy, user preferences*

1. INTRODUCTION

Experience drives the perceived values of users and consumers, its force of attraction far exceeding that of the entertainment or culture industry. Our experience is constructed by our perceptions (Coxon, 2015, p. 12) and is formed by our memory and how we selectively remember an interaction. Also, experiences are tied to the passage of time and are interpreted based on our life moments, and thus memory helps customers to get more value from products and services not just by improving usability but by unlocking options and potential (Newbery & Farnham, 2013). Experience emerges from trying or testing something out, which is our physical interaction with a product and service and forms frequent users and promotes the good of society and growth of the business, which starts with an attitude (Cramer & Simpson, 2004). Individual experience is processed through social, cultural and historical filters. Experience is closely tied to the impact of technology and is more strongly felt than ever and at scales never seen before. Not only products, but even more strongly, e-services and digital technology solutions create experiences that differ from physical services and can be experienced both passively and actively.

An experience occurs when a company intentionally uses services as the stage to engage individual customers in a way that creates a memorable event and experience (Pine II & Gilmore, 1998). An economy based on experiences is one ‘in which many goods or services are sold by emphasizing the effect they can have on people’s lives’ (Cambridge Business English Dictionary, n.d.). In general it is the same form of economy as the one based on commodities, an industrial economy, based on goods, and a service economy (Pine, 2019). An experience economy is the evolutionary outcome of a service economy (Fuchs, 2011) and an expansion of the product-service system. Although an experience is intangible, memorable and linked with time, at the touchpoints it is purely tangible and material. Touchpoints or interaction points with products or services are events that create memorabilia – things that are remarkable and worthy of remembrance. Thus, according to the author, design is a method that defines a true need and as a result creates happiness and satisfaction. This paper discusses user preferences in the experience and service economies, which are complicated due to oversaturated market offerings ranging from material-based products to e-services and digital technology solutions. Every business has its own objectives, and all products and services must offer promises that persuade users to buy the products and affect them in ways that will encourage continued consumption.

1.1. Methodology

The findings of this paper are based on in-depth structured online interviews with 250 respondents and reveal the perceived design value preferences as an outcome of experience for the use of three options: a wood product, an e-service and a digital technology solution. The survey aims to measure the perception of business objectives and attitudes towards sustainable consumption and production (SCP) aspects in a product and service life cycle. The study analyses what users value and indicates what the implications are for the experience and service economy. Respondents were asked to participate in interviews voluntarily and anonymously. They were asked to categorise themselves according to demographic cohorts of the following generations: Silent Generation (<1945), Baby Boomers (1946–1964), Generation X (1965–1980), Millennials or Generation Y (1981–2000) and Generation Z (Gen Z) (2001<), taking into account locally and country-specific experienced economic, political and social events, values, attitudes and behaviour characteristic of the nation. In the interviews, participants were asked their preferences for three options: a wood product, an e-service and a digital technology solution. The survey sought to identify which is used most often in everyday life, the most comfortable to use, saves the most time and resources, has the longest-lasting use, most effectively fulfils user needs and creates the most positive experience, satisfaction and sense of well-being. Each respondent chose the particular wood product, e-service and digital technology solution they preferred individually. Respondents were asked to define and rank their goodwill towards SCP aspects in product–service preferences on a scale from 1 to 5, with 5 being the highest. This study is part of the analysis of a complex design identification system and is subject to the limitation of having selected its respondents on a country-specific basis. The influence and impact of cultural aspects will be researched in future studies to determine the cross-cultural value impact on a defined design identification system.

2. FINDINGS

Products and services primarily fulfil physiological and safety needs, but their value in everyday life may differ across generations. The principal aim of a business is profit, and the medium to reach that aim consists of products and services that fulfil users’ expectations by promising memorable experiences. This results in a paradox, as too many products are designed, produced, and, thus, consumed, following a scheme of planned obsolescence, with negative effects on the

environment and communities over the long term. The findings section describes the results of the study based on the analysis of user preferences and indicates dilemmas for later discussion.

2.1. Perception of business value

Products and services are mediums of a company's purpose. The mission statement expresses why the company exists, its values and what it provides for the customers or market. It combines physical, emotional and logical elements into one exceptional experience, creating a loyal customer. As such, customers or product/service users should be interested in the business's desires and intentions. Every product or service has a purpose for the particular target audience, and the objective or mission statement communicates that purpose. Respondents of this study say that objectives of the companies and manufacturers are not important to them (Table 1). Individual user needs are more important when purchasing and using a product or service, agree all generations. Half of Baby Boomers and Generation X say that they know the objectives of the company and manufacturer before they make a purchase. This indicates that consumers are indifferent to the objectives that drive business; therefore, businesses should aim to fulfil real user needs.

Table 1: Consideration of the business objectives of the company and/or manufacturer when purchasing and using a product or service by generations

Yes, I know the objectives before I make a purchase		1946–1964 The Baby Boomers	1965–1980 Generation X		
No, I'm not interested in the company's objectives					2001< Generation Z
The objectives of the company are not important to me; my needs are more important	< 1945 The Silent Generation	1946–1964 The Baby Boomers	1965–1980 Generation X	1981–2000 Millennials or Generation Y	

Source: Postdoctoral research 'Identification system of design's socio-economic impact', Aija Freimane, 2019

If the respondents say that the objectives of the companies and manufacturers are not important to them, when they choose to buy and use a product or service, they consider the promise or mission statement of the company very much.

Table 2: Consideration of the stated promise or mission of the company before buying or using the product or service by generations

1	2	3	4	5
			< 1945 The Silent Generation	
				1946–1964 The Baby Boomers
			1965–1980 Generation X	
			1981–2000 Millennials or Generation Y	
			2001< Generation Z	

Source: Postdoctoral research 'Identification system of design's socio-economic impact', Aija Freimane, 2019

Dilemma: Communicating user needs in business as a mission statement as the company's value could target the client or user more effectively.

2.2. Preference of sustainable solutions as an experience value

The importance of values in the sustainable development paradigm is stressed by the sustainable consumption and production (SCP) discourse (Oslo Roundtable on SCP, 1994). SCP considers consumption of resources from the viewpoint of the end product and the final consumption by assessing the product's lifecycle (Freimane, 2015). Hence, sustainable and long-lasting solutions should be the core topic and every company should address the solving of ecological, environmental and social problems through their products and services in line with addressing the true needs of people. Thus it was useful to know whether people as users are willing to pay more for products and services whose origins are known or whose resources have been responsibly sourced to reduce environmental and social problems. There are no common features across all generations, but Millennials and Generation X members say that they are willing to pay more to be environmentally and socially responsible, whereas Gen Z members say they are not. That indicates a paradox between acting on and expressing good will, as Gen Z members in particular are known for 'Fridays for Future' activism. Gen Z are the ones who grew up with the information of ecological problems, thus the willingness to rethink their behaviour, to act, rather just protest or make statements, should be visible.

Table 3: Breakdown by generational willingness to pay more for a product and/or service in which the origin is known and the resources have been responsibly sourced to reduce environmental and social problems

1	2	3	4	5
		< 1945 The Silent Generation		
		1946–1964 The Baby Boomers		
			1965–1980 Generation X	
			1981–2000 Millennials or Generation Y	
	2001< Generation Z			

Source: Postdoctoral research 'Identification system of design's socio-economic impact', Aija Freimane, 2019

Information about ecological and environmental problems is overwhelming our lives and media all over the globe. We, as users and human beings, should be aware of the full product life cycle and consider SCP in every decision we make. According to the study, none of the generations consider the amount of resources used in the product or service development, manufacturing and implementation process. This shows that users care about the fulfilment of their own needs but not how the solution is performed.

Table 4: Consideration of resources used in the product or service development, manufacturing and implementation process by generations

1	2	3	4	5
	1946–1964 The Baby Boomers			
< 1945 The Silent Generation	1965–1980 Generation X			
		1981–2000 Millennials or Generation Y		
	2001< Generation Z			

Source: Postdoctoral research 'Identification system of design's socio-economic impact', Aija Freimane, 2019

If the users do not care about the product life cycle in terms of the amount of resources used in the product or service development, manufacturing and implementation process, they care about and consider the need for the supplementary resources they will have to include when using the product or service. This insight identifies the paradox in experience and the service economy: on the one hand, the experience economy is based on extra services, but on the other hand, users are not fully open to pay additionally to experience the experience more or anew. From a sustainability perspective, it is possible to argue for a planned memorabilia similar to planned obsolescence. This makes a paradox of the experience economy – planned memorabilia is the heart of the experience economy and product service system but is not designed into a product life cycle.

Table 5: Consideration of supplementary resources needed to be added into using the product or service by generations

1	2	3	4	5
		< 1945 The Silent Generation		
			1946–1964 The Baby Boomers	
			1965–1980 Generation X	
			1981–2000 Millennials or Generation Y	
			2001< Generation Z	

Source: Postdoctoral research 'Identification system of design's socio-economic impact', Aija Freimane, 2019

Almost all generations, when they choose to buy and use a product or service, strongly consider the long-lasting usability. The exception is Gen Z. This matches with the users' willingness to pay more for products and services whose origins are known or whose resources have been responsibly sourced to reduce environmental and social problems. Users who consider durable usage of products and services are the ones who are ready to act and change their behaviour.

Table 6: Consideration of the long-lasting usability of the product or service by generations

1	2	3	4	5
			< 1945 The Silent Generation	
				1946–1964 The Baby Boomers
				1965–1980 Generation X
			1981–2000 Millennials or Generation Y	
		2001< Generation Z		

Source: Postdoctoral research 'Identification system of design's socio-economic impact', Aija Freimane, 2019

Dilemmas:

- The paradox of what people express and prefer considering the SCP aspects in their daily decisions.
- Planned obsolescence in the experience economy is strengthened by planned memorabilia, thus zooming out the preference or need for long-lasting products and services.

2.3. Comparison of perceived design value preferences among a wood product, an e-service and a digital technology solution

Respondents report that the most satisfying experience in the wood product group is created by wooden spoons and kitchen accessories, such as wooden spatulas and chopping boards, wood

furniture, such as wood tables, beds, and closets, and wood products that provide satisfactory experiences, such as kendama (a coordination skill toy), longboards and skim boards. The choice of the wood product group as sustainable was especially valued by Gen Z. When asked to choose the most satisfying experience provided by digital technology solutions, the respondents named smart phones and Smart-ID in particular, but Gen Z particularly values Spotify. However, the most common answers for a digital technology solution among the Silent generation and the Baby Boomers were ‘I don’t know what a digital technology solution is’ or ‘I don’t use it.’ According to an Eventbrite study, ‘more than 3 in 4 millennials (78%) would choose to spend money on a desirable experience or event over buying something desirable, and 55% of millennials say they’re spending more on events and live experiences than ever before’ (Pol, 2014). However, wood products are identified as creating the most positive experience, satisfaction and sense of well-being over three options. The paradox is that the Silent Generation in particular name digital technology solutions, but Millennials choose wood products as those that have created the most positive experience.

Table 7: Preferred solution by generations that create the most positive experience, satisfaction and sense of well-being in your everyday life

< 1945 The Silent Generation	1946–1964 The Baby Boomers	1965–1980 Generation X	1981–2000 Millennials or Generation Y	2001< Generation Z
Digital-technology solution	Wood product	Wood product, digital-technology solution	Wood product	

Source: Postdoctoral research ‘Identification system of design’s socio-economic impact’, Aija Freimane, 2019

Both digital technology solutions and wood products most effectively fulfil the everyday needs of all generations. Fulfilment of needs is a step towards the most positive experience, satisfaction and sense of well-being. Respondents agree that everyday needs are most effectively fulfilled by digital technology solutions, but the most positive experience, satisfaction and sense of well-being are created by wood products.

Table 8: Preferred solution by generations that most effectively fulfils needs

< 1945 The Silent Generation	1946–1964 The Baby Boomers	1965–1980 Generation X	1981–2000 Millennials or Generation Y	2001< Generation Z
Digital-technology solution	Wood product	Digital-technology solution		Wood product, digital-technology solution

Source: Postdoctoral research ‘Identification system of design’s socio-economic impact’, Aija Freimane, 2019

The most positive experience, satisfaction and sense of well-being is linked with the everyday use of products and services. All generations clearly stated that wood products are the most comfortable to use; however, digital technology solutions provide the greatest everyday comfort for Generation Z. Therefore, products for Gen Z need to be comfortable, long-lasting, easy to use, visually beautiful, aesthetic, enjoyable, practical and good quality, but the services need to present positive attitudes, be friendly, intuitive, comfortable, pleasurable and effective (Freimane, 2019). Thus a digital technology solution, particularly Spotify, provides comfort to Gen Z, in comparison with e-services or wood products in particular.

Table 9: Preferred solution by generations that are the most comfortable to use in everyday life

< 1945 The Silent Generation	1946–1964 The Baby Boomers	1965–1980 Generation X	1981–2000 Millennials or Generation Y	2001< Generation Z
Wood product				Digital-technology solution

Source: Postdoctoral research 'Identification system of design's socio-economic impact', Aija Freimane, 2019

Perception of the most positive experience, satisfaction and sense of well-being is composed of the abovementioned fulfilment of the needs and comfortable use of products or services, which leads to the willingness to use them again and again. The respondents indicated that digital technology solutions are most often used in everyday life by all generations, except the Silent Generation. This shows that digital technology solutions have come into people's lives more than any other product.

Table 10: The preferred most often used solution in everyday life by the generations

< 1945 The Silent Generation	1946–1964 The Baby Boomers	1965–1980 Generation X	1981–2000 Millennials or Generation Y	2001< Generation Z
Wood product	Wood product, e-service or digital-technology solution	Digital-technology solution		

Source: Postdoctoral research 'Identification system of design's socio-economic impact', Aija Freimane, 2019

The perception of sustainable products and services depends not only on the consideration of the resources used in the development, manufacturing and product or service implementation process, but also efficiency in its usage. While most respondents believe that the usage of the particular wood product is the most efficient and saves the most resources in the full product life cycle, the Silent Generation and Millennials believe that it is provided by digital technology solutions.

Table 11: Preferred solution by generations that is the most efficient and saves the most resources

< 1945 The Silent Generation	1946–1964 The Baby Boomers	1965–1980 Generation X	1981–2000 Millennials or Generation Y	2001< Generation Z
Digital-technology solution	Wood product		Wood product, e-service or digital technology solution	Wood product

Source: Postdoctoral research 'Identification system of design's socio-economic impact', Aija Freimane, 2019

An interesting outcome is the preference of all generations for one out of three options they are most likely to use over the long term. Surprisingly, the Silent Generation prefers a digital technology solution, whereas all the other generations choose the wood products. This is linked to the SCP practice that wood products do not need supplementary resources while being used or renewed as a subscription.

Table 12: Preferred solution by generations that is the most likely to be used over the long term

< 1945 The Silent Generation	1946–1964 The Baby Boomers	1965–1980 Generation X	1981–2000 Millennials or Generation Y	2001< Generation Z
Digital-technology solution	Wood product			

Source: Postdoctoral research 'Identification system of design's socio-economic impact', Aija Freimane, 2019

Research indicates that wood products give the most positive experience and satisfaction and are the most comfortable to use in the era of the experience economy. Wood products also save the most resources, are the most efficient and can be used over a long-lasting term, whereas digital technology solutions save the most time, are used most often in everyday life and most effectively fulfil users' needs.

Dilemmas:

- Wood products vs digital technology solutions create the most positive experience and satisfaction in everyday life in the experience economy.
- E-services are not preferred contrary to wood products and digital technology solutions in the experience and service economy.

3. DISCUSSION

The discussion brings up dilemmas of user preferences in the experience and service economy, assesses its weaknesses and strengths and identifies implications for the future.

Dilemma: Communicating user needs in the business mission statement as the company's value could target the client or user more effectively.

There are global companies that communicate user needs in their mission statement. With a reference to the wood and furniture industry, for example, IKEA promises 'To create a better everyday life for the many people'. IKEA's mission statement is simple and understandable by promising to fulfil the need and the wish for a better life. It could be an exception, as Spotify, one of the preferred digital technology solution providers, states: 'Our mission is to unlock the potential of human creativity—by giving a million creative artists the opportunity to live off their art and billions of fans the opportunity to enjoy and be inspired by it.' In comparison with IKEA's mission statement, Spotify's is complicated and too long to remember. According to the study, while people seriously consider the promise or mission statement of the company, they say that their needs are more important than the business objectives. To understand why the objectives of the companies and manufacturers are not important to consumers, comparing these two mission statements reveals several weaknesses: overly complicated communication and a lack of clarity and simplicity in communication. Thus, the implication for the future of the experience and service economy is the need to balance business objectives, user needs and promised excitement in the form of planned memorabilia that consumers can believe in.

Dilemmas: The paradox of what people express and prefer considering the SCP aspects in their daily decisions. Planned obsolescence in the experience economy is strengthened by planned memorabilia, thus zooming out the preference and need for long-lasting products and services.

Long-lasting products and services contradict the concept of ‘the growth of consumerism and the fetishism of commodities as an acknowledgement of social status and inclusion in a particular social class’ (Freimane, 2018), which has been popular since the 1920s. At the same time, design has created the possibility for socialisation through the possession of products/goods and experiences. This has favoured an increase in consumption through the expansion of planned obsolescence and consumer engineering, as economic and industrial growth made use of the design-diversified products needed to ensure people’s basic material needs (Freimane, 2015). Designing products and services from the perspective of planned obsolescence is a long-lasting weakness of society. By planning memorable and renewed experience moments in the product and service development process, it is possible to argue that planned memorabilia is the principle underlying the strengthening of planned obsolescence. By not being willing to pay an additional or extra price while using the product or service, users demonstrate the central contradiction of the experience economy. For example, to use or experience a digital technology solution or e-service, a form of subscription is needed; likewise, to use certain products, additional resources are needed, though this is not understood by consumers. Having personal needs higher than the consideration of used and needed resources in the full product life cycle does not lead to sustainable consumption and production. Thus, the use of design in the form of planned memorabilia creates an implication in the experience and service economy and strengthens planned obsolescence.

Dilemmas: Wood products vs digital technology solutions create the most positive experience and satisfaction in everyday life in the experience economy. E-services are not preferred, contrary to wood products and digital technology solutions in the experience and service economy.

Tactile and long-lasting wood products create the most satisfaction and positive experience, but digital technology solutions are the most used in everyday life. The lack of an e-service preference indicates the lack of intelligible, perceivable and convenient criteria in service development and the need for more clearly defined personal interaction and expression of personal values and experience. A preference for wood products over any digital technology solution or e-service could be argued as a sign of cultural and behavioural ties with people’s values and feelings. It shows that in the digital era, where experience is a medium for consuming products and services, there is a challenge to sustain long-lasting design solutions. Products and services that fulfil users’ expectations by promising memorable experiences need to be decoupled from the phenomenon of planned obsolescence.

4. CONCLUSION

The study results show that among all generations, wood products are most often valued and preferred because they are perceived as the most comfortable to use and create the most positive experience, satisfaction and sense of well-being. *Wood products provide the longest-lasting use, and their usage saves the most resources.* At the same time, digital technology solutions most effectively fulfil users’ daily needs. E-services were not preferred in any category in comparison to wood products and digital technology solutions. The study demonstrates the differences and similarities in user-perceived design value preferences among the generations and has implications for the design of new and improved products and services.

There are no fundamental perceived design value differences across generations.

ACKNOWLEDGEMENT: *This research was supported by a fellowship grant from the European Regional Development Fund’s Growth and Employment Program for Latvia (1.1.1.2/VIAA/1/16/125).*

LITERATURE:

1. Cambridge Business English Dictionary (n.d.).
<https://dictionary.cambridge.org/dictionary/english/experience-economy>. Retrieved from <https://dictionary.cambridge.org>:
<https://dictionary.cambridge.org/dictionary/english/experience-economy>
2. Coxon, I. (2015). Fundamental Aspects of Human Experience: A Phenomeno(logical) Explanation. In P. Benz, *Experience Design. Concepts and Case studies*. (pp. 11–21). London: Bloomsbury.
3. Cramer, J. P., & Simpson, S. (2004). *How Firms Succeed: A Field Guide to Design Management*. Atlanta: Ostberg.
4. Freimane, A. (2015). *Design for Sustainable Social Well-being: Paradigm Shift of Design. Summary of Doctoral Thesis*. Riga: Art Academy of Latvia, Aija Freimane.
5. Freimane, A. (2018). Design footprints for mining the future. *EDUKACIJA MENE, MENU, PER MENA (EDUCATION IN, FOR AND THROUGH ART)*, 105–116.
6. Freimane, A. (2019). Perceived Design Value through the Lens of Generation Z. *The Design After, CUMULUS Conference Proceedings, Bogota, Colombia* (pp. 302–311). Bogota: Universidad de los Andes, School of Architecture and Design, Bogota, Colombia.
7. Fuchs, V. R. (2011). *Who Shall Live? Health, Economics and Social Choice*. Singapore: World Scientific.
8. Newbery, P., & Farnham, K. (2013). *Experience Design: A Framework for Integrating Brand, Experience, and Value*. New Jersey: Willey.
9. Oslo Roundtable on SCP. (1994). <http://www.iisd.ca/consume/oslo000.html>. Ielādēts 2012. gada 09. 04 no <http://www.iisd.ca>: <http://www.iisd.ca/consume/oslo000.html>
10. Pine II, J. B., & Gilmore, J. H. (1998). Welcome to the Experience Economy. *Harvard Business Review*, July–August.
11. Pine, J. (2019, December 5). <https://blooloop.com/features/joe-pine-experience-economy/>. Retrieved from <https://blooloop.com>: <https://blooloop.com>
12. Pol, H. (2014, July 1). https://eventbrite-s3.s3.amazonaws.com/marketing/Millennials_Research/Gen_PR_Final.pdf. Retrieved from <https://eventbrite-s3.s3.amazonaws.com/>: https://eventbrite-s3.s3.amazonaws.com

AUDIT OF ASSETS OF LOCAL AND REGIONAL SELF- GOVERNMENTS

Dubravka Mahacek

*State Audit Office, Požega Regional Office
Associate Professor at Faculty of Medicine in Osijek, Croatia
dmahacek@vup.hr*

Aleksandar Vcev

*Professor at Faculty of Dental Medicine and Health in Osijek, Croatia
aleksandar.vcev@fdmz.hr*

Kristina Peic

*Polytechnic of Požega, Croatia
kpeic@vup.hr*

ABSTRACT

The aim of this paper is to investigate the assets of local and regional self-government units. The conducted research is based on two counties (Vukovar-Srijem and Međimurje) for 2013, 2015 and 2016. The assumption is that the assets of counties vary significantly in their structure and value. This is investigated from the asset information contained in financial audit reports and from the data obtained from performance audit related to the field of assets. Scientific literature from the said field was also used. Horizontal and vertical analysis of assets was carried out and the structure of total assets (financial and non-financial) is analysed. Audit reports have been drafted by the State Audit Office as the highest audit institution in the Republic of Croatia and are considered reliable as a source of information. The audit seeks to determine whether the entity's financial position is presented in a fair and objective manner. Objectivity criteria are consistent and concrete application of generally accepted accounting principles and standards. The task of the state audit is to provide information to citizens on business activities, and to inform the public about the management of public funds. The State Audit Report is submitted to the Croatian Parliament and to the public through the website of the State Audit Office. The paper confirms the assumption that counties differ significantly in the value of their assets and the structure of their available assets. Recommendations given by the audit were researched. The assumption that the audit resulted in numerous recommendations was confirmed. The assumption that recommendations were effective and that they resulted in better asset managements was also confirmed. This can be stated since recommendation evaluation was performed after a certain time has passed.

Keywords: *Audit, Report, Assets, Recommendations, Counties*

1. INTRODUCTION

The paper focuses on the assets of local units, which differ significantly by counties, as well as by cities and municipalities. Asset irregularities occur, and therefore audit orders and recommendations related to the area are presented. Performed audit results in an audit report. Pursuant to the annual work program, the entities that will be audited, whose financial statements will be reviewed and the time required to perform the audit is determined. The Auditor General decides when the audit will begin and the decision consists of the name of the local unit and the audit team members. At the same time, an internal audit decision is made, specifying the time required to perform the audit. An audit plan is then drafted, which contains the planned time for the audit to be conducted by individual audit areas and by members of the audit team.

The audit is announced to the local unit in advance and the required documentation is prepared. The subject of auditing local and regional self-government units is adoption and execution of the budget, i.e. the aim is to determine the regularity and compliance with legal regulations. Audit methods and procedures are applied and evidence needed to produce the report are collected. The report consists of several parts. The audited entity is obliged to follow the orders and recommendations given for the previous period. It is determined in which cases the orders and recommendations were acted upon and in which cases the orders and recommendations were not acted upon. The audit orders and recommendations for the period for which the audit was performed are an integral part of the audit report. The financial audit report provides an opinion that may be unconditional, conditional, reserved, and negative.

2. AUDIT OF LOCAL UNIT ASSETS

An audit of assets should establish the value of assets compared to the previous year and identify the reasons for significant discrepancies. The realization is determined in accordance with the legal provisions, statutes, regulations and decisions of the local unit. The compliance of internal acts and decisions in accordance with legal provisions is determined. Within the asset audit frame, the structure of the assets is determined, i.e. what constitutes financial and what constitutes non-financial assets.

2.1. Audit procedures, asset revenue realization and findings and recommendations

Assets auditing applies the same audit procedures as in other areas (revenues and receipts, expenses and expenditures, public procurement). An external auditor uses the work of others in his/her work, i.e. he/she may use the work of an internal auditor if an audit has been carried out in that area. "An internal auditor must rank potential areas of audit examination according to their risk criteria in order to determine priorities and focus the examination on highest risk areas and activities in business conduct of an enterprise" (Tušek, Žager, 2006, p.328). In most local units, this area was not subject to internal audit, and there was no possibility to use the work of others when performing external audit. The findings and recommendations of the external audit in the area of assets were numerous and significant. Assets auditing is a demanding and complex process. Business events related to the acquisition of assets directly from suppliers are easy to audit. "However, business events related to donated property, non-monetary exchange and assets built with own resources are more difficult to audit. For example, it may be difficult to check the value of an asset that has been exchanged with others, or to appropriately audit the accumulation of expenses of assets built with own resources. If such events exist, the inherent risk assessment should be increased." (Messier Jr., 1998, p. 557). The assets area was not subject to either internal or external audits, so there were no known errors, i.e. inherent risk assessment had to be increased. Each audited entity disposes of certain assets. Assets are necessary for performing the activity of the entity and they differentiate in their structure. At the end of the year, an inventory of assets is made. "The inventory of assets should include assets irrespective of whether the property relations have been resolved, or whether the property was leased etc." (Mahaček, 2016, p. 125). The size and share of each type of assets is different in individual counties, as well as in cities and municipalities. The type of assets varies significantly across levels of government (counties, cities, and municipalities). When looking at assets, it is also necessary to look at the revenue from assets at the disposal of local units. Overall revenue realization from assets at the level of Vukovar-Srijem County (which includes the county, cities and municipalities) for 2018 amounted to HRK 64,044,841.00 (Ministry of Finance, 2019), of which revenue from financial assets amounted to HRK 1,589,832.00. In 2018, Vukovar-Srijem County generated revenue from assets in the amount of HRK 15,171,259.00, of which revenue from financial assets amounted to HRK 1,558,031.00. At the county level, assets revenues in 2018 were 17.96% higher than in 2016, when they amounted

to HRK 54,295,759.00. Overall revenue from assets at the level of Međimurje County (which includes the county, cities and municipalities) for 2018 amounted to HRK 38,042,347.00 (Ministry of Finance), of which revenue from financial assets amounted to HRK 7,974,637.00. For 2018, Međimurje County generated revenue from assets in the amount of HRK 7,769,079.00, of which revenue from financial assets amounted to HRK 1,508,844.00. At the county level, assets revenues in 2018 were 15.1% higher than in 2016, and they amounted to HRK 33,062,773.00. If we compare the two observed counties, we see that at the level of all units within the county, revenue from assets for 2018 was significantly higher in Vukovar-Srijem County, i.e. 68.35% higher (64,044,841.00 / 38,042,347.00). At the county level, revenue from assets for 2018 was also significantly higher in Vukovar-Srijem County, by 95.28% (15,171,259.00 / 7,768,079.00). We can conclude that in both counties, revenues from assets in 2018 increased compared to 2016. Comparing the two counties, we have noticed a significantly higher realization of revenue from assets in absolute amount in Vukovar-Srijem County compared to Međimurje County.

2.1.1. Audit of assets of Vukovar-Srijem County

Vukovar-Srijem County comprises of five cities and 26 municipalities with a total population of 180,117, the county seat is in Vukovar. Table 1 below gives an overview of assets of Vukovar-Srijem County. The State Audit Office's audit reports for 2013, 2015 and 2016 were used as the source of the data.

Table 1: Value of assets of Vukovar-Srijem County (in HRK), source: authors according to data from financial audit reports for 2013, 2015 and 2016

No	Description	2013	2015	2016	2013 = 100	
					Index for 2015	Index for 2016
1.	Non-financial assets	51,897,305	52,722,453	52,705,453	101.59	101.56
1.1.	Natural resources (land)	8,108,161	8,408,160	8,408,160	103.70	103.70
1.2.	Buildings	41,407,792	42,151,279	41,639,467	101.80	100.56
1.3.	Plants and equipment	275,232	260,082	230,329	94.50	83.69
1.4.	Means of transport	281,029	377,709	347,970	134.40	123.82
1.5.	Non-financial assets in preparation	1,500,000	0	214,438	0.00	14.30
1.6.	Other non-financial assets	325,091	1,525,223	1,865,089	469.17	573.71
2.	Financial assets	47,121,103	40,599,837	44,992,784	86.16	95.48
2.1.	Funds	495,420	5,895,259	9,181,221	1,189.95	1,853.22
2.2.	Other claims	13,309,202	2,364,354	3,310,494	17.76	24.87
2.3.	Receivables for loans issued	16,357,608	16,604,085	16,751,379	101.51	102.41
2.4.	Stocks and shares of equity	8,599,300	8,761,069	10,993,669	101.88	127.84
2.5.	Receivables for operating revenues	7,353,386	6,831,963	4,636,842	92.91	63.06
2.6.	Receivables from sales of non-financial assets	1,006,187	143,107	119,179	14.22	11.84
Total assets		99,018,408	93,322,290	97,698,237	94.25	98.67

Local government assets consist of non-financial and financial assets. Assets refer to "resources controlled by the budget, i.e. the budget users as a result of past events and from which future benefits are expected to be exercised." (Ordinance on Budget Accounting and the Accounting Plan, Article 17). Assets are basically divided into non-financial assets and financial assets.

Non-financial assets include buildings, equipment, patents, licenses and all other assets. Financial assets include cash, stocks and shares of equity, receivables etc. In the observed years, the value of overall assets decreased in absolute terms. This is also confirmed by calculated base indexes. The value of assets at the end of 2016 decreased by 1.33% compared to 2013. Overall assets increased by 4.7% in 2016 compared to 2015, largely due to an increase in financial assets. Through 2013, 2015 and 2016 the share of financial and non-financial assets is equal. In the structure of assets, in absolute terms, the most significant are buildings, which accounted for 41.8% in 2013, 45.2% in 2015, and 42.6% of overall assets in 2016. In the structure of assets, within the financial assets, there are significant receivables for loans issued, which in 2013 had a share of 16.52%, in 2015, the share was 17.8%, and in 2016, the share was 17.1% in overall assets. Stocks and shares of equity increased in absolute terms and in 2016, their share was 11.3%, and receivables for operating revenues in 2016 had a share of 4.7% in overall assets.

2.1.2. Audit of assets of Međimurje County

Međimurje County comprises of three cities and 22 municipalities with a total population of 113,804. The county seat is in Čakovec. Table 2 below gives an overview of assets of Međimurje County. The State Audit Office's audit reports for 2013, 2015 and 2016 were used as the source of the data.

Table 2: Value of assets of Međimurje County (in HRK), source: authors according to data from financial audit reports for 2013, 2015 and 2016

No	Description	2013	2015	2016	2013 = 100	
					Index for 2015	Index for 2016
1.	Non-financial assets	243,981,726	248,432,175	250,424,464	101.82	102.64
1.1.	Natural resources (land)	155,902,974	152,041,444	152,041,443	97.52	97.52
1.2.	Buildings	80,282,172	80,667,690	79,710,723	100.48	99.29
1.3.	Plants and equipment	281,382	364,217	331,928	129.44	117.96
1.4.	Means of transport	170,264	65,540	37,649	38.49	22.11
1.5.	Non-financial assets in preparation	6,905,429	13,946,549	17,029,576	201.96	246.61
1.6.	Other non-financial assets	439,505	1,346,735	1,273,145	306.42	289.68
2.	Financial assets	34,089,433	19,384,471	15,477,334	56.86	45.40
2.1.	Funds	1,860,222	2,592,606	541,518	139.37	29.11
2.2.	Other claims	9,747,478	1,118,780	1,048,446	11.48	10.76
2.3.	Receivables for loans issued	158,480	4,000	0	2.52	0.00
2.4.	Stocks and shares of equity	16,341,152	5,873,952	5,857,152	35.95	35.84
2.5.	Receivables for operating revenues	5,972,888	8,092,281	6,327,366	135.48	105.93
2.6.	Receivables from sales of non-financial assets	9,213	1,702,852	1,702,852	18,483.14	18,483.14
Total assets		278,071,159	267,816,646	265,901,798	96.31	95.62

In the observed years, the value of overall assets decreased in absolute terms. This is also confirmed by calculated base indexes. The value of assets at the end of 2016 decreased by 4.38% compared to 2013. Overall assets decreased in 2016 compared to 2015 by 0.71%. Non-financial assets through 2013, 2015 and 2016 accounted for a much larger share than financial assets. In the structure of assets, in absolute terms, the most significant are natural resources (land), which accounted for 56.1% in 2013, 56.8% in 2015, and 57.2% in overall assets in 2016. In the structure of assets, within the financial assets, there are significant receivables for loans issued, which in 2013 had a share of 5.9%, in 2015 the share was 2.2%, while in 2016 the share was 2.2 % in overall assets. Receivables for operating income were significant and in 2013 they accounted for 2.15%, in 2015 they accounted for 3.02% and in 2016 they accounted for 2.38% of overall assets. At the end of 2016, the total assets of Međimurje County increased by HRK 168,203,561.00 or 172.17% compared to Vukovar-Srijem County. The structure of assets of Međimurje County is significantly different from the assets structure of Vukovar-Srijem County.

3. AUDIT ORDERS AND RECOMMENDATIONS

This paper examines audit orders and recommendations regarding the management and disposal of real estate, which makes up a significant proportion of assets of local units. The State Audit Office has conducted an audit of the management and disposal of real estate and has compiled reports for each county. In a report for Međimurje County, the State Audit Office found that the management and disposal of real estate of Međimurje County, the cities of Čakovec and Prelog and the municipalities of Domašinec, Kotoriba, Nedelišće, Orehovica and Sveti Martin na Muri is efficient, while in all other units in the area of Međimurje County the same is partially effective. The State Audit Office assessed that the management and disposal of real estate in Vukovar-Srijem County and the City of Vinkovci is efficient, while in all other local units in the Vukovar-Srijem County the same is partially effective. In addition to the financial audit, performance audits are also performed. They focus on particular areas, programs and projects. The financial audits carried out in local units identified irregularities and omissions related to the recording, listing and evaluation, and leasing, purchase and sale of assets. The disposal of and management of certain types of assets was not regulated in detail by laws or regulations, and different actions were observed when disposing of the same types of assets. Therefore, there was a need to audit the effectiveness of real estate owned by the local units. Following the audit, a summary report was prepared. It states that the management and disposal of real estate in 32 local units is effective, while in all other local units it is partially effective. Property management and disposal has been evaluated as effective in seven counties (Karlovac, Koprivnica-Križevci, Međimurje, Primorje-Gorski Kotar, Virovitica-Podravina, Vukovar-Srijem and Zagreb), 19 cities (Buzet, Čakovec, Duga Resa, Gospić, Karlovac, Kastav, Ivanec, Labin, Ludbreg, Opatija, Ozalj, Prelog, Senj, Slavonski Brod, Slunj, Umag-Umag, Vinkovci, Virovitica and Zaprešić) and six municipalities (Domašinec, Kotoriba, Nedelišće, Orehovica, Rakovica and Sveti Martin na Muri). The methods of gathering and analysing evidence used in the audit process are:

- consistency of the application of laws and other regulations and internal acts of local units that prescribe procedures and activities related to real estate were examined
- business books and bookkeeping documents that serve as evidence of business events were checked and data collected through questionnaires were analysed
- interviews with responsible persons were conducted and explanations were provided regarding certain business events

After the performance audit was finalized, recommendations were made. The objectives of the audit were to evaluate the integrity of the real estate data, the regulatory arrangements for

managing and disposal of real estate, whether local units manage and dispose of real estate in accordance with regulations and effectively and to evaluate the effectiveness of internal control systems in managing and disposal of real estate. We have investigated the orders and recommendations given in the two counties observed and list them below:

- determine the actual state of assets which the local unit manages and disposes of or should manage and dispose of in accordance with the laws and other regulations, and for the said property check the registration of ownership rights in the land registers
- record business changes related to real estate in the books of accounts, harmonize data on the value of long-term non-financial assets in the analytical accounting records and general ledger, conduct a complete inventory of assets and liabilities, and record the assets whose procurement process is completed in the relevant asset accounts and perform value adjustments. In the books of account, record land by type, amount and value, as well as all assets for which property relations have been resolved, and for property for which property relations have not been resolved, undertake activities for resolving and recording in the books of accounts. Initiate the process of registering property rights in favour of the local unit in the land registers of real estate belonging to the local unit and harmonize the data in the land registers and cadastre
- organize and maintain the property register in the manner and data prescribed for the state property register, and programmatically link the property register with the books of accounts, so that the same data is not repeatedly entered
- determine the purpose of the property managed and disposed of by the local unit, and establish records of the realized income and expenses from the management and disposal of real estate for each real estate unit, so that the efficiency of management and disposal of real estate can be determined and monitored
- plan activities for resolving property-legal relations and evaluation and recording of assets in the books of accounts in order to improve the performance of business of recording assets in the books and property register, uniformity of treatment and accuracy of data
- adopt a property management and disposal strategy and an annual asset management and disposal plan. Arrange the authority, procedures and criteria for all forms of asset management and disposal planned by strategic documents
- in accordance with the provisions of the Right of Access to Information Act, publish a tender for the disposal of real estate on the web pages of the local unit
- in accordance with the principle of good management and for the purpose of efficient disposal of assets and budgetary funds in the acquisition of real estate, to make an analysis to determine the economic justification of the proposed or selected form of acquisition of real estate. For properties that are not in operation or are not appropriate for use, take measures to arrange them, i.e. put them into operation according to their intended purpose. Prior to the sale of real estate, it is proposed to determine the reasons why the real estate is for sale, i.e. to justify the sale of real estate
- lease business premises and conclude lease agreements in accordance with the provisions of the Lease and Sale of Business Premises Act and the acts of the local unit. When granting business premises for use to associations in the form of non-financial support for the financing of programs and projects, conduct a public tender in accordance with the provisions of the Associations Act and the Regulation on the Criteria, Measures and Procedures for financing and contracting programs and projects of interest for the general good carried out by the associations
- in cases where a long period of time has passed from the appraisal to the sale of the real estate, determine whether there were any changes that influenced, or could have affected the appraised value of the asset and, if necessary, re-appraise the asset value before the tender

- amend internal acts, i.e. adopt written procedures that should detail the procedures for managing and disposing of real estate, as well as the powers and competencies of persons in charge of certain activities, deadlines for performing activities and other issues in order to improve the way in which the said activities are organized.

Other failures were noted in other local units. The implementation of these recommendations would contribute to the elimination of identified weaknesses and omissions and would increase the efficiency of management and disposal of real estate. Data on the value of non-financial assets from the consolidated report relating to the value of non-financial assets of local units for 2012, 2013 and 2014 (State Audit Office, 2016, p. 6) were used for drafting Table 3. This table provides an overview of the data for the two observed counties, which are observed in relation to the overall data covering 20 counties and the City of Zagreb. According to the data presented in Table 3, we observe that in 2012, the two observed counties had a share of 4.13% in the overall value of non-financial assets of all local units, while in 2013, the share was 4.59% and in 2014 it was 4.56%. The stated participation of the observed counties in the overall value of non-financial assets of all local units is not significant. Chain indices were calculated showing an increase in the value of non-financial assets in 2013 compared to 2012, and in 2014 compared to 2013 in both counties. A significant increase in the value of non-financial assets is seen in Vukovar-Srijem County in 2013 compared to 2012, by 38.43%. In Međimurje County, the increase in 2013 compared to 2012 amounted to 2.81%, while the increase in 2014 compared to 2013 amounted to 1.50%, which is not significant. From the above data, we can see that non-financial assets of the two counties, in the overall value of non-financial assets of all local units, do not have a significant share. A significant increase in the value of non-financial assets in 2013 compared to 2012 is seen in Vukovar-Srijem County. If one considers the value of non-financial assets by levels of local government, "in the structure of the overall value of non-financial assets of all local units for 2014, the largest share is held by non-financial assets of cities (64.6%), followed by municipalities (20.7%), the City of Zagreb (12.7%), and non-financial assets of counties account for 2.0% of the overall value of non-financial assets." (State Audit Office, 2016, p. 7).

Table 3: Value of non-financial assets of two counties, Source: authors according to data from the consolidated report on performance audit in the area of management and disposal of real estate of local and regional self-government units

	Vukovar-Srijem	Međimurje	Total for two counties	Total non-financial assets of all counties (20 counties and the City of Zagreb)	share (3/4)
	1	2	3	4	5
2012	1,551,493,568	1,590,512,275	3,142,005,843	76,160,787,325	4.13
2013	2,147,804,189	1,635,252,383	3,783,056,572	82,485,549,321	4.59
2014	2,274,017,899	1,660,198,849	3,934,216,748	86,268,356,225	4.56
Index 2013/2012	138.43	102.81	120.40	108.30	-
Index 2014/2013	105.90	101.50	104.00	104.60	-

Cities are the level of local government with the largest share in the structure of non-financial assets, while numerically speaking, municipalities are the most numerous.

4. CONSLUSION

The conducted research has confirmed that the assets of local and regional self-government units is an important area that should be given due attention. Therefore, we investigated the assets of two counties and their structure and movement over a period of time. In addition, assets income in these counties was also investigated. It was confirmed that the two observed counties differ significantly in the value of assets at their disposal and in the structure of their assets. The overall assets of Međimurje County are significantly higher than those of Vukovar-Srijem County. Natural resources (land) have the most significant share in assets structure, while buildings had the most significant share in assets structure of Vukovar-Srijem County. Comparing the two counties, we have noticed a significantly higher realization of property revenues in absolute amount in Vukovar-Srijem County compared to Međimurje County. Audit orders and recommendations regarding the management and disposal of real estate, which constitute a significant proportion of assets of local units, were explored. It has been determined that there are various irregularities and omissions that need to be addressed. The value of non-financial assets at the local government level is significant in cities and therefore attention needs to be paid to implementing the recommendations. This has the effect of satisfying the needs of living and working in a particular area. It would be useful to investigate the structure of assets of local units and, in that regard, the revenues generated. Existing assets need to be put into service in order to increase the efficiency of management and disposal of real estate.

LITERATURE:

1. Mahaček, D. (2016): Revizija u zdravstvenome sustavu, Medicinski fakultet u Osijeku, ISBN 978-953-7736-28-6, pp. 125.
2. Ministry of Finance: Ostvarenje proračuna JLP(R)S za period 2014. – 2018., Retrieved on October 27, 2019 from : <http://www.mfin.hr/hr/ostvarenje-proracuna-jlprs-za-period-2014-2018>
3. Ministry of Finance: Pravilnik o proračunskom računovodstvu i Računskom planu, Official Gazette 124/14, 115/15, 87/16 and 3/18
4. State Audit Office, Čakovec, June 2014, Izvješće o obavljenoj reviziji Međimurska županija, Retrieved on November 8, 2019 from <http://www.revizija.hr/izvjesca/2014/rr-2014/lokalne-jedinice/zupanije/medimurska-zupanija.pdf>
5. State Audit Office, Čakovec, July 2016, Izvješće o obavljenoj reviziji Međimurska županija, Retrieved on November 10, 2019 from <http://www.revizija.hr/datastore/filestore/86/medimurska.pdf>
6. State Audit Office, Čakovec, July 2017, Izvješće o obavljenoj reviziji Međimurska županija, Retrieved on November 12, 2019 from <http://www.revizija.hr/datastore/filestore/125/MEDIMURSKA.pdf>
7. State Audit Office, Vinkovci, July 2014, Izvješće o obavljenoj reviziji Vukovarsko-srijemska županija, Retrieved on November 14, 2019 from <http://www.revizija.hr/izvjesca/2014/rr-2014/lokalne-jedinice/zupanije/vukovarsko-srijemska-zupanija.pdf>
8. State Audit Office, Vinkovci, July 2016, Izvješće o obavljenoj reviziji Vukovarsko-srijemska županija, Retrieved on November 16, 2019 from <http://www.revizija.hr/datastore/filestore/86/vukovarsko-srijemska.pdf>
9. State Audit Office, Vinkovci, July 2017, Izvješće o obavljenoj reviziji Vukovarsko-srijemska županija, Retrieved on November 18, 2019 from http://www.revizija.hr/datastore/filestore/125/VUKOVARSKO_SRIJEMSKA.pdf

10. State Audit Office, Zagreb, March 2016, Izvješće o obavljenoj reviziji učinkovitosti upravljanje i raspolaganje nekretninama jedinica lokalne i područne (regionalne) samouprave, Retrieved on November 20, 2019 from <http://www.revizija.hr/izvjesca/2016/rr-2016/revizije-ucinkovitosti/upravljanje-i-raspola-ganje-nekretninama-lokalnih-jedinica/upravljanje-i-raspologanje-nekretninama-skupno-izvjesce.pdf>
11. State Audit Office, Čakovec, January 2016, Izvješće o obavljenoj reviziji upravljanje i raspolaganje nekretninama jedinica lokalne i područne (regionalne) samouprave na području Međimurske županije, Retrieved on November 22, 2019 from <http://www.revizija.hr/izvjesca/2016/rr-2016/revizije-ucinkovitosti/upravljanje-i-raspolog-anje-nekretninama-lokalnih-jedinica/medimurska-zupanija.pdf>
12. State Audit Office, Vukovar, January 2016, Izvješće o obavljenoj reviziji upravljanje i raspolaganje nekretninama jedinica lokalne i područne (regionalne) samouprave na području Vukovarsko-srijemske županije, Retrieved on November 24, 2019 from <http://www.revizija.hr/izvjesca/2016/rr-2016/revizije-ucinkovitosti/upravljanje-i-raspolog-anje-nekretninama-lokalnih-jedinica/vukovarsko-srijemska-zupanija.pdf>
13. Tušek, B. & Žager, L., (2006), Revizija, Hrvatska zajednica računovođa i financijskih djelatnika, Zagreb, pp. 328.
14. William F. Messier Jr., (1998), Revizija – Priručnik za revizore i studente, Faber & Zgombić Plus, Zagreb, pp. 557.

VALUATION AND CLASSIFICATION OF FIXED ASSETS IN SELECTED LOCAL GOVERNMENT

Magdalena Glebocka

*University of Economics in Katowice, Poland
magdalena.glebocka@ue.katowice.pl*

Ewa Mackowiak

*University of Economics in Katowice, Poland
ewa.mackowiak@ue.katowice.pl*

ABSTRACT

Fixed assets and intangible assets remain one of the most difficult accounting issues in the entities of the public finance sector. In private sector entities, the issue was regulated by the Accounting Act in 1995. In the public finance sector, on the other hand, it was addressed in the Regulation of 28 July 2006 on detailed accounting principles and the chart of accounts for the state budget, budgets of local government units and certain units of the public finance sector. Changes in public finance resulting from the amendment to the Public Finance Act also led to an amendment to the Regulation. The new provisions were adopted by the Regulation of the Minister of Development and Finance as of 13 September 2017 on special accounting principles and the chart of accounts for the state budget, budgets of local government units, budgetary units, local government budgetary establishments, state special-purpose funds and state budgetary units based outside the borders of the Republic of Poland. Pursuant to the Regulation, entities of the public finance sector keep accounts in compliance with the provisions of the Accounting Act, taking into account the principles set out in the Act on Public Finance. In addition, paragraph 1 of Article 2 of the Accounting Act stipulates that the provisions also apply to: communes, poviats, voivodships and their associations, as well as to:

- a) state, communal, powiat and voivodship budgetary units,*
- b) communal, powiat and voivodship budgetary establishments,*
- c) state special-purpose funds*

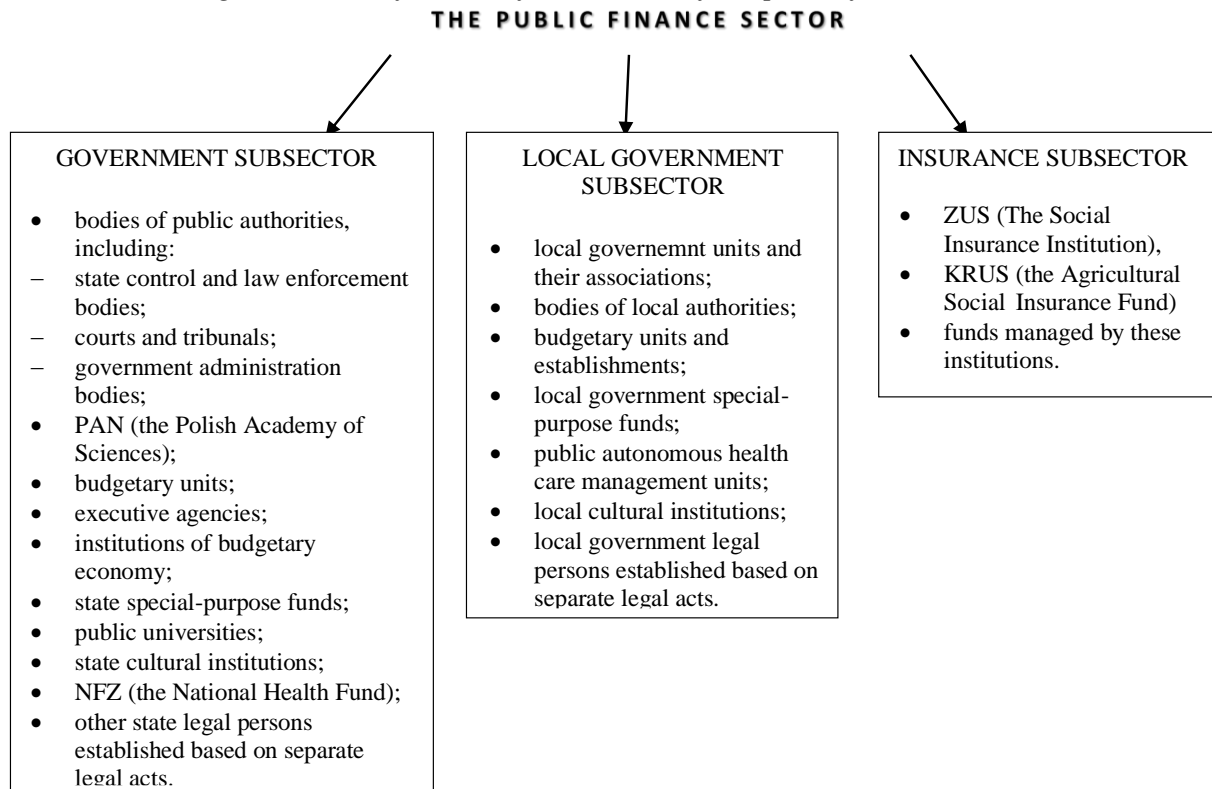
The article aims to propose a different method for the recognition and depreciation of fixed assets in local government units and their impact on the financial result of a local government unit.

Keywords: *public finance sector, valuation, fixed assets*

1. INTRODUCTION

The principles of the functioning and establishment of units of the public finance sector are defined in the Act of 27 August 2009 on public finance. Chapter 3 provided the detailed description of their functioning and types. According to Article 9, the public finance sector is composed of: bodies of public authorities, including government administration bodies, state control and law enforcement bodies, as well as courts and tribunals, local government units, metropolitan associations, budgetary units, local government budgetary establishments, executive agencies, budgetary and state economy institutions, state special-purpose funds, ZUS (The Social Insurance Institution), KRUS (the Agricultural Social Insurance Fund), NFZ (the National Health Fund), public autonomous health care management units, public universities, PAN (the Polish Academy of Sciences), state and local cultural institutions, and others.

Figure following on the next page

Figure 1: Classification of the entities of the public finance sector

Source: own elaboration

The units of the public finance sector include budgetary units and local government budgetary establishments. Budgetary units are organizational public finance sector units without legal personality, which cover their expenses directly from the budget, while transferring their revenue to the income account of the state budget or the budget of a local government unit. Budgetary units are established, merged and closed by ministers, heads of central offices and voivods (these are state budgetary units). When they are established by constitutive bodies of local government units, they are recognized as communal, poviats or voivodship budgetary units. A budgetary unit performing tasks for government administration is set up by the Prime Minister. The budgetary unit operates based on the statute. The statute has to specify the unit's name, seat and scope of activity. The budgetary unit is also obliged to have a statement of revenue and expenditure, which is used for accounting purposes. The basis of the financial management of a budgetary unit is the statement of revenue and expenditure, referred to as the unit's financial plan. Local government budgetary units conducting activity specified in the Act of 7 September 1991 on the education system use a separate account for collecting revenue defined in the resolution adopted by the constitutive body of the local government unit, in particular from:

- inheritances, bequests and donations in cash to the budgetary unit,
- compensation and payments for lost or damaged property that is managed or used by a budgetary unit,
- activity beyond the scope of core activity, specified in the statute, involving, for example, provision of services, such as training and information services,
- examination fees, the issuing of certificates, and the verification of qualifications,
- food and accommodation charges for students in dormitories and boarding houses, paid by parents or guardians,

- subsidies and other payments applicable under the EU's Common Agricultural Policy, received based on separate regulations.¹

The Act on Public Finance also stipulates how the own revenues of budgetary units can be spent (Zysnarska A. 2008, p. 19):

1. to finance current and property-related expenses related to the revenue generated by the budgetary unit from fees for releasing tender documentation,
2. towards the goals indicated by the donor,
3. on renovation or restoration of property when revenue is generated:
 - from compensation and payments for lost or damaged property transferred to a budgetary unit for management or use.

The local government budgetary establishment is an organizational unit of the public finance sector that:

1. performs specific tasks in return for payment,
2. covers the costs of its operations from its own revenue with the following reservations:
 - a) the local government budgetary establishment may receive grants and targeted grants from the budget of the local government unit for current tasks co-financed with the funds referred to in Article 5, paragraph 1, points 2 and 3 (the Act on Public Finance);
 - b) targeted grants for financing or co-financing the costs of investment projects. To the extent specified in separate acts, the local government budgetary establishment may receive a subsidy.

2. CLASSIFICATION OF FIXED ASSETS ACCORDING TO THE ACCOUNTING ACT

The Accounting Act defines assets as the property that is controlled by the entity and has a reliably assessed value. They originate in past events and will bring economic benefits in the future. Assets are classified based on the criterion of time, resulting in the division into fixed and current assets. Fixed assets include intangible assets, property, plant and equipment, long-term receivables, long-term investments and long-term accruals and deferred income. The Accounting Act, in paragraph 1 of Article 3, defines fixed assets as tangible fixed assets and their equivalents, with an expected useful economic life longer than one year, complete, fit for use and designed to serve an undertaking's purposes. They include in particular:

- a) immovable property - including land, the perpetual usufruct right to land, buildings and structures, as well as premises owned on a separate basis, cooperative ownership rights to residential premises, and cooperative rights to commercial premises,
- b) plant and machinery, means of transport and other things,
- c) improvements in third party items of property, plant and equipment,
- d) livestock.

The above list shows that fixed assets are mainly assets that have the physical form, but they may also include assets that are of different nature. The best example involves property rights, e.g. the perpetual usufruct right to land. Fixed assets also include assets which are complete at the time of recording them as owned by an undertaking and they do not need to be assembled, repaired or renovated in order to be used for their intended purpose for a period longer than one year as from the balance sheet date. The period of use is determined separately in each economic undertaking. Notably, the Accounting Act does not require that an undertaking should own property, plant and equipment based, for example, on the title deed.

¹ Cf. Act of 27 August 2009 on public finance, Article 11a

The undertaking may exercise control over assets based on lease contracts that fulfill the conditions for transferring control to the user. This means that fixed assets are maintained in connection with an undertaking's statutory activity (manufacturing, trade, administration). Fixed assets may also take the form of operational leases, they may be made available for use, or they may be used based on a rental or lease agreement. Such assets will be recognized as an undertaking's assets if the contract fulfills at least one of the conditions specified in items 1-7, paragraph 4, Article 3 of the Accounting Act:

- ownership of the assets is transferred to the user at the end of the term for which it was concluded;
- it confers the right for the user to acquire the assets following the expiry of the term for which it was concluded at a price lower than the market price;
- the term for which it was concluded corresponds, to a major extent, to the expected useful economic life of the fixed asset or property right, save that it may not be shorter than 3/4 of that period. The ownership title to the assets may be transferred to the user following the expiry of the term for which the contract was concluded;
- the total charges, less the discount, determined at the date of the contract's conclusion and payable during the term of the contract, exceed 90 per cent of the market value of the assets at that date. The total charges include the terminal value of the assets that the user undertakes to pay for the transfer of the ownership title. The total charges do not include the payments to the financing party for additional services, taxes or insurance premiums relating to the asset if the user covers these in addition to the charges for use;
- it contains a pledge by the financing party to conclude another contract with the user to give the same asset for use against remuneration or extend the existing contract on more advantageous terms and conditions than those stipulated in the existing contract;
- it provides for the possibility of terminating it, subject that any resulting costs and losses incurred by the financing party will be borne by the user;
- the asset has been adapted to the user's individual needs.

The Classification of Fixed Assets (KŚT) was introduced pursuant to the Regulation of the Council of Ministers of 10 December 2010 and has remained in force since 1 January 2011. It replaced the Generic Classification of Fixed Assets (KRŚT), adopted by the decision No. 51 of the President of the Central Statistical Office on 17 December 1991 on the Generic Classification of Fixed Assets (Official Journal No. 21, item 132, Central Statistical Office). The introduction of the new classification was associated with the changes in many legal acts. The new definition of fixed assets was also related with the need to account for new technical and technological solutions in the classification. It is also associated with the new classifications of the Polish Classification of Products and Services (PKWiU) and the Polish Classification of Buildings and Structures (PKOB).² The rules for classifying fixed assets are primarily based on the functions they perform in an undertaking. Pursuant to the Regulation of the Council of Ministers of 10 December 2010, fixed assets include:

- immovable property (land, buildings, civil engineering structures),
- machines, technical equipment and tools,
- means of transport for persons or goods,
- livestock.

Taking into account the principles for classifying fixed assets discussed, the first level of the classification distinguishes the following 10 single-digit groups of fixed assets:

- Group 0 – Land,

² K. Sawicki, „Rachunkowość finansowa przedsiębiorstw”, Polskie Wydawnictwo Ekonomiczne, Warszawa 2005, p. 61

- Group 1 – Buildings and premises and cooperative rights to commercial premises and cooperative ownership rights to residential premises,
- Group 2 – Civil engineering facilities,
- Group 3 – Power boilers and machines,
- Group 4 – General purpose machinery, equipment and apparatus,
- Group 5 – Specialist machinery, equipment and apparatus,
- Group 6 – Technical devices,
- Group 7 – Means of transport,
- Group 8 – Tools, instruments, movables and equipment, not classified elsewhere,
- Group 9 – Livestock.³

3. THE CLASSIFICATION OF FIXE ASSETS IN BUDGETARY UNITS AND LOCAL GOVERNMENT BUDGETARY ESTABLISHMENTS

In budgetary units and local government budgetary establishments, property, plant and equipment are classified as follows:

- fixed assets,
- other fixed assets,
- investments (fixed assets under construction).

The Regulation of the Minister of Development and Finance defines fixed assets as follows: assets referred to in item 15, paragraph 1, Article 3 of the Accounting Act, including fixed assets owned by the State Treasury or local government units, received in management or used and intended for the needs of the unit. In consequence, these definitions show that, in accordance with item 15, paragraph 1, Article 3 of the Accounting Act, in order to recognize a given asset as a fixed asset, it must meet the following conditions jointly:

- 1) must be a tangible fixed asset (or its equivalent);
- 2) its expected useful life must exceed one year;
- 3) it must be:
 - complete,
 - usable,
 - intended for the use of the unit.

If land granted in permanent management to a budgetary unit has these characteristics, the head of the unit will be obliged to include it in the unit's accounting books. Other fixed assets are the assets listed in paragraph 3, Article 6 of the Regulation, which are financed with funds for current expenses (except for the first equipment of a new facility, which is also financed with investment funds). They include:

- books and other library collections (provided that a library operates in the unit),
- teaching resources for schools and education establishments,
- clothing and uniforms,
- furniture and carpeting,
- livestock,
- fixed assets of the initial value not exceeding the amount specified in the regulations on corporate income tax, for which depreciation write-offs are recognized as tax-deductible costs in 100% of their value upon their adoption for use.

³ Regulation of the Council of Ministers of 10 December 2010 on the Classification of Fixe Assets (Journal of Laws 2010, No. 242, item 1622, as later amended), p. 16362

Budgetary units and local government budgetary establishments can perform a one-time depreciation of other fixed assets in the month when they are taken over for use, regardless of their value. The exception is the last group of other fixed assets, the so-called low-value fixed assets. The Accounting Act allows for a one-time depreciation, i.e. a write-off of a fixed asset as a cost, however it does not indicate what a low value means. This value was specified in the Act on Income Tax and currently amounts to PLN 10,000. Interestingly, a one-time write-off of other fixed assets is a possibility, but not an obligation.

4. PRINCIPLES FOR MEASURING FIXED ASSETS IN UNITS OF THE PUBLIC FINANCE SECTOR

The performance of tasks assigned to units of the public finance sector requires the involvement of public funds. The assessment of the proper management of these units is carried out based on how funds are used, basically whether they are allocated accurately and effectively and whether expenses are incurred adequately in relation to the assigned tasks. The assets at the disposal of public sector entities are public property, which is why the processes taking place in the public sector are subject to control. The assessment is performed based on the information included in a unit's accounting records. Accounting as a system of mapping, predicting and communicating the states and dynamics of an economic unit's resource position performs this function regardless of which sector the unit belongs to [Nowak, 2014, p. 193]. In units of the public finance sector, the accounting policy is closely related to the principles of its functioning regulated by the Act of 27 August 2009 on Public Finance. Pursuant to paragraph 1, Article 40 of the Act on Public Finance, entities of the public finance sector keep accounts in compliance with the provisions of the Accounting Act, taking into account the specific principles set out in the Act on Public Finance and further specified in the Regulation of the Minister of Finance of 13 September 2017 on special accounting principles and the chart of accounts for the state budget, budgets of local government units, budgetary units, local government budgetary establishments, state special-purpose funds and state budgetary units based outside the borders of the Republic of Poland [Regulation]. The special accounting principles that apply to the public sector concern [Paragraph 2, Article 40 of the Act on Public Finance]:

- 1) records of budgetary implementation;
- 2) records of task-based budgetary implementation;
- 3) records of fixed assets owned by the State Treasury or local government units;
- 4) measurement of individual assets and liabilities;
- 5) preparation of financial statements and recipients of these reports and they shape individual features of the accounting policy of a particular unit.

The useful life of fixed assets means that the value of economic benefits determined at the time of their initial recognition may change over time. Measurement in accounting is continuous and is performed on a regular basis to assess probable economic benefits [Hońko, 2013, p. 71]. One of the most important elements of the accounting policy involves the choice of the methods of measurement of assets and liabilities. In terms of the reliability of the unit's image presented in the financial statements, balance sheet valuation is of particular importance. It should be emphasized that the value of fixed assets is a significant parameter of the assessment of:

- the financial condition of the unit,
- its capacity for continued operations,
- transformations,
- restructuring,
- sanation [Chluska, 2016, p. 38].

In units of the public finance sector, the principles of the initial and subsequent measurement of fixed assets originate in the provisions of the Accounting Act and the Regulation. The National Accounting Standard 11 'Fixed assets' complements the statutory regulations. Due to the differences in the rules concerning the financing of public entities, the NAS 11 guidelines can be applied on a voluntary basis. Under the Regulation, the specific principles for measurement (and recording of fixed assets) that should be taken into account in the process of creating the accounting policy relate to:

- the separation of the group of other fixed assets subject to one-time depreciation,
- the measurement of fixed assets owned by the State Treasury or local government units received free of charge, based on the decision of the competent authority at the value specified by the decision.

The method of initial recognition of fixed assets in the accounting books depends, among others, on:

- sources of financing,⁴
- intended use and
- initial value.

The correct determination of the initial value⁵ of a fixed asset affects not only the way of its initial recognition, but also the amount of costs. Depending on the method of the acquisition⁶ of a fixed asset, its initial value is determined by such measurement parameters as (Table 1):

- the purchase price,
- the manufacturing cost,
- the selling price, or
- another value.

Table following on the next page

⁴ Depending on the method of financing, fixed assets are divided into basic fixed assets or other fixed assets. Basic fixed assets are financed with funds allocated for investment financing. Other fixed assets, on the other hand, are funded from current expenditure and are subject to depreciation in full at the time they are released for use, with the exception of the situation when such assets are used to equip a new building under construction, which is also financed from investment funds.

⁵ The initial value is the purchase price, the cost of manufacture or other value according to which the fixed asset was first recognized in the unit's accounting books. Upon recognition, the initial value of a fixed asset is equal to its gross book value [point 3.5 of NAS 11].

⁶ Pursuant to point 3.4 of NAS 11, the acquisition of a fixed asset includes all factual and legal activities resulting in the recognition of a fixed asset, acquired in particular through purchase, manufacture, financial leasing, unpaid receipt, payment in kind (in-kind contribution), exchange, reclassifying from investment property, in the accounting books.

Table 1: Principles for determining the initial value of fixed assets.

Acquisition method	Measurement parameter	Initial value
Purchase	The purchase price	<p>The purchase price [paragraph 2, Article 28 of the Accounting Act] is:</p> <ul style="list-style-type: none"> the purchase price of an asset comprising the amount payable to the seller less the deductible value added tax and excise duty, in the case of imports, increased by any public levies increased by any costs connected directly with the purchase and adaptation of the asset to make it fit for use or trading, including transport, loading, unloading, storage costs or costs of introducing to trading, less any rebates, discounts and any other similar reductions or benefits. <p>If it is impossible to determine the acquisition price of an asset, including in particular an asset received free of charge, including as a donation, it is measured at the selling price of an identical or similar asset.</p>
Internal manufacture	The manufacturing cost	<p>The manufacturing cost includes:</p> <ul style="list-style-type: none"> the value at the purchase price of tangible assets and external services used, salaries and contributions, other costs that can be included in the value of the fixed assets.
In-kind contribution (non-cash contribution)	The selling price Fair value	<p>The net selling price (value) of an asset is its selling price recoverable on the balance sheet date, net of value added tax and excise duty, less any rebates, discounts and any other similar reductions and costs to adapt the asset for sale and to sell it, increased by any targeted subsidy receivable. If it is impossible to determine the net selling price of an asset, its fair value should be otherwise determined as of the balance sheet date [paragraph 5, Article 28 of the Accounting Act].</p>
Free-of-charge acquisition	Value specified in the decision issued by a competent body	<p>The fair value is the amount for which a given asset could be exchanged and the liability paid off as a market transaction between willing, well informed and unrelated parties [paragraph 6, Article 28 of the Accounting Act].</p> <p>Value specified in the decision of the competent authority on the handover of particular fixed assets.</p>

Source: own elaboration

The definition of permanent management is given in paragraph 1, Article 43 of the Act on Real Estate. The purchase price and the manufacturing cost of fixed assets (and fixed assets under construction) comprise the total costs incurred by the unit during the period of construction, assembly, adaptation and improvement up to the balance sheet date or the date they are accepted for use, including:

- non-deductible value added tax and excise duty,
- the cost of servicing the liabilities incurred to finance them and the exchange rate differences related to them, less any related gains [paragraph 8, Article 28 of the Accounting Act].
- real estate by an organizational unit.

Particular fixed assets are recognized in the unit's accounting books at their initial value [item 6.1. NAS 11], i.e. the purchase price or the manufacturing cost [paragraphs 2 and 8, Article 28,

paragraphs 3 and 8, Article 28 of the Accounting Act] increased by the costs of external financing [paragraphs 8, Article 28 of the Accounting Act]. The statutory regulations ensure the right to capitalising the costs of external financing in the initial value of fixed assets. In the case of budgetary units and establishments, the initial value of fixed assets does not include costs of external financing, because the costs of servicing the liabilities incurred to finance the acquisition of a fixed asset are charged to the budget that incurred them. If it is not possible to determine the purchase price or the manufacturing cost of a fixed asset (for example in relation to the disclosed surpluses), its initial value is determined based on the net selling price of the same or a similar asset [item 6.30. NAS 11]. Budgetary units and establishments may receive, free of charge, into management or perpetual usufruct, fixed assets owned by the State Treasury or local government units. In such a case, the initial value of fixed assets is set by the decision of the competent authority making the transfer [paragraph 1, Article 6 of the Regulation]. In a situation when used fixed assets are transferred between budgetary units and establishments, their initial value corresponds to the gross value and the depreciation recorded in the books of the transferring entity. However, a situation may arise when units receive fixed assets free of charge based on decisions that do not provide information so as to their value. In consequence, they need to estimate the value of such assets based on the selling price of the same or similar asset. If the subject of the transfer is real estate, the measurement method⁷ is specified in the Act of 21 August 1997 on real estate management [the Act on Real Estate]. Accordingly, the value of real estate received in permanent management determined in this way may become the basis for determining the initial value of the real estate received free of charge or as a donation to the receiving unit. In the event that the transfer involves real estate that was previously included in the real estate resource, the measurement performed for the purpose of the decision on permanent management cannot be used as the measurement for the purpose of accounting records (it cannot be used as the initial value of the real estate). This would breach the continuity of records required by the principle of historical cost. The transfer of real estate between the organizational units of the same owner cannot justify a change in the measurement of real estate, nor can an update performed by a surveyor in order to determine the permanent management fee [Rup, 2017, p. 105]. The acquisition of fixed assets in exchange for budget appropriations constitutes a special case. Pursuant to paragraph 1, Article 66 of the Act of 29 August 1997 on the Tax Code [Tax Code], a tax debt extinguishes as a result of the transfer of a real estate title or property rights to:

- the State Treasury – in exchange for arrears on taxes constituting state budget revenue,
- a commune, a poviát or a voivodship – in exchange for arrears on taxes constituting revenue for the budgets of these units.

The transfer is executed upon request of the taxpayer, based a written agreement concluded between the taxpayer and the official acting in his capacity within government administration or an application addressed to the competent official or the marshal of a voivodship [www1]. The application should contain at least the identification of tax arrears to which the transfer is to be made and the value of property rights or assets to be transferred [items 1 and 2, paragraph 2, Article 66 of the Tax Code]. The initial value of the acquired fixed asset will be stated in the agreement and will correspond to the value accepted by the two parties to the agreement. One of the ways to acquire fixed assets is to build them.

⁷ Pursuant to Article 150 of the Act on Real Estate, the following categories can be used for real estate measurement:

- the market value of real estate,
- the replacement value of real estate,
- the cadastral value of real estate.

The measurement of real estate can be conducted using the following approaches [paragraph 2, Article 152 of the Act on Real Estate]: comparative, income-based, cost-based, mixed.

Units of the public finance sector can implement investment projects, as a result of which new facilities are built or existing ones are modernised. Investment can involve the construction or assembly of purchased fixed assets or investment purchases. Until completed, they constitute fixed assets under construction. Fixed assets arising from completed investment are measured at their manufacturing cost. The costs of manufacturing a fixed asset internally include [point 6.38 NAS 11]:

- a) direct costs of building an asset – the costs that can be linked with a given asset directly, based on source documents or relevant units of measurement (coefficients) clearly defining the amount of costs incurred in relation to an asset in question,
- b) indirect costs of building an asset, which cannot be directly assigned to a given asset, including:
 - costs shared in the process of the construction of more than one asset and
 - costs of maintaining tangible, intangible and human resources used for the construction of a given asset as well as other activity.

The initial value of a new fixed asset includes the costs of decommissioning (e.g. demolition) of another fixed asset, provided that its decommissioning is a prerequisite for launching a relevant construction project. On the other hand, the initial value of a new fixed asset does not increase the net value of the liquidated fixed asset, unless, in connection with the construction of a new fixed asset, the unit liquidates another fixed asset without physically removing it and the existing asset will become part of the new fixed asset [item 6.53 and 6.54 NAS 11]. The cost of manufacturing a fixed asset also includes the costs of trials and tests (technological start-up) carried out to check the operation of the fixed asset and determine its fitness for use as intended by the unit or external requirements, incurred by the unit until the date when it is launched for use. The initial value of a fixed asset under construction reduces the value in the net selling price of semi-finished products, finished products or services sold or received as a result of tests and trials, provided that their value is significant [item 6.51 NAS 11]. NAS 11 provides guidelines for identifying the causal relationship between the cost incurred and the initial value of the fixed asset that was produced. However, not all the guidelines are applicable to units of the public finance sector, so the standard can be used only to a limited extent. This applies in particular to the rules for financing tangible investments in units of the public finance sector and the rules for capitalising the costs and revenues of external financing in the initial value of the fixed assets that were produced [items 6.58-6.77 NAS 11]. The initial value of fixed assets is subject to changes stemming from the improvement⁸, the connection or disconnection of peripheral parts, their updated value and planned impairment resulting from their use. When the unit decides to record expenses as improvement, it takes into account the criterion of the significant initial value of a fixed asset, defined in its accounting principles (policy). If the expenses incurred on the improvement of a given asset are, on an annual basis, lower than the significant initial value of this asset, they are recognised as operating costs [items 4.28-4.32 and 8.29-8.32 NAS 11]. In their accounting policy, units of the public finance sector can adopt solutions based on tax regulations. In consequence, improvement related expenses not exceeding PLN 10,000 can be recognized as costs and not be capitalized in the initial value

⁸ The improvement of a fixed asset involves expenses that increase its usable value. In practice, the following actions are considered to constitute improvements:

- modification – a change of the existing state of a fixed asset to another state,
- extension – an increase (enlargement) of an asset,
- reconstruction – a restoration of an asset that shows signs of complete or partial wear and tear,
- adaptation – a conversion of an asset so that it can be used for a purpose other than its original purpose or the addition of new features,
- modernization – an upgrade of a fixed asset.

of the fixed asset⁹ [paragraph 13, Article 16g of the Corporate Income Tax Act]. The change in the initial value (and depreciation applied so far) may arise from the statutory review of the value of fixed assets conducted under separate provisions. This aims to eliminate the impact of inflation and update the unit's fixed assets and depreciation cost. In terms of the usefulness of information included in the financial statements, the measurement of assets performed on the balance sheet date is of crucial importance. Pursuant to Article 28 of the Accounting Act, tangible fixed assets should be measured not less frequently than on the balance sheet date – at the purchase price or the manufacturing cost, or at reviewed value (following the revaluation of fixed assets), less depreciation or amortization write-offs, as well as write-offs for permanent impairment¹⁰. Fixed assets as assets with long-term economic usability are gradually impaired. Impairment may result from their use or the passage of time. It may also be caused by adverse changes in the unit's economic environment, unforeseen changes in law, or erroneous investment decisions¹¹. Consequently, the unit will not obtain the economic benefits expected upon the acquisition of the fixed asset. The information on the value of assets can only be reliable if this is taken into account. In the case of public sector units, the principle of prudence applied to the measurement of fixed assets on the balance sheet date may be used to assess whether public funds are used in an appropriate manner. In units of the public finance sector, the specific principles that make up their accounting policy should reflect the use of funds in a true and reliable manner, creating the basis for assessing the rationale behind their use. It is important to remember that the evaluation of the performance of the public finance sector involves determining whether social goals are achieved with efficacy and efficiency, while economic goals remain secondary in terms of importance. The focus of the accounting policy on tax solutions is a simplification that allows estimating the impairment of assets and the costs involved in the use of fixed assets. When this solution is applied by commercially oriented enterprises, it may lead to wrong decisions. The successful decision-making process depends on the correctness, credibility and reliability of the information used. The selection of accounting principles in the area of fixed assets translates into the picture of the unit's economic situation in the financial statements.

5. PRINCIPLES AND METHODS OF DEPRECIATION OF FIXED ASSETS IN UNITS OF THE PUBLIC FINANCE SECTOR

Fixed assets are classified as assets with long useful life. The principle of prudence requires that entities report in the financial result [paragraph 1, Article 7 of the Accounting Act] decreases in the usable value or commercial value of assets, including depreciation or amortization write-offs. The depreciation of a fixed asset is a cost that reflects the scheduled, gradual and systematic distribution of value subject to depreciation over time, arising from the use of the fixed asset or the passage of time, which reduces the initial value of the asset¹². Unlike impairment, depreciation reflects the gradual use of the potential for generating economic benefits specific to a given asset, rather than partial or total loss of this potential [item 8.1 NAS 11].

⁹ If fixed assets were improved as a result of modification, extension, reconstruction, adaptation or modernization, the initial value of these assets is increased by total expenses incurred on their improvement, including the purchase of components or peripheral parts whose unit purchase price exceeds PLN 10,000. Fixed assets are considered improved when total expenses incurred on their modification, extension, reconstruction, adaptation or modernization in a given tax year exceeds PLN 10,000 and these expenses increase their usable value compared to the value as on the date of adopting fixed assets for use, measured with the period of use, production capacity, quality of products obtained with improved fixed assets and their operating costs.

¹⁰ Permanent impairment occurs when it is highly likely that the unit's assets will not yield a significant or full expected economic benefit in the future. This justifies a write-down bringing the value of an asset recorded in the accounting books to the net selling price, and in the event of its absence – to its fair value determined otherwise [Paragraph 7, Article. 28 of the Accounting Act].

¹¹ The basis for impairment originating in external and internal sources are presented in items 4.3. and 4.4. NAS 4 'Impairment of assets'.

¹² Pursuant to Article 7.3 of the Regulation, land and cultural goods are not depreciated or amortized, while under paragraph 2, Article 31 of the Accounting Act, land is not subject to depreciation (except for land used for open-cast mining).

The choice of principles and methods of depreciation of fixed assets is one of the elements of accounting policy and aims at ensuring the accuracy and reliability of information presented in the financial statements. Accordingly, the unit is responsible for developing a depreciation schedule that would take into account the causal relationship between the impairment of a fixed asset and economic benefits that it generates. In the process of creating their accounting policy, units of the public finance sector draw on the provisions of the Accounting Act and the Regulation, while additionally also referring to the guidelines of NAS 11. Under Article 7.1 of the Regulation, units may determine the principles of depreciation of fixed assets based on:

- a) the provisions of the Accounting Act or
- b) the rates specified in the Act of 15 February 1992 on corporate income tax [the Act on Corporate Income Tax] or
- c) the rates set by the superior unit or the board of the local government unit.

On the date when the unit adopts a fixed asset for use, it should determine a period, a rate and a method of depreciation, taking into account the economic useful life of a given asset¹³. Depreciation or amortization write-offs are made through a systematic distribution of its initial value over the period of depreciation [paragraph 1, Article 32 of the Accounting Act]. The determination of the rate¹⁴ and method of depreciation should relate to how economic benefits are generated by the asset [item 8.9 NAS 11]. The period of economic useful life and depreciation rates are subject to periodic verification [paragraph 3, Article 32 of the Accounting Act], while the depreciation method adopted remains unchanged. The Accounting Act does not define depreciation methods, but detailed explanations are included in NAS 11. The methods of depreciation of fixed assets that are listed in NAS 11 [item 8.10. NAS 11] include the linear, degressive and natural methods as well as the degressive-linear method adopted by tax regulations [items 8.18 and 8.22 NAS 11]. The focus of the accounting policy on the solutions adopted in the accounting or tax law also affects the time when depreciation starts. Under paragraph 1, Article 32 of the Accounting Act, depreciation starts after the fixed asset has been accepted for use. On the other hand, NAS 11 [item 8.33 NAS 11] also allows for the recognition of depreciation charges (based on the gross book value of the asset¹⁵) in the month following the month when the fixed asset was adopted for, which remains in compliance with tax regulations. The depreciation is completed no later than when the value of the depreciation (amortization) write-off is equal to the initial value of the fixed asset, the asset is qualified for liquidation, sale, or its shortage is confirmed. As a rule, depreciation is calculated in monthly installments [item 8.1 NAS 11]. In the case of entities of the public finance sector, units exempt from corporate income tax may depreciate fixed assets once a year, while units paying tax for periods other than monthly periods – once a given period [Article 7.4 of the Regulation]. It is possible to apply simplifications in the accounting policy for fixed assets with low initial unit value. The simplification involves [paragraph 6, Article 31 of the Accounting Act]:

- making collective write-offs for groups of assets similar in type and purpose, or
- a one-time write-down of the initial value of the fixed assets in question.

¹³ The economic useful life of a fixed asset is influenced by [paragraph 2, Article 32 of the Accounting Act]:

- the number of shifts during which the fixed asset is in operation,
- the rate of technical and economic advancements,
- the productivity rate of a fixed asset measured by the number of hours of its operation or by the number of products manufactured or by another appropriate measure,
- legal or other restrictions on the time of use of a fixed asset,
- the net selling price of the significant remains of a fixed asset expected at liquidation.

¹⁴ If a fixed asset comprises components or peripheral components, determining the useful life and depreciation rates of the fixed asset, the unit can take into account the differences in the useful life of individual parts or the manner of consuming the economic benefits arising from them [item 8.26 NAS 11].

¹⁵ The value of a fixed asset subject to depreciation is the gross book value of the asset, less any impairment losses and the value of a significant remain of the asset [KSR 11, item 3.6.].

Simultaneously, the specific rules for financing fixed assets in the public finance sector should be taken into account, as they necessitate the division of fixed assets into two main groups:

- basic fixed assets financed from investment funds,
- other fixed assets acquired from current expenses (except for the first equipment of a facility).

Basic fixed assets are subject to systematic depreciation (amortization) write-offs, whereas other fixed assets are depreciated outright.

5.1. Depreciation according to balance sheet law and tax law

Table 1: Comparison of depreciation according to balance sheet law and tax law.

The stage of depreciation	The Accounting Act	Tax regulations
The choice of the method of depreciation	The choice is made by the entity – the method can be linear, degressive, natural, progressive	- the linear method – all assets are depreciated or - the degressive method - machines and devices included in groups 3-6 and 8 of the Classification of Fixed Assets
The change of the method	unacceptable	unacceptable
The rate and period of depreciation	The unit makes the relevant decision taking into account the period of economic useful life of the fixed asset	Specified in the list of depreciation rates included in the annex to the tax laws
The change of rates	Regular verification of the periods and rates of depreciation	- an increase – based on adequate coefficients – from the month following the month in which the circumstances justifying the changes occurred, - a decrease – starting from the month when the means were recorded or from the first month of each subsequent fiscal year
The frequency of write-offs	In equal installments for each reporting period	In equal installments every month or in equal installments every quarter or once at the end of the fiscal year
The end of depreciation	Not later than when: - the value of depreciation or amortization write-offs equals the initial value of a fixed asset, - the fixed asset is assigned for liquidation, - the fixed asset is sold, - there is a shortage of the fixed asset	Until the end of the month when: - the sum of depreciation write-offs equals their initial value, - the fixed asset is put into liquidation, - the fixed asset is sold, - there is a shortage of the fixed asset
Fixed assets used on a seasonal basis	They are depreciated in the entire financial year	They are depreciated during their period of use.

Source: own elaboration

The group of other fixed assets includes the assets of specific type and use, but also the assets with low initial value, for which depreciation can be calculated in a simplified manner. The provisions of the Regulation explicitly refer to tax law when determining the threshold of the value of low-value fixed assets. This simplification is also granted by the Accounting Act, which does not determine the value-based threshold for classifying assets as fixed assets. Based on the principle of materiality, the unit has the right not to recognize assets of low initial value as fixed assets [paragraph 6, Article 32 of the Accounting Act, item 4.28 NAS 11].

These types of assets can:

- a) be recognized as fixed assets and:
 - be covered by a collective inventory item,
 - constitute individual inventory items depreciated once on the date when they are adopted for use,
- b) be written off outright as the costs of materials on the date of adoption of use.

This provision enables the recognition of the amount of PLN 10,000, specified by tax regulations [paragraph 3, Article 16f of the Corporate Income Tax Act], as insignificant and the performance of one-off depreciation charges regardless of the useful life of the asset. In units of the public finance sector, classifying an asset in a group of other fixed assets is associated with recognizing their value in the cost of materials. This solution represents a narrow approach to the provisions of the Accounting Act specifying simplifications in the manner of depreciation of low-value fixed assets. The development of depreciation policy is the responsibility of every entity that keeps accounts. The adopted detailed rules should fairly reflect the way resources are used and economic benefits they generate, creating the basis for assessing the rationality of their use. The evaluation whether unit of the public finance sector operate effectively is conducted through the prism of the principle of efficacy and efficiency of their operation. Efficacy refers to the extent to which their objectives were achieved and their tasks were performed. Effectiveness is assessed in relation to the likelihood of achieving the set goal while minimizing the costs or achieving the maximum goal at the assumed costs [Babuška, 2016, p. 24]. The focus of depreciation policy on tax solutions is a simplification that allows for the estimation of the impairment of property and the costs of using fixed assets. However, the success of the decision-making process depends on the accuracy of the information used. In the case of commercially oriented entities, the use of such simplifications may lead to erroneous conclusions. When defining the principles of depreciation of fixed assets, tax law does not take into account the manner of obtaining economic benefits. The relation between revenue and the corresponding cost is determined in an arbitrary manner by applying tax depreciation rates provided by regulations.

6. CONCLUSION

To sum up, fixed assets in units of the public finance sector are subject to special rules, which include the following:

- 1) fixed assets owned by the State Treasury or local government units that have been received free of charge, based on the decision of the competent authority, may be measured at the value specified
- 2) fixed assets and intangible assets are amortized or depreciated. Depreciation or amortization write-offs are made according to the principles adopted by the unit in accordance with the provisions of the Accounting Act. When determining the rules of depreciation, the unit may adopt rates specified in the Act of 15 February 1992 on corporate income tax, or rates specified by the superior unit or the board of a local government unit,
- 3) one-time depreciation write-offs, involving writing off the costs in the month when the asset is adopted for use, apply to: books and other library collections, teaching resources for schools and education establishments, clothing and uniforms, furniture and carpeting, livestock, other fixed assets and intangible assets with a value not exceeding the value specified in the Act of 15 February 1992 on corporate income tax, for which depreciation write-offs are recognized as tax deductible in 100% of their value upon their adoption for use,
- 4) land and cultural goods are not depreciated or amortized,

- 5) the initial value of fixed assets and amortization write-offs made so far are subject to updates in compliance with the principles set out in separate provisions, and the results of the updates are referred to the fund,
- 6) the inventory of real estate should ensure the comparison of data arising from the accounting records with the records of the commune, powiat and voivodship real estate resources,
- 7) war stocks are subject to the inventory according to the rules set by the head of the unit servicing the authorizing body of the budget part.

LITERATURE:

1. Babuńska E. (2016), *Mierniki realizacji celów i zadań w jednostce budżetowej*, Finanse, Rynki Finansowe, Ubezpieczenia, nr 6 (84), Uniwersytet Szczeciński, Szczecin, cz.1., s.23-34.
2. Chluska J. Polityka rachunkowości w zarządzaniu jednostkami sektora finansów publicznych, *Studia ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach*, nr 274, 2016, s. 36- 45.
3. Hońko S. (2013), *Wycena w rachunkowości, znaczenie, podstawy, parametry i zasady*, Uniwersytet Szczeciński, Szczecin.
4. Komunikat nr 2 Ministra Finansów z dnia 29 marca 2012 r. w sprawie ogłoszenia uchwały Komitetu Standardów Rachunkowości w sprawie przyjęcia znowelizowanego Krajowego Standardu Rachunkowości Nr 4 „Utrata wartości aktywów”, *Dz.Urz.MF* z dnia 23 kwietnia 2012, poz. 15.
5. Nowak W.E., 2014, *Rachunkowość sektora finansów publicznych jako rachunkowość branżowa*, Prace naukowe uniwersytetu Ekonomicznego we Wrocławiu, Branżowe problemy rachunkowości i podatków, nr 373, Wrocław, s. 182- 194.
6. Rozporządzenie Ministra Rozwoju i Finansów z dnia 13 września 2017 r. w sprawie rachunkowości oraz planów kont dla budżetu państwa, budżetów jednostek samorządu terytorialnego, jednostek budżetowych, samorządowych zakładów budżetowych, państwowych funduszy celowych oraz państwowych jednostek budżetowych mających siedzibę poza granicami Rzeczypospolitej Polskiej, *Dz.U* z 2017 r., poz.1911, z póź. zm.
7. Rup P. (2017), Aspekty prawne i rachunkowe klasyfikacji oraz wyceny nieruchomości w jednostkach sektora finansów publicznych, *Państwo i Społeczeństwo*, 2017 (XVII) nr 2, s. 89-110.
8. Uchwała nr 4/2017 Komitetu Standardów Rachunkowości z dnia 03.04.2017 r. w sprawie przyjęcia Krajowego Standardu Rachunkowości nr 11 "Środki trwałe", *Dz. Urz. MRiF* z 2017 r. poz. 105.
9. Ustawa z dnia 15.02.1992 r. o podatku dochodowym od osób prawnych, t.j. *Dz. U.* z 2019 r. poz. 865, z 2020 r. poz. 183
10. Ustawa z dnia 21 sierpnia 1997 r. o gospodarce nieruchomościami, *Dz. U.* z 2018 r. poz. 2204 i 2348 oraz z 2019 r. poz. 270, 492, 801.
11. Ustawa z dnia 27 sierpnia 2009 r. o finansach publicznych, t.j. *Dz. U.* z 2019 r. poz. 869, 1622, 1649, 2020.
12. Ustawa z dnia 29 sierpnia 1997 r. Ordynacja podatkowa, t.j. *Dz. U.* z 2019 r. poz. 900, 924, 1018, 1495, 1520, 1553, 1556, 1649, 1655, 1667, 1751, 1818, 1978, 2020, 2200.
13. Ustawa z dnia 29.09.1994 r. o rachunkowości, *Dz. U.* z 2019 r. poz. 351, tekst jednolity.
14. [www1: Przeniesienie własności rzeczy lub praw w zamian za zaległe podatki - jak to zaksięgować](#) [data dostępu: 11.02.2020]

SECULAR RITUALS AND THEIR ECONOMIC EFFICIENCY

Alexandr Shmakov

*Novosibirsk State University of Economics and Management,
Novosibirsk State Technical University
Novosibirsk, Russia
a.shmakov@mail.ru*

ABSTRACT

An approach to evaluating the effectiveness of secular rituals is outlined. First, the author compares the approaches used in research literature to define the “ritual” term. The key characteristics of ritual are revealed to give an original definition of “ritual”. An emphasis is put on describing rituals as an element of secular culture. Then functions of rituals described by sociologists are analyzed, studying which led to an assumption that all rituals are pragmatic to a certain degree. Within the economic logic, these functions are reduced to the function of decreasing transaction costs in person-to-person interaction. In the next section of the paper, the concept of ritual efficiency is defined. The author builds on the idea that rituals facilitate optimization of social relations by cutting transaction costs. As a result, additional wealth is created. Ritual efficiency is defined through a ratio of transaction costs-cutting due to a particular ritual to the costs of exercising and maintaining the ritual. The proposed interpretation of ritual efficiency needs further clarification of transaction costs. The idea is to break the structure of transaction costs into procedural and behavioral transaction costs. Procedural transaction costs are regarded as the costs associated with the essence of the procedures in a particular institutional environment required for establishing and protecting property rights, as well as losses generated by violations of these procedures. Behavioral costs are understood as the costs and losses arising during social-and-psychological adaptation of participants of the relationships, formed to establish and protect property rights, to actions of their partners and the conditions of an institutional environment, where those relationships take place, as well as the costs of functioning of the institutions and organizations, designed to create conditions for personal adaptation. A neo-institutional approach for classifying transaction costs depending on a transaction nature is used for procedural transaction costs. The author suggests that classification of behavioral transaction costs should be based on types and forms of personal (individual) adjustment. Intra-personal (individual) and inter-personal (person-to-person) behavioral transaction costs are delineated with a more detailed intra-group breakdown.

Keywords: *functions of rituals, ritual efficiency, rituals, transaction costs*

1. INTRODUCTION

The development of the concept of social capital has led to the recognition of a number of socio-psychological phenomena, including rituals of interpersonal interaction, as factors that influence economic results. Given the ongoing changes to the code of ritual behavior, it seems relevant to describe and evaluate its impact. It is necessary to develop a methodological framework for evaluating the effectiveness of interpersonal interaction rituals.

The following tasks are expected to be solved during the research:

1. to identify the functions of interpersonal interaction rituals;
2. to form a concept of the effectiveness of interpersonal interaction rituals;
3. to clarify the composition of transaction costs.

2. CONCEPT AND FUNCTIONS OF RITUALS

Based on the works of S. Silva (2013), R. Firth (1951), V. Fuchs-Heinritz (1978), J. and A. Theodorson (1969), and others the following definition of ritual is suggested: *a ritual* is a stereotypical sequence of symbolic actions performed in the course of social relationships that is regulated by society and expresses certain social and cultural values. A ritual is traditionally understood as a culturally determined set of standardized symbolic actions that express certain values or problems of the group. In the past, rituals were primarily religious in nature. In the modern world, the main focus is to consider rituals as a form of symbolic behavior that affects the socialization processes (Radcliffe-Brown, 2001). Along with traditional rituals of religious culture, there are modern rituals of secular social culture. Therefore, ritual behaviors can be called general cultural universals (Garfinkel, 1967). Scientists recognize that rituals are characterized by a certain level of pragmatism: utilitarian or symbolic (Baiburin, 1993; Vohs, 2013). Utilitarian pragmatics implies obtaining some utility by satisfying the need for material goods, while sign pragmatics implies the need for symbolic forms. Moreover, the need for symbolic forms can be no less significant (Toporov, 1988; Langer, 1956). It is symbolization that is a means of ensuring the cooperation of efforts of a large number of individuals aimed to solve the problems of the group. Through rituals, the group solves the most important tasks of reproducing symbolic values (social institutions, traditions, statuses, etc.) (Malinowski, 1926). Sociologists note the importance of using rituals in terms of creating conditions for sustainable, effective functioning of groups. Based on the works of E. Durkheim (2018) the four main functions of rituals were defined:

1. Function of individuals' socialization. Ritual actions contribute to the formation of the qualities necessary for effective interaction within the group, facilitate the process of socialization. Performing ritual actions teaches individuals to balance their interests with the interests of the group, to control their behavior in accordance with the accepted standards, to comply with the requirements of the team, to inhibit impulsive behavior, leading to the standardization of external behaviour (Maret, 1914) and internalization of sociocultural norms (Saringulian, 1968), thus facilitating the processes of social interaction (Levkovich, 1970).
2. Integrated function. Performing ritual actions contributes to the building of a sense of solidarity in the group, interconnectedness and unity among its members. The building of solidarity helps to increase the effectiveness of communications, as well as the integration of actions aimed at achieving the group's common goals. Stereotyped ritual actions make the behavior of participants more familiar and predictable, and contribute to the strengthening of collective ties (Abramyan, 1983; Rappaport, 1971).
3. The reproducing function. Ritual actions contribute to the fixation and reproduction of a system of historically developed cultural values: maintaining a system of values, institutions, traditions, and other rules of social organization in society. Rituals are used to assign social roles to individuals when they are included in a group or to change their statuses within these roles (initiation), and to maintain a hierarchy of social roles, statuses, and values (Gluckman, 1964). The rules of social relationships are fixed (Etkin, 1963). Performing rituals helps people to actualize and consolidate the experience of social interaction and legitimize social norms (Jensen, 1963).
4. Psychotherapeutic function. Performance of rituals contributes to the maintenance of psychological comfort in the group, the sublimation of mental stress. The sense of solidarity and belonging, experienced during rituals, psychologically helps individuals to cope better with crisis situations and preserve the unity of the team. The feeling of discomfort caused by the need to adapt to changes is reduced (Rappaport, 1971; Lotman, 1987).

Within the framework of economic logic, these four functions can be consolidated into the function of reducing transaction costs in the process of group members' interaction. Ritualization can be described as a group's response to a situation of uncertainty (Howe, 2000). A high degree of uncertainty increases the transaction costs of interaction between group members. As a response to perceived losses, a person develops an adaptive behavior strategy aimed at eliminating a frustrating problem situation, which implies choosing or forming behavior, agreeing with their role, and updating the necessary skills (Melnikov, 2014). One of the strategies is to use rituals that reduce uncertainty.

3. EFFECTIVENESS OF RITUALS - TRANSACTION COSTS

The effectiveness of a ritual is determined by how much this ritual implements its functions (Rudnikov, 2015). Since we were able to consolidate the functions of the ritual into a reduction of transaction costs in the course the group members interaction, the effectiveness of the ritual can be determined by the ratio of the savings in transaction costs as a result of the ritual to the cost of implementing and maintaining the specified ritual. Rituals are effective, if by reducing transaction costs they create additional wealth, which is distributed among the group members in different ways. As an operational definition of transaction costs, we will use the following: *transaction costs* are the costs of establishing and protecting property rights and freedoms accepted in society (Tambovtsev, 1996). In the future, we will not distinguish freedoms from the totality of property rights, since the freedoms being a full-fledged element of wealth can be characterized as property in the economic interpretation. We suggest dividing the transaction costs into: (1) procedural transaction costs, (2) behavioral transaction costs.

3.1. Procedural transaction costs

Procedural transaction costs are the costs associated with the need to implement procedures provided by the institutional environment to establish and protect property rights, as well as losses resulting from violations of these procedures. When classifying procedural transaction costs, researchers, in most cases, start with the nature of the transactions through which the transfer of property rights is carried out. Three types of transactions correspond to three groups of transaction costs (Furubotn, 2005) (table. 1).

Table following on the next page

Table 1: Groups of procedural transaction costs depending on the type of transaction

Type of transaction	Group of transaction costs
<i>Transactions</i> imply relationships that arise as a result of a voluntary agreement between equal parties under the law.	<p><i>Market transaction costs</i> are the costs that arise when using a market mechanism, that is, when carrying out transactions. These in turn include:</p> <ul style="list-style-type: none"> a) search costs and information costs, which are related to the search and transmission of information about sellers, buyers, prices, product quality before the negotiation process, with the implementation of communications by parties to the future exchange, as well as losses caused by incomplete and imperfect information found; b) costs of negotiating and making decisions, which are related to negotiating, concluding and processing contracts, as well as losses due to poorly concluded, poorly executed and unprotected agreements; c) costs of monitoring and ensuring the performance of contracts, which arise from the need to monitor compliance with delivery dates, to measure the quality and volume of delivered products and other terms of the contract, the need to protect the rights and to ensure the performance of the contract, as well as losses from the breach of contracts.
<i>Management transactions</i> imply voluntarily accepted by the parties relationships of power and subordination between the legal levels of the hierarchy.	<p><i>Management transaction costs</i> are the costs that arise when implementing relationships within hierarchical structures, that is, when implementing management transactions. These include:</p> <ul style="list-style-type: none"> a) the cost of creating, maintaining, and changing organizational design, which are related to the costs of personnel management, information technology investments, anti-takeover protection, public relations, and lobbying; b) operating costs of the organization consisting of two parts: first, information costs, which include the cost of making decisions, monitoring the execution of orders, measuring employee performance, agency costs, etc.; second, the costs of goods and services physically crossing the borders of related industries, which relate to the cost of intra-company transportation, downtime, etc.
<i>Rationing transactions</i> imply a binding relationship of power and subordination between parties of unequal legal status.	<p><i>Political transaction costs</i> are the costs that arise during the operation and adjustment of the institutional framework of the state structure, that is, during the implementation of rationing transactions. These include:</p> <ul style="list-style-type: none"> a) the costs of creating, maintaining and changing the formal and informal political organization of the system that are related to the costs of establishing the legal framework, administrative structure, military, educational, judicial systems, etc.; b) the costs of state structure operating, which are related to the costs of implementing the functions of the state: provision of legislation, justice, defense, transport, education, etc.

3.2. Behavioral transaction costs

Behavioral transaction costs are the costs and losses that arise during the socio-psychological adaptation to the actions of parties involved in the relations of the property rights establishment and protection, to the conditions of the institutional environment in which these relations are carried out, as well as costs for the functioning of institutions and organizations designed to create conditions for personal adaptation. The key in this definition is the concept of socio-psychological adaptation of an individual – the process of acquiring a certain status by the individual, mastering certain socio-psychological role functions (Naimushina, 2010). When classifying behavioral transaction costs we will proceed from the type of adaptation of an individual: internal or external (Ivanova, 2014) (table. 2).

Table 2: Groups of behavioral transaction costs depending on the type of adaptability

Type of adaptability	Group of transaction costs
<i>Internal adaptability</i> is a complete adaptation of a personality in which there is a restructuring of functional systems of the personality.	<p><i>Intrapersonal (individual)</i> costs are the costs and losses that arise during the psychological adaptation to the actions of parties involved in relations of the property rights establishment and protection and to the conditions of the institutional environment in which these relations are carried out. These include:</p> <ul style="list-style-type: none"> a) costs associated with assuming a social role; b) costs of updating the skills required to match the social role; c) losses associated with the possible suffering, arising in the course of interactions with the external environment; d) the cost of protection against possible losses specified in the paragraph (b).
<i>External adaptation</i> is the adaptation of an individual to the environment in which there is no significant alteration of the functional structures and systems of the individual.	<p><i>Interpersonal</i> costs are the costs and losses arising in the course of social adaptation to the actions of parties involved in the relations of the property rights establishment and protection, to the conditions of the institutional environment in which these relations are carried out, as well as costs for the functioning of institutions and organizations designed to create conditions for personal adaptation. These include:</p> <p>(I) Costs of individual adaptation:</p> <ul style="list-style-type: none"> a) the costs of conformity are losses associated with compliance with restrictions, reducing the flexibility of the system of public relations, the loss by society of the basis for the adaption to changing conditions; b) the costs of innovative adaptation are the costs of protection from opportunistic behaviour and losses from opportunistic behaviour, losses from the reducing level of trust, losses resulting from unreasonable risks, losses from deformation of the motivation system, etc.; c) the costs of ritualism are the costs of taking precautionary measures, protecting against risks associated with competition, opportunistic behaviour, etc., losses from compliance with restrictions, reducing business activity, and other initiatives; d) the costs of retreatism are the losses from reducing the flexibility of the system of public relations, opportunistic behaviour, reducing the level of trust, deforming the system of motivation, reducing business activity, the cost of protection from opportunistic behaviour, the maintenance of unproductive population and the fight against this form of social adaptation; e) the costs of rebellion are the costs of formulating and consolidating ideas about the existing and alternative social reality, changing the old ones, forming and maintaining new social orders. <p>(II) The costs of operating institutions and organizations designed to create conditions for individual adaptation that balance the sustainability and development of the institutional environment:</p> <ul style="list-style-type: none"> a) the costs of formulating ideas about social reality; b) costs of developing and maintaining public practices.

One of the manifestations of internal adaptability is the formation of intrapersonal behavioral transaction costs – costs and losses that arise during the psychological adaptation to the actions of parties involved in relations of the property rights establishment and protection and to the conditions of the institutional environment in which these relations are carried out. Intrapersonal behavioral transaction costs can be interpreted as the cost of an individual's restructuring (accepting a social role, updating the required skills) in accordance with the requirements of the external environment, as well as losses associated with suffering arising during interactions with the external environment. It is proposed to distinguish the following groups of interpersonal behavioural costs: the costs associated with the acceptance of a social role; the costs of updating the skills required to match this social role; the losses associated with possible suffering that occurs during interactions with the external environment; the costs of

preventing these losses. External adaptation is associated with the formation of interpersonal behavioural transaction costs – costs and losses that arise during the social adaptation to the actions of parties involved in the relations of the property rights establishment and protection, to the conditions of the institutional environment in which these relations are carried out, as well as costs for the functioning of institutions and organizations designed to create conditions for personal adaptation. When classifying this type of transaction costs, we will start with the typology of forms of individual adaptation by R. Merton (Merton, 2006). Merton identified five forms of individual adaptation: conformity, innovation, ritualism, retreatism, and rebellion. Conformity is a form of individual adjustment in which an individual changes their behavior or opinion under the influence of society. Transaction costs associated with this form of individual adaptation are expressed primarily in losses caused by the reduced flexibility in the system of public relations; in losses associated with tight restrictions on alternative ways of behaviour. The predominance of this form of adaptation guarantees temporary social stability, but it is a barrier to innovation and leads to the loss by society the basis for the adaption to changing conditions. Innovation is a form of individual adaptation in which an individual uses institutionally prohibited but effective means to achieve their cultural goals. As a result, the use of this form of adaptation increases transaction costs associated with opportunistic behaviour. As a result of abuse of trust, its level decreases, which leads to losses associated with the difficulty of cooperation and the need to spend additional efforts to protect against opportunistic behaviour. Willingness to take risks is associated with losses that occur when this risk is not economically justified. As people's individual achievements are no longer linked to their strengths and efforts, individuals tend to lean on network connections (netopism), and there is a ground for the development of superstitions, belief in chance, luck, which undermines the motivation to make efforts aimed to achieve success by institutionalized means (Bakke, 1934). Ritualism is a form of individual adjustment in which an individual rejects or reduces the value of cultural goals to the level at which these goals can be met, while continuing to persistently observe institutional norms. This form of adaptation is characterized by a high level of distrust, since external threats are felt acutely, and there is a need of protection against all sorts of risks, including the risk of opportunistic behaviour. The level of entrepreneurial activity and other initiatives decreases because people prefer to perform routine, relatively safe actions, the level of risk falls below the optimum level, and the cost of taking precautionary measures increases above the optimum level. Retreatism is a form of individual adjustment in which the individual rejects both the cultural goals of society and the acceptable institutional means of achieving them. This form of individual adaptation is associated with the main groups of transaction costs described earlier. As in the case of conformity, there is no desire for innovative activity, which means that there are losses from reduced flexibility in the system of public relations. The individual does not recognize the cultural values of society, does not strive for success, therefore, similar to ritualism, the level of entrepreneurial initiatives decreases, the level of trust decreases, there are difficulties with cooperation, which also leads the growth of transaction costs. The individual ignores institutional practices, hence, as in the case of innovation, the transaction costs of opportunistic behaviour increase. Moreover, the retreating individual becomes an unproductive ballast for society, and society spends resources on the prosecution of individuals who have chosen this form of adaptation. Rebellion is a form of individual adjustment in which the individual not only rejects the cultural goals of society and the prescribed institutional means of achieving them, but also proposes an alternative to them. The use of this form of individual adaptation is associated with the costs of demonstrating the source of large-scale frustrations in the social structure, the costs of finding alternatives to the existing social structure that meets public expectations, the costs of forming and consolidating ideas about the existing and alternative social reality, the costs of changing the old, formulating and maintaining new social orders. It should not be forgotten that in order to maintain any existing social order, it is necessary to bear the transaction costs associated with

the functioning of institutions and organizations designed to create conditions for the implementation of preferable forms of the individual's adaptation, providing the required balance between the stability and development of the institutional environment. The existence of a political system that provides the desired level of conformity requires expenses related both to formulation of desired ideas about social reality, and to building and maintaining certain social orders. The costs incurred by the individual, and associated with compliance with institutional norms must be compensated by certain socialized rewards. The distribution of social statuses within the established order should be organized in such a way as to create incentives for maintaining status obligations. The above-mentioned factors are related to transaction costs, the alternative of which is the manifestation of aberrant behavior, erosion of institutional norms, and anomie (Marshall, 2002).

4. CONCLUSION

Rituals are characterized by a certain degree of pragmatism: utilitarian or symbolic. Sociologists distinguish four main functions of rituals: the socialization function of individuals, integrating function, reproducing function, and psychotherapeutic function. Within the framework of economic logic, these functions can be consolidated into the function of reducing transaction costs in the process of group members' interaction. Rituals are effective, if by reducing transaction costs they create additional wealth, which is distributed among the group members in different ways. If we were able to consolidate the functions of the ritual into a reduction of transaction costs in the course the group members interaction, the effectiveness of the ritual can be determined by the ratio of the savings in transaction costs as a result of the ritual to the cost of implementing and maintaining the specified ritual. Transaction costs are the costs of establishing and protecting property rights and freedoms accepted in the society. The structure of transaction costs includes procedural transaction costs and behavioural transaction costs. Procedural transaction costs are the costs associated with the need to implement procedures provided by the institutional environment to establish and protect property rights, as well as losses resulting from violations of these procedures. Behavioural transaction costs are the costs and losses that arise during the socio-psychological adaptation to the actions of parties involved in the relations of the property rights establishment and protection, to the conditions of the institutional environment in which these relations are carried out, as well as costs for the functioning of institutions and organizations designed to create conditions for personal adaptation.

LITERATURE:

1. Abramyan, L. A. (1983). *Primitive celebration and mythology [Pervobytnyi prazdnik i mifologiya]* Yerevan, 231 p.
2. Bakke, E. W. (1934). *The Unemployed Man*. New York.
3. Durkheim, E. (2018). *Elementary forms of religious life: the totemic system in Australia Trans. from Eng. [Elementarnye formy religioznoi zhizni: totemicheskaya sistema v Avstralii]* Moscow: Delo publishing house, RANEP, 736 p.
4. Etkin, W. (1964). Theories of socialization and communication In Etkin, W. *Social behavior and evolution among the vertebrates*. Chicago, pp.167-205.
5. Firth, R. (1951). *Elements of social organization*. London, 258 p.
6. Fuchs-Heinritz, W. (1978). *Lexikon zur Soziologie*. Opiaden: Westdeutscher Verlag.
7. Furubotn, E., Richter, R. (2005). *Institutions and Economic Theory: The Contribution of the New Institutional Economics. Trans. from Eng. [Instituty i ekonomicheskaya teoriya: Dostizhenie novoi institutsionalnoi ekonomicheskoi teorii]* S.Petersburg, Publishing House of St. Petersburg State University, 702 p.
8. Garfinkel, H. (1967). *Studies in Ethnomethodology*. Englewood Cliff, New Jersey.

9. Gluckman, M. (1964). *Closed systems and open minds*. Edinburgh: London.
10. Howe, L. (2000). *Risk, Ritual and Performance*. The Journal of the Royal Anthropological Institute, 2000 (No. 1), pp. 63-79.
11. Ivanova, A. I. (2014). *Social and psychological adaptation: classification and mechanisms* [Sotsialno-psikhologicheskaya adaptatsiya: klassifikatsiia i mekhanizmy] Vestnik Universiteta (Bulletin of the University) (No. 9), pp. 255-259.
12. Jensen A. E. (1963). *Myth and cult among primitive peoples*. Chicago.
13. Langer S. K. (1956). *Philoeophie in a new key: A study in the symbolism of reason, rite and art*. New York.
14. Levkovich, V. L. (1970). *Customs and rituals and their role in improving family relations* [Obychai i obriady i ikh rol v sovershenstvovanii semeinykh otnoshenii] Moscow, pp. 69-89.
15. Lotman, Yu. (1987). A few thoughts on the typology of culture [Neskolko myslei o tipologii kultury] In Uspenskiy B.A. *Yazyki kultury i problemy perevodimosti: monografiya* (Languages of culture and problems of translatability: the monograph) Moscow, 256 p.
16. Malinowski, B. (1926). *Myth in primitive psychology*. London.
17. Marett, R. R. (1914). *The threshold of religion*. London.
18. Marshall, D. (2002). *Behavior, Belonging, and Belief: A Theory of Ritual Practice*. Sociological Theory, 2002 (No. 3), pp. 360-380.
19. Melnikov, V. V. (2011). *Non-competitive behavior as a factor of transaction costs* [Nekonkurenstnost povedeniia kak faktor transaktsionnykh izderzhek] Terra Economicus, (No. 4), pp. 23-37.
20. Merton, R. (2006). *Social theory and social structure* Trans. from Eng. [Sotsialnaya teoriya i sotsialnaya struktura] Moscow: Khranitel, 873 p.
21. Naimushina, A. G. (2010). *Psychophysiological mechanisms of ecological adaptation* [Psikhofiziologicheskie mekhanizmy ekologicheskoi adaptatsii] Fundamentalnye issledovaniya (Fundamental research) (No. 6), pp. 76-81.
22. Radcliffe-Brown, A. R. (2001). *Structure and function in primitive society. Essays and lectures* Trans. from Eng. [Struktura i funktsiya v primitivnom obshchestve. Ocherki i lektsii] Moscow: Eastern Literature publishing company of the Russian Academy of Sciences, 304 p.
23. Rappaport, R. (1971). *Ritual, sanctity and cybernetics*. American Anthropologist, 1971 (No. 73(1)), pp. 59-76.
24. Rudenkov, I. A. (2015). *Economic evaluation of institutions: assessment and factors* [Ekonomicheskaya otsenka institutov: otsenka i faktory] Retrieved from: <http://www.bsu.by/Cache/pdf/389863.pdf>.
25. Saringulyan, K. S. (1986). *Culture and regulation of activities* [Kultura i regulyatsiya deyatelnosti] Yerevan, 156 p.
26. Silva, S. (2013). *Remarks on Similarity in Ritual Classification: Affliction, Divination and Object Animation*. History of Religions, 2013 (No. 2), pp.151-169.
27. Tambovtsev V.L. (1996). *Textbook under the editorship of Tambovtsev V.L.* Moscow: Economic Department Moscow state University, 171 p.
28. Theodorson, G., and Theodorson, A. A. (1969). *Modern dictionary of sociology*. New York: Crowell Company.
29. Toporov, V. N. (1988). *About the ritual: introduction to the concept* [O rituale: vvedenie v problematiku] Arkhaicheskii ritual v folklornykh i ranneliteraturnykh pamyatnikakh (Archaic ritual in folklore and early literary monuments) Moscow, pp. 7-60.
30. Vohs, K., Wang, Y, Gino, F., Norton, M. (2013). *Rituals Enhance Consumption*. Psychological Science, 2013 (No. 9), pp.1714-1721.

REGIONAL ASPECTS OF 2024 NATIONAL PROJECTS ON STRATEGIC DEVELOPMENT IN RUSSIA

Anatoly Pleslov

*Novosibirsk State University of Economics and Management
Novosibirsk, Russia
gal_pl@ngs.ru*

Olga Lukashenko

*Novosibirsk State University of Economics and Management
Novosibirsk, Russia
olgaluck@gmail.com*

ABSTRACT

The priority goals and objectives at the regional level under the frame of the National Projects for strategic development of the Russian Federation till 2024 are analyzed. Project milestones in performance assessment of top officials as well as regional authorities of the Russian Federation in the course of executing the National Projects are reviewed, particularly, through a focus on development of industrial parks with use of regional resources and the existing institutional tools for their establishment and operation. The study findings will be valuable for senior officials as well as specialists in public administration over regional economies.

Keywords: *industrial parks, industrial policy, institutional tools, national projects, performance indicators, points of economic growth, strategic development*

1. INTRODUCTION

No.204 Order of the President of the Russian Federation signed in May 2018 outlined the main strategic goals of development of Russia till 2024 and specified the directions for achieving the set goals in the form of the 12 National Projects that should be shaped by the RF Government in collaboration with the regional authorities. The focal areas of further development of the Russian Federation include demographics and healthcare, education and culture, science and digital economy, improvements in the environment and urban milieu, construction of residential housing and motor roads, boosting labour productivity, supporting employment and small and medium business, international cooperation and export, etc. [2]. The current of events has shown, though, that the authorities at all levels are not ready to address the tasks set by the President both in terms of their direct involvement in devising the National Projects within the deadlines and organizational and administrative support for the Projects. On a date, which is of special symbolic significance for Russia – the 9 May, the State Council held a designated meeting in 2019 where the RF President summed up the intermediary progress in fulfilling the National Projects and highlighted the absence of crucial achievements in the past year with a visible positive effect upon the domestic economy and the quality of live of the population [5]. Absence of visible results, in this case, can be interpreted as evidence of systemic problems in management over social-and economic development on the national and regional scales. Systemic integrated efforts of the authorities at all levels towards fulfilling the National Projects are currently being mainstreamed, putting a special emphasis upon the role of the regional authorities and personal responsibility of the regional leaders. In this context, the main areas of efforts must be identified at the regional level of power that would enable comprehensive solving of social-and economic development goals for regions under the frame of the National Projects, based on which an objective, nonpartisan performance assessment of the work of the regional leaders will be possible.

2. GOAL-SETTING BY THE REGIONAL AUTHORITIES TO FULFILL THE NATIONAL PROJECTS FOR STRATEGIC DEVELOPMENT OF RUSSIA TILL 2024

Expectations to Heads of the regions are strengthened upon No.193 Order of the Russian President of 25.04.2019 on performance assessment of the Heads of the subjects of the Russian Federation [3]. This act abolished No. 548 Order of the President of Russia that had set 24 target values, only indirectly reflecting the objectives of the National Projects. Instead, the new No. 193 Order specifies 15 targets for personal assessment of the work of the regional Heads: the level of confidence in the authorities; the number of high-performance jobs in the private sector; the number of small and medium businesses and individual entrepreneurs; labour productivity in the non-resource-based sector; the level of salaries and wages; the scope of investments in fixed capital (except federal projects); the poverty level; life expectancy at birth; natural population growth; the number of families whose housing conditions improved; housing affordability and access; the share of towns with favourable milieu; the quality of the environment; the level of education; the share of regional highways that meet the established standards. Even a rather sketchy comparative analysis of the main 12 directions of the National Projects and the above-listed 15 estimated targets leads to a conclusion that 12 targets clearly match the National Projects and the remaining three are integrated assessment values as demonstrated in Table 1, compiled on the basis of the data taken from the official web-site of the President of Russia [5].

Table following on the next page













National Projects for strategic development of Russia till 2024 in accord with No.204 Order of the President of the Russian Federation of 07.05.2018		Target values to assess performance of the Heads of the subjects of the Russian Federation according to No.193 Order of the President of the Russian Federation of 25.04.2019 (target numbering is given as in the Order)
Official logos of the National Projects	Target areas of the National Projects (the Project sequences is given as in the Order)	
1	2	3
	Demography	9. Natural population growth.
	Healthcare	8. Life expectancy at birth.
	Education	14. Level of education.
	Housing and urban environment	10. Number of families whose housing conditions improved. 11. Housing affordability and access. 12. Share of towns with favourable milieu.
	Ecology	13. The quality of the environment.
	Safe and high-quality motor roads	15. The share of regional highways and highways in urban agglomerations that meet the established standards in view of traffic congestion.
	Labour productivity and employment support	2. Number of high-performance jobs in the private sector of the economy. 4. Labour productivity in the main non-resource-based sectors of the economy. 5. Level of actual salaries and wages. 7. Poverty level.
	Science	A synergy factor of regional economic development
	Digital economy	A synergy factor of regional economic development
	Culture	A synergy factor of regional economic development
	Small and medium business and support of individual business initiative	3. The number of the employed in small and medium businesses, including individual entrepreneurs.
	International cooperation and export	6. Scope of investments in fixed capital except investments of infrastructure monopolies (federal projects) and federal funding.
	The level and trends in social and-economic development of a region in the course of executing the National Projects	1. The level of confidence in the authorities (the President of the Russian Federation, senior officials (Heads of supreme executive bodies) of the subjects of the Russian Federation).

Table 1: Consistency of the targets set in the National Projects and performance targets for the regional authorities

Commenting on No. 193 Order, some experts try to shift the discussions from the economic to the social realm, interpreting the Order as an attempt to shuffle off the responsibility for executing the National Projects from senior federal officials to Heads of the regions [9]. This destructive position has no objective grounds. In the past two years indeed there have been intensive replacements in the pool of Governors when 48 out of 85 Heads of the regions assumed office in 2018 – 2019. No less significant staff changes have been taking place in the federal government bodies, culminating in the resignation of the Cabinet on 15 January 2020. The Government Cabinet was approved by the President on 21 January and soon the new Prime-Minister Mikhail Mishustin confirmed, as also did most Governors acceding to the office, that the main objective of the Cabinet is to fulfill the National Projects, undertaking personal responsibility by the Cabinet ministers for the outcome. Thus, an executive chain of command is being actively shaped across Russia on the basis of personal responsibility for achieving the national targets and addressing the strategic tasks for developing the Russian Federation till 2024, as specified in No.204 Order of the President of the Russian Federation of 07.05.2018. No. 193 Order certainly formalizes personal responsibility of the regional leaders for achieving particular target values of the National Projects and consolidates their efforts in consistence with the federal authorities. It is an obvious positive result of an institutional impact upon the system of public administration with the purposes of carrying out a unified social-and-economic policy across the entire territory of the Russian Federation. The Order effectively lists the priority values to be achieved at the regional level under the frame of fulfilling the National Projects, and at the same time the responsibility zones between the federal and regional authorities are delineated. Social-and-economic development of Russia till 2024 is undoubtedly a continuation of 2012 - 2020 National Development Strategy based on 11 so-called “May” Orders of the President of the Russian Federation issued in 2012. Still, this is a new, ascending stage of evolution in the development strategy of Russia in general and each region in particular. It can be demonstrated through a comparison of the goals and objectives of the National Projects and the 2012 May Orders as summarized in Table 2.

Table following on the next page

Goals and objectives of the National Projects for strategic development of Russia till 2024 according to No.204 Order of the President of the Russian Federation of 07.05.2018.	Goals and objectives of long-term state economic policy in accord with Nos. 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606 Orders of the President of Russia given on 7 May 2012
1	2
Increasing life expectancy to 78 years by 2024 and to 80 years by 2030	Achieving life expectancy to 74 years by 2018
Birth rate increase to 1.7	Increasing birth rate to 1.753
Raising the share of the population who pursue a healthy lifestyle, and increasing the share of the population going in for sport to 55%	Popularizing the culture of healthy eating and sport
Decreasing mortality of the working-age population to 350 cases per 100,000 people. Reducing mortality caused by tariff accidents by 3.5 times, to four per 100,000 people	Reducing mortality caused by tariff accidents to 10.6 cases per 100,000 people (11.2 in March 2018) and mortality from tuberculosis to 11.8 cases.
Decreasing mortality from cardio-vascular diseases to 450 cases per 100,000 people and mortality from tumors, particularly, malignant tumors, to 185 cases	Decreasing mortality from cardio-vascular diseases to 649.4 cases per 100,000 people (the figure achieved in March 2018 was 615.4) and from tumors to 192.8 cases (used to be 203.3 cases in March 2018)
Increasing the scope of export of medical services by at least four times in comparison with 2017 to 1 billion dollars per year	Increasing Russian-made medicinal drugs from the list of vital and essential drugs to 90%
Reducing infant mortality to 4.5 cases per 1000 births	Reducing infant mortality to 7.5 cases per 1000 births (in 2017 infant mortality was 7.3 cases per 100,000 people)
Russia becoming one of the five largest world economies by 2024 and achieving the economic growth rate higher than the world rate while keeping the inflation no higher than 4%	Improving the position of Russia in Doing Business ranking to the 20 th place in 2018 (in 2017 Russia was on the 35 th place)
Increasing the share of non-resource-based export to 20% GDP and the total volume of non-resource-based export - to \$ 250 billion per year	
Increasing labour productivity by at least 5% per year	Improving labour productivity by 1.5 times by 2018
Increasing spending for development of digital economy by at least three times compared to 2017	
Increasing the pool of entrepreneurs to 25 million people	Creating 25 million high-productivity jobs by 2020
	Increasing the scope of investments to 27% GDP in 2018 (currently around 17% according to various estimates)
Securing an increase of the actual earnings of the population; as well as retirement income above the inflation level	Increasing the actual salaries and wages by 1.4-1.5 times. Increasing the salaries of teachers and healthcare workers
Halving the poverty level	
Improving the housing conditions for 5 million families per year	Providing affordable housing to 60% of families wishing to improve their housing conditions
Decreasing mortgage rates below 8%	Decreasing the average mortgage rate to a level not exceeding the inflation level by over 2.2 p.p. Increasing the share of mortgage loans. Reducing the costs of 1 m ² in residential housing construction by 20% due to commissioning more economy-class residential housing
Increasing residential housing construction at least to 120 million m ² a year	

Table 2: Continuity of the goals and objectives of the National Projects under No.204 Order of the President of Russia of 07.05.2018 and a long-term state economic policy in accord with the Orders of the President of Russia of 07.05. 2012.

Another important aspect of successful execution of the National Projects is their inseparable connection with fulfilling the National Plan for Developing Competition in Russia. 2018 – 2020 National Plan was approved by № 618 Order of the President of the Russian Federation of 21.12.2017 [12]; its ultimate objective is to increase consumer satisfaction, economic efficiency and competitiveness, facilitate sustainable growth and development of mixed economy. According to the standpoint taken by President of Russia Vladimir Putin, violating the antimonopoly law is a gross offence comparable to treason. Restricting competition incurs colossal damages to the economy and without solving the problems in this sphere Russia will not be able to move forward [13]. The National Plan and the National Projects have common goals on economic development and sustainable growth and cannot be efficiently fulfilled separately from each other so intergration of the Plan and the Projects is the paramount priority. The synergy of the two strategic documents will enable to reach the goals in the field of increasing economic growth, improving the quality of life and well-being of the population. Otherwise, possible adverse result will include continued futile spending of budgetary funds and increasing the scope of state assets in the economy. Integration means, first of all, that measures specified in a national project fall under strict control of a body responsible for the National Competition Development Plan – the Federal Antimonopoly Service (FAS Russia). From the regional prospective, it translated in robust FAS efforts to start the ball rolling at the regional level. FAS has entered into Agreements on Cooperation in the field of competition with all subjects of the Russian Federation; FAS senior officers at the level of Deputy Head of FAS visited all regions twice in 1.5 years to draw and approve regional competition development programmes. Under the frame of the Agreements on Cooperation with regions, FAS, with involvement of its regional Offices, has drafted the Guidelines on Road Maps that contain an approximate list of measures, which can be expanded by regions. FAS further provides support in drafting Road Maps on competition development and approves them. So far, FAS has received 82 Road Maps for approval, most of which are already considered and more than one third of the Road Maps are approved. At the same time, doing this work, FAS summarizes the best practices that will be recommended for use to all regions of Russia. Each region has selected 33 markets from the list compiled by FAS as the prime targets for developing competition in a particular region, with a possibility to add some other markets depending on a regional specifics and determine the indicators to measure the success rate of competition development in a segment. Action Plans must be drafted for each selected segment. So far, Russian regions have been actively involved in this work – 100% regions have approved the key competition development targets and made amendments to the regulations on regional executive bodies, in terms of antimonopoly compliance. Road Maps for developing competition across regions are being mainstreamed. Regional Action Plans aimed at fulfilling the National Projects must be submitted to FAS for further analysis. It is helpful in exposing shortcomings in public procedures and elements of cartels associated with the National Projects. For example, preliminary results of analyzing regional Action Plans aimed at fulfilling the National Projects show in some cases avoidance of competitive procedures in procurement, violations in granting subsidies and concluding prohibited agreements. The general targets of the National Plan includes halving antimonopoly violations by the authorities (which account for nearly 50% of all antimonopoly violations committed in the Russian Federation), particular regional executive bodies, by 2020; doubling the share of procurement by small and medium companies in regions by 2020; and curtailing presence of state and municipal unitary enterprises on competitive markets. The interim achievements at a new stage of the pro-competitive policy in Russia (2018) are quite consistent: antimonopoly violations by the authorities decreased by 14%, the share of small and medium business in public procurement reached 29.7% (the target set for 2020 is 31%), and the share of procurement by particular types of legal entities from small and medium business is 12.1% (the target to be achieved by 2020 is 18%).

At the same time, 6 867 unitary enterprises were registered in Russia as of 1 January 2019, which is 49% more in comparison with 1 January 2013. More than one third (38%) of such enterprises operate in sectors with developed competition such as real estate, lease, commerce. Overall, operations of unitary enterprises on competitive markets are not transparent which can lead to abusing and unreasonable monopolization, having, therefore, a strong adverse effect on competition. The relevant law banning unitary enterprises on competitive markets is finally passed in the third reading by the parliament (December 2019) and a transitional period is set until 2025. Antimonopoly compliance is another important tool for efficient deterrence of adverse trends, particularly, at the level of municipalities. It implies adopting an in-house system of conformity to fair competition rules by regional market players and regional authorities to avoid high economic and reputational risks associated with breaching antimonopoly regulations. Since even the tightest policy of regulators cannot fully eliminate violations of the law, and it inevitably raises the regulators' costs upon the society, it is essential that participants of economic operations independently suppress and prevent violations, using tools of inner control. So far, all executive bodies have adopted antimonopoly compliance systems and are currently refining them and learning how to employ them efficiently. Due to interim achievements of the targets set in the first National Plan, FAS, together with "OPORA Russia", a national NGO of small business and entrepreneurs, FAS is drafting a new, 2021-2025 National Competition Development Plan (the deadline is 1 April 2020). The main focus of the new Plan will be to create conditions for increasing the number of small and medium companies, and people employed in this sector of the economy, guarantee a possibility for small and medium business to operate on competitive markets. Summing up, fulfillment of the National Projects at the regional level requires an in-depth, critical analysis of the entire efforts undertaken in the previous development period and continuation of successful projects in each particular region. Success can be reached only through rational use of not only targeted federal resources but also the resources available in the regions. It means, first of all, independent search of available resources at the regional level to meet the target values.

3. THE KEY TASKS AND TOOLS OF A REGIONAL POLICY OF ECONOMIC GROWTH

The policy of development is a leading function of the regional authorities and comprises research-and-engineering, educational, industrial, investment and foreign trade elements. Currently, the policy of development is formulated as a totality of interrelated National Projects of strategic development of Russia till 2024. Under the existing conditions, reaching a trajectory of a sustainable growth of the regional economy and the level of life of the population is possible only on the basis of concentrating the available resources in the breakthrough directions of the policy of development. All 85 regions of the Russian Federation have different resource bases; however, each of them possesses its own unique set of capabilities typical for Russia in general. According to Sergey Glaziev, a member of the Russian Academy of Sciences, it concerns, first of all:

- High level of education of the population and spiritual traditions, steering the local population towards productive and creative work, social justice and partnership, personal self-fulfillment in the interests of the society;
- Developed research-and-engineering potential, presence of mature engineering-and-manufacturing structures in some sectors under the modern and contemporary technological paradigms;
- Large-scale, free production capacities in the manufacturing sector enabling to promptly increase fabrication of products with high-added value;
- Rich natural resources covering the most part of internal needs in raw materials and energy carriers.

At the same time, an essential administrative target is the ability of the Heads of regions to employ the options and institutional tools enabling to find comprehensive solutions in regional development. Nearly all target values for personal assessment of performance of regional leaders depend directly or indirectly on the outcome of the regional industrial policy under the frame of No.488-FZ Federal Law “On industrial policy in the Russian Federation”, which sets the goals, particularly, to provide employment and enhance the level of life of the population [1]. The Law spells out all parameters of the industrial policy and such forms of regional development of the manufacturing sector as industrial parks and industrial clusters. These forms of production organization have become the mainstream in the world practice and proved to be efficient. Industrial parks originated in the UK at the end of the XIX c. The lands owned by the state or farmers were classified under the commercial grade due to development of industrial production and typically were subsequently added to the confines of towns. From the beginning of the XX c., industrial zones / estates were equipped with appropriate communications infrastructures, and private developers have been in charge of their further upgrowth. Later, the UK experience was extrapolated to the US, Canada and Western Europe. Nowadays, there are more than 20,000 industrial parks in 90 countries all over the world. According to a generally accepted international classification, there are two types of industrial parks depending on characteristics of a particular site: “greenfield” and “brownfield”. The same principle is formalized in the Russian National Standard GOST R 56301 – 2014 “Industrial Parks. Requirements”, which clearly formulates that “greenfield” industrial parks are established on previously underdeveloped real estates, typically, without any utilities and transport infrastructure at the time of commissioning a project, while brownfield industrial parks are built on the basis of earlier existing enterprises or production facilities, and equipped with utilities and transport infrastructure, that usually were and / or are under reconstruction and (or) capital repair. Institutional factors, robustly burgeoning since 2012, shape a framework of government guarantees to support establishing and functioning of industrial parks. For instance, the “Industrial Park Standard” came into effect in 2012. No. 488-FZ Federal Law “On industrial policy in the Russian Federation and GOST “Industrial Parks. Requirements” National Standard were adopted in 2014. No.794 Decree of the Government of the Russian Federation of 04.08.2015 highlights that the purpose of establishing industrial parks (estates) is to organize the necessary conditions on their territory for production of industrial products by residents of industrial parts. According to a Decree issued by the Russian Government, from 1 January 2016 the Ministry of Industry and Trade of the Russian Federation is in charge for ascertaining conformance of industrial parks and their managing companies to the statutory requirements, keeping the Register of industrial parks (estates), entering them into the Register, and drafting proposals annually on the state support in the form of compensating the costs incurred by regions to establish such parks. The Ministry of Industry and Trade of the Russian Federation keeps an official Register of industrial parks by regions; as of January 2020 it contained 46 industrial parks (estates) in 19 regions of Russia [7]. Government subsidies have been allocated to the subjects of the Russian Federation since 2016 to compensate the costs of establishing industrial park infrastructure in accord with No. 1119 Decree, with the following breakdown: 4348.33 million RUB in 2016; 3075.85 33 million RUB in 2017; 2609.53 33 million RUB in 2018; and the estimated figure for 2019 is 1165.54 33 million RUB [6]. The full picture of establishment, development and performance of industrial parks (estates) in Russia in general and its particular regions can be derived from data reported by the Ministry of Industry and Trade of the Russian Federation, the Association of Industrial Parks of Russia and the subjects of the Russian Federation. The Association of Industrial Parks of Russia (AIP of Russia) is a national sectoral NGO, integrating industrial parks (estates) since 2010. In 2015 AIP of Russia were authorized to issue certifications to industrial parks on conformity to the running standards.

The certification is a mandatory condition for including industrial parks (estates) in the Register of the Russian Ministry of Industry and Trade. At the beginning of 2020, AIP of Russia comprised 150 legal entities, including 100 industrial parks, from 48 subjects of the Russian Federation, of which 34 are certified, and they form a pool of park-candidates for including in the Register [8]. The Federal Law on industrial policy directs that industrial parks (estates) and industrial clusters are a form of spatial organization of industry recognized by the state and their presence in the territory of a particular region is a factor of an efficient industrial policy of the region. Currently, 80 subjects of the Russian Federation have announced 875 industrial parks that, apart from the 46 parks entered in the State Register and 48 certified parks, include 781 facilities that regions intend to develop, and that are currently are at the state of design or construction [10]. Obviously, these 781 facilities that at the moment do not function as industrial parks can be considered in the capacity of a quantitatively-significant potential base for establishing operating industrial parks across regions. Thus, it is a project, valuable for all regions, on pursuing an efficient industrial policy with use of an operational institutional tool based on No.488-FZ Federal Law “On industrial policy in the Russian Federation”, which complies to the goals and objectives of the National Projects for strategic development of Russia till 2024. It is exactly on the territories of industrial parks with completed modern production and transport infrastructure, where attractive conditions will be created for investors ready to develop operations in the form of industrial enterprises (park residents), particularly, small and medium business, which, in its turn, will increase the overall investment attractiveness of a territory [11]. As a result, new modern high-productivity workstations can be created, generating decent salaries for workers, and subsequently leading to improved housing conditions and providing high-quality education to the younger generation. Thereby, a chain of positive social-and-economic effects is built up that ultimately decreases the poverty level, improves the quality of life of the population and raises the level of confidence in the power-holders.

4. CONCLUSIONS

- 1) Currently, a double pattern of setting the goals for fulfillment of the National Projects by regional authorities is formed. First, there are directive goals for achieving the regional targets of the National Projects. Second, 15 indicators are determined in the regulatory framework to evaluate performance of supreme officials of the subjects of the Russian Federation and regional executive bodies, that are directly linked to successful execution in the regions of the National Projects for strategic development of the Russian Federation till 2024.
- 2) To fulfill the regional elements of the National Projects and achieve the target values of evaluating performance of the senior regional officials and regional executive bodies, the working agenda of regional authorities should include development of a regional economic growth policy as a top priority. The key objective, tasks and tools for creating points of growth should be identified exactly within this policy to enable comprehensive solutions for regional development.
- 3) Based on the positive established practice, such points of regional economic growth can become industrial parks established as part of an efficient industrial policy under No.488-FZ Federal Law “On industrial policy in the Russian Federation”. It ensures achieving the set of target values for evaluating performance of senior officials and regional authorities, and answers the purposes of the National Projects for strategic development of the Russian Federation till 2024.

LITERATURE:

1. No.488-FZ Federal Law “On industrial policy in the Russian Federation” of 31.12.2014 // Retrieved 14.12.2019 from a web-site on legal acts, codes and regulatory acts in the Russian Federation: <https://legalacts.ru/doc/federalnyi-zakon-ot-31122014-n-488-fz-o/> [in Russian]
2. No. 204 Order of the President of the Russian Federation “On the national goals and strategic objectives for development of the Russian Federation till 2024” of 07.05.2018 // Retrieved 17.12.2019 from the official web-site of the President of the Russian Federation: <http://www.kremlin.ru/acts/bank/43027> [in Russian]
3. No.193 Order of the President of the Russian Federation “On assessing performance of senior officials (Heads of supreme government bodies) of the subjects of the Russian federation and executive bodies of the subjects of the Russian Federation” of 07.04.2019 // Retrieved 12.12.2019 from the official web-site of the President of the Russian Federation: <http://www.kremlin.ru/acts/bank/43027> [in Russian]
4. Kashin, A., Komarova, O. (2017). The role of small business in shaping and developing economic agglomerations. *Journal of Economy and Entrepreneurship*. 2017. No. 3-2 (80-2). Pp. 555-558. [in Russian]
5. Retrieved 18.12.2019 from the official web-site of the President of the Russian Federation:: <http://kremlin.ru/events/president/news/60485> [in Russian]
6. Retrieved 16.12.2019 from the official web-site of the Government of the Russian Federation: <http://government.ru/>. [in Russian]
7. Retrieved 10.01.2020 from the official web-site of the Ministry of Industry and Trade of the Russian Federation (Minpromtorg Russia): <http://minpromtorg.gov.ru/docs/orders/> [in Russian]
8. Retrieved 19.12.2019 from the official web-site of the Industrial Parks Association: [http://www.indparks.ru/upload/medialibrary/8f4/Obzor%202016%20site%20\(1\).pdf](http://www.indparks.ru/upload/medialibrary/8f4/Obzor%202016%20site%20(1).pdf) [in Russian]
9. Retrieved 17.12.2019 from: <https://svpressa.ru/> [in Russian]
10. A list of industrial parks of Russia – 2019. Retrieved 24.01.2020 from: https://russiaindustrialpark.ru/industrialparks_catalog_perecheny_spisok_russia [in Russian]
11. Pleslov, A. (2017). Organizational and economic factors of establishing and developing industrial parks. *Russian Journal of Entrepreneurship*. 2017. V. 18. No. 5. Pp.749-759. [in Russian]
12. No. 618 Order of the President of the Russian Federation “On the main directions of the state policy for competition development” of 21.12.2017. Retrieved 08.01.2020 from: <https://fas.gov.ru/documents/600680>
13. Lukashenko, O. (2017). Chapter 2. Theoretical foundations of competition policy. § 2. Specifics of competition at the modern stage. Pp. 63-81. In Karaganchu, A, Knyazeva, I. *Competition policy for preventing restrictive business practice and anticompetitive state aid. Experience and practice of the European Union*. Novosibirsk: Novosibirsk State University Publishing. 2017. 296 p. [in Russian].

THE ANALYSIS OF THE ELECTRONIC COMMERCE IN THE CONTEXT OF BUYERS' BEHAVIOR

Andzela Veselova

University of Latvia

Aspazijas blv.5., Latvia

andzela.veselova@lu.lv

ABSTRACT

Nowadays, the trend of online trade or selling and purchasing things through the Internet keeps increasing all over the world, including Latvia. This means that buyers tend to prefer online shops instead of real stores. It is possible that relatively soon the online trade will replace other types of retail sales. Although it seems more convenient for both buyers and sellers, there is a bunch of negative aspects to consider. Online trade is the way of sales of goods or services on Internet sites instead of physical trading points like shops, markets, kiosks etc. The customers of Internet shops see the offer on a website, place their orders and the purchased goods are delivered by post or delivery service. Sometimes, on rare occasions, the seller takes care of the delivery itself. The aim of the research is to explore the behaviour models of the buyers purchasing goods online basing on theories related to online trade, detect the different and elaborate the conclusions. The tasks to complete are following: analyse theoretical aspects of online trade and its models and make the conclusions.

Keywords: *e commerce, online shops, online trade*

1. INTRODUCTION

Information and communication technologies overcome borders, distance and time. Technologies are the main driving force of globalization. Nowadays, the widest accessibility of international electronic commerce as well as the promotion of electronic trade is among top economic priorities of many countries (Barnes, Vidgen, 2002). One of the most important parts of electronic commerce is shopping online. Online trade keeps spreading all over the world. The wide range of goods and services makes online trade an important instrument for individuals, companies, institutions of different sectors and state authorities. The partnerships become more efficient through using information and communication technologies. The efficiency of cooperation relates to the decreasing costs of the trading deals. (Cristobal, Flavian, Guinaliu, 2007). Namely, deals online reduce the costs related to the finding and processing the information, discussions and signature of contracts, therefore the sales procedure is fast and simple, increasing the possibilities to attract investments and to improve the geographic accessibility. According to author, the development of electronic commerce in today's world closely relates to the economic development. Largely, the electronic commerce bases on growth of IT use and increase of trade deals in the world. The electronic commerce and, particularly, the online trade, has become reality due to the innovations and human achievements in information and communication technologies. In online trade, Internet accessibility is one of the core values. Electronic commerce opens new opportunities for the development of the company, offering goods or services 24/7, ensuring the uninterrupted advertising of the company or even becoming a part of the global market. In order to ensure successful sales of goods or services as well as to make profit, the customers and end users of the purchased goods and services must be in focus. From the company's perspective, it is very important to find out the reasons motivating the buyers to purchase particular goods or services online as well as the steps and order of their activities taken during the purchase procedure (Marimon, Vidgen, Barnes, Cristobal, 2010). Besides, it is important to find out the external impacts to the buyer's actions taken during the purchase procedure.

More and more often, the customers choose to purchase different products and services online. Constantly increasing range of goods and services is one of the reasons to prefer shopping online. All these circumstances intensify the competition between the companies working in e-commerce field. Therefore, a detailed study of activities of current and potential customers reduces the risks of inappropriate offers by the merchants. The aim of the research is to explore the behaviour models of the buyers purchasing goods online basing on theories related to online trade, detect the different and elaborate the conclusions. The tasks to complete are following: analyse theoretical aspects of online trade and its models and make the conclusions. Nowadays, the proportion of online trade and Internet shopping keeps increasing both in Latvia and all over the world. It means that the buyers tend to prefer online shops instead of real retail stores. Possibly, relatively soon the online trade will replace the rest of retail sales as more appropriate and beneficial method both for buyers and sellers. However, there are also many negative aspects of the issue.

2. THE IMPORTANCE OF ONLINE TRADE AND ITS MODELS

According to D. Chaffey, the online trade is a type of trade, where the goods and services are sold on the Internet instead of real retailers, such as stores, markets, kiosks and other. It means that the customers of online shops browse the offer on the website, place their orders and the delivery of the products is organized by mail or a delivery service company. On rare occasions, the seller delivers the goods itself (Chaffey, 2016). According to R.T. Watson, P. Berthon, F.L. Pitt and G.M. Zinkhan, online trade has conquered the hearts of the buyers by making their lives easier. They do not have to spend time to go to the retail shops. Besides, the prices of the goods and services on Internet tend to be lower than the prices of the same products sold in high street shops. In case of online trade, the seller needs just a warehouse to store the goods and the office for management purposes, sparing the costs related to the management and maintenance of the stores. The difference in costs allows offering the same products for better price in comparison to retailers (Watson, Berthon, Pitt, Zinkhan, 2008). Feng Li points out that online trade, however, has many disadvantages discouraging many buyers to choose this kind of shopping. There are a lot of fraud on Internet and a huge number of methods to deceive the buyers using online shops. The most popular is a simple swindling of money by ordering prepayment of goods and failing to deliver the order afterwards (Feng, 2015). It is essential to check, whether the online shop delivering the goods is secure and free from fraud. Online trade also includes the possibility that something can be mixed up and the buyer will not receive the ordered product. It is not possible to see and try the product in reality, which is an important disadvantage when purchasing clothing. Despite the basic price online often is lower, sometimes the delivery costs covered by the buyer reaches the prices of the retailer. Besides, sometimes the delivery costs are not clearly stated, thus leading to the disappointment of the customers (Suppliers of trade, 2018). It is hard to conclude whether the online trade is better or worse in comparison to traditional retail sales, but it is clear that it will keep attracting the customers. Lately, in the largest part of the world the online trade dominates over the regular retail sales. It keeps developing due to many innovations that also allow dealing with deficiencies step by step. The most significant features that make online shopping attractive are comfort, speed and low prices etc. However, the shopping as process in a traditional way, including the ambience and the possibility to try the product are also important for many consumers. According to author, an online shop is one of the most popular solutions of electronic commerce. The online shop is a virtual place, where the seller offers the products and services via new electronic technologies, but the customer uses the technologies to find out the information on offer and places the order to be delivered.

To classify the online shops D. Chaffey offers the following features:

1. Users, technical solutions and options;
2. Volume of the market share;
3. Assortment of goods and services (Chaffey, 2016)

Considering the feature including users, technical solutions and options, the electronic shop-windows is the simplest way to organize the online trade by publishing detailed information on goods on sale, and placing all necessary pictures. According to J. Reynolds, the important shortcoming of the electronic shop-window is the automatic purchase order function without a mechanism providing the implementation of electronic payments. The ordering includes the sending of an e-mail to the administrator, calling the administrator or appearing in the office of online shop to receive the goods. Such a solution does not require the elaboration and installation of a special software that could prepare and launch the virtual online shopping project in a short time, but such an approach is not convenient for the customers, because many additional activities are involved.

2.1. Subjects of e-commerce and their interaction

The electronic commerce consists of three elements that are three wales of the whole e-commerce system: government (G), business (B) and customers (C). Table 1 below displays the interaction of these elements.

Table 1: Participants of e-commerce

Beneficiary Supplier	Country	Company	Consumer
Company	B2G	B2B	B2C
Country	G2G	G2B	G2C
Consumers	C2G	C2B	C2C

Source: (Oterwalder, A., Pigneur, Y., 2012;)

The author believes that two types of interaction deserve particular attention, namely, B2B (business to business) and B2C (business to consumer), meanwhile other interconnections among the participants of e-commerce according to A. Oterwalder and Y Pigneur (Oterwalder, Pigneur, 2002) can be defined as follows: B2G (business to government) – the merchant provides the services to the governmental and municipal institutions; G2G (government to government) – different governmental or municipal institutions cooperate among themselves; C2G (customer to government) – individuals perform duties regulated by law and regulations, for instance, pay taxes, submit declarations and similar; G2B (government to business) – governmental or municipal authorities provide the services to businesses, for instance, issue licences, trade permissions, guarantees the access to information included in the registers; B2B (Business to Business) – the communication between the companies or legal bodies; C2B (customer to business) – an individual provides the services to the companies; C2C (customer to customer) – the individuals interact among themselves, for instance, one person sells the product to another using information and communication technologies; G2C (government to customer) – governmental and municipal institutions provide the services. The users are individuals – taxpayers, population of the respective municipalities etc. The characteristic of online services are displayed in Table 2 below.

Table foillowing on the next page

Table 2: Characteristics of Online Services

Year	Authors	The main ideas of the online service concepts
2000	<i>Grönroos C., Heinonen F., Lindholm M. & Isoniemi K.</i>	<ul style="list-style-type: none"> • Basic services; • Additional offers, customer participation
2001	<i>Conrick M. & Essen A.</i>	<ul style="list-style-type: none"> • Special, personalized communication • Customize of business offer in real time; • The correction of the company's real-time mode; • Cross product development; • The possibility of attracting customers.
2003	<i>Ribbink F., van Riel A.C., Liljander V. & Jurriens P.</i>	<ul style="list-style-type: none"> • Basic services; • Promotional services; • Ancillary services; • Additional services; • User interface.
2005	<i>Roth, Boyer &Hallowell</i>	<ul style="list-style-type: none"> • Increasing of service delivery capabilities • Offering the new services of a lower cost, with the widest geographic coverage and product diversity
2008	<i>Heinonen K.</i>	<ul style="list-style-type: none"> • Value depends on benefits and “victim”; • Value of worth: technical, functional, time, spatial
2010	<i>Conrick M. & Essen A.</i>	<ul style="list-style-type: none"> • Innovative service concept; • Innovative service system; • Innovative service process.

Source: By the author basing on models by Grönroos, Heinonen, Lindholm & Isoniemi; Lemon & Rust; Ribbink, van Riel, Liljander & Jurriens; Boyer, Hallowell & Roth; Heinonen K.; Conrick. & Essen

Thus, the analysis leads to conclude that the main task of the online service similarly to the traditional services is to meet the needs of the consumers, and it is achieved through other elements of the service, such as flexible price, additional comfort, speed, control, simple dealing and constant improvements. The author makes several conclusions regarding the main characteristics of online services discussed by various authors in their theories:

1. All theories pay particular attention to the communication with the customer, customer reviews, information flow, interchange of information and personalized communication.
2. The main difference from the traditional service mentioned by the researchers is the use of new technologies and innovations in the services provided by the Internet.

2.2. Evaluation criteria of e-commerce services

In latest decades, the quality assessment methods for services have become an important field for marketing research. Due to the increasing importance of the services, the scientists and businesspersons work to improve the quality of the provided services (Chaffey, 2016). One can define the quality of the electronic services as general assessment of the clients and the decision on best practice quality in the field of electronic services in virtual market. Since the issue is in focus of the research from 2000 on, this study will base on most popular models of online services' efficiency assessment starting from the aforementioned period (Chaffey, 2016). Table 3 displays the common aspects regarding the most popular quality criteria models for electronic services in chronological order.

Table 3: Parameters for electronic services' quality assessment

Authors	Year	Quality assessment parameters
Wigand R.T. & Swaid, S.I.	2009	Ease of use of the website, quality of information, reliability, responsiveness, trust, personalization.
Stehenaus, R., Raman, M., Alam, N. & Kuppusamy, M.	2008	Ease of use, appearance, reliability, customization, communication, initiative.
Lin Y. & Lee Y.	2005	Website design, reliability, responsiveness, personalization.
Ribbink D., van Riel A.C., Streukens S. & Liljander V.	2004	Ease of use, website design, customization, responsiveness, trust.
Gilly M. & Wolfinbarger. M	2003	Performance (reliability), site design, customer service, security (confidentiality).
Santos J.	2003	Ease of use, appearance, connectivity, The structure and arrangement, content, reliability, efficiency, support, communication, safety, initiative
Vidgen, R.T. & Barnes S.J.	2000	Ease of use, design, information, trust and empathy.

Source: Chaffey, 2016

In 2003, J. Santos identified several factors that define the quality of electronic services. He mentioned the ease of use of the site, its appearance, communication, structure and layout as well as contents, reliability, efficiency, support, communication, safety and initiative (Santos, J. 2003). At the same time, M. Gilly and M. Wolfinbarger, in their turn, identified four quality aspects of electronic services as follows: performance (reliability), website design, customer service and security (privacy) (Gilly, Wolfinbarger, 2003). In 2004, D. Ribbink, A.C. van Riel, S. Streukens and V. Liljander defined five quality parameters of electronic services – ease of use, website design, customization, responsiveness and trust (Ribbink, van Riel, Streukens & Liljander, 2004). In 2005, Y. Lin and Y. Lee came up with five quality criteria for electronic services – website design, reliability, responsiveness, trust and personalization (Lin, Lee, 2005). At the same time, A. Parasuraman, A. Malhotra and V. Zeithaml in their study proved that in order to assess the quality of electronic services, two different evaluation scales – *E-RecSQUAL* and *ES-QUAL* – should be applied. The main scale *ES-QUAL* consists of four parameters: efficiency, performance, accessibility and confidentiality. *E-RecS-QUAL* is a sub-scale of *ES-QUAL* and includes the elements related to the processing of troubleshooting and orders related to the service. *E-RecS-QUAL* suits only for the customers that have accidentally opened the website. This scale considers relevant three quality aspects – operativeness, compensation and contact (Parasuraman, Malhotra, Zeithaml, 2012). In 2008, R. Stehenaus, M. Raman, N. Alam and M. Kuppusamy offered six dimensions of electronic services. They identified the following parameters to assess the efficiency of an Internet shop: ease of use, appearance, reliability, personalization, communication and initiative (Stehenaus, Raman, Alam, & Kuppusamy, 2008). In 2009, R.T. Wigand and S.I. Swaid identified the following quality parameters for electronic services – ease of use of the website, quality of information, reliability, responsiveness, trust, personalization (Wigand, Swaid, 2009). R.T. Vidgens and S.J. Barnes, in their turn, defined five quality dimensions of electronic services, emphasizing the criterion “ease of use”.

They believed that this particular criterion includes appearance, ease of use and navigation as well as fast and clear image transmission to the user (Vidgen, Barnes, 2000). D. Ribbink, A.C. van Riel, S. Streukens and V. Liljander also accentuated the ease of use as the most important assessment criterion, believing it includes such critical aspects as functionality, availability of information, ease of ordering and navigation (Ribbink, van Riel, Streukens & Liljander, 2004). R.T. Wigand and S.I. Swaid agreed to the opinion of other researchers and include in their model a parameter that, they believe, include the most important aspects for the customer – perception of convenience and ease of navigation in using the website. (Wigand, Swaid, 2009) The next step after evaluation of the ease of use of online shop, the next important issues are simplicity, availability and clearness of all actions to be taken for standard user. J. Santos describes simplicity as the ease of use of the website to search external information necessary for the customer, the simplicity of internal navigation and browsing options within the website. The external browsing related to the search of the particular website on Internet (Santos, 2003). R. Stehenaus, M. Raman, N. Alam and M. Kuppusamy relate the ease of use of the website to the ease of memorization of e-mail address, easy navigation as well as concise and clear contents, terms and conditions (Stehenaus, Raman, Alam, Kuppusamy, 2008). All authors, except R.T. Wigand and S. I. Swaid in their models emphasize the web design criterion, which, they believe, is an important issue for the customers during the purchasing procedure (Wigand, Swaid, 2009). R. T. Vidgen and S. J. Barnes believe that design means attractive appearance and aesthetics (Vidgen, Barnes, 2000). Y. Lin and Y. Lee totally agrees with R.T. Vigen and S. J. Barnes, because the web design is a key factor for the visual assessment of the interface by the users and consumers (Lin, Lee, 2005). D. Ribbink, A.C. van Riel, S. Streukens, S. and V. Liljander supports the opinion of aforementioned authors. They believe that the website must be visually pleasant. Therefore, one more service quality dimension turns out related to the web design user's interface. Authors mention that one of the advantages of IT is the possibility to adapt the website to the needs of user even if it is not very easy. (Ribbink, van Riel, Streukens & Liljander, 2004). J. Santos writes that the design includes the correct colour, graphics, picture and use of animations, also web pages of appropriate size. According to Santos, design is the first parameter assessed by the Internet users (Santos, 2003). R. Stehenaus, M. Raman, N. Alam and M. Kuppusamy are of similar opinion. They believe that appearance means attractive graphics, colors and images. In addition, the website must be understandable and well-organized (Stehenaus, Raman, Alam, Kuppusamy, 2008). M. Gilly and M. Wolfinbarger assess this parameter in the light of Internet service users' experience. They state that the website design includes navigation, information search, processing of orders, personalization and the selection of goods, but excludes customer service (Gilly, Wolfinbarger, 2003). All included authors have paid attention to information and the way it is presented to the user. R.T. Vidgen and S. J. Barnes write that the information assessment parameter consists of its suitability to the goal and needs of the user (Vidgen, Barnes, 2000). According to J. Santos, the information is the content of the website related to the products and the demonstration of website functions (Santos, 2003). Too extensive or too limited information are both negative factors. The information on website containing the description of goods must precisely represent and describe the qualities of the products placed for sale. The description of the product must match the customer's idea of what he or she has ordered. R.T. Wigand and S. I. Swaid fully share this opinion claiming that the quality of information includes consumer perception of usefulness and quality of websites (Wigand, Swaid, 2009). In addition, for the assessment of service quality such criteria as credibility, safety, confidentiality and customer loyalty, are very important. Maintainability, writes J. Santos, is the ability to carry out the promised service correctly and consistently, including the frequency of website updating, immediate response to the requests of the customers, accuracy in online shopping and payments (Santos, 2003). R. T. Wigand and S. I. Swaid (2009) identify the credibility of the service with such factors as buyers'

perception about the reliability of the website (confirmation letters of order placement, order tracking function) and the commitment of the seller regarding precise implementation of the service (according to the statements published in the website). Y. Lin and Y. Lee (2005) believe that the reliability is what guarantees the ability of the website to process the orders, guarantee fast deliveries and comply with the requirements of personal data security. According to R. Stehenaus, M. Raman, N. Alam and M. Kuppusamy, the reliability includes order accuracy, updated content and fulfilment of promises (Stehenaus, Raman, Alam, Kuppusamy, 2008). M. Gilly and M. Wolfinbarger, in their turn, identify the security with confidentiality and relates it to secure credit card payments and general confidentiality of customer-related information (Gilly, Wolfinbarger, 2003). D. Ribbink, A.C. van Riel, S. Streukens and V. Liljander (2004) in their research proved that both security and confidentiality cause many doubts in the context of online shopping. A. Parasuraman, A. Malhotra and V. Zeithaml combined two parameters (security and privacy) and renamed the new criterion “protection” that included the security of the site and the protection of sensitive information of the customers (Parasuraman, Malhotra, Zeithaml, 2012). D. Ribbink, A.C. van Riel, S. Streukens and V. Liljander shared the view that the security and confidentiality cause great doubt in the field of electronic services (Ribbink, van Riel, Streukens & Liljander, 2004). They considered security separated and independent criterion indicating on its autonomy from threats, risks or doubts (including financial volatility) during the implementation of service. R.T. Vidgen and S. J. Barnes (2000) believe that the reliability is the main parameter containing security and confidentiality related to personal data collecting as well as to the reputation of the website. Y. Lin and Y. Lee (2005) define reliability as the readiness of the customers to accept the vulnerability in case of a deal on Internet basing on their positive expectations related to the further activities of the online shop. There are also the efficiency parameters of the service identified by the authors in different ways. According to J. Santos, the efficiency includes downloading, search and navigation speed (Santos, 2003). M. Wolfinbarger and M. Gilly (2003) believe that the efficiency criteria of customer service include the responsiveness, appropriate and ready service that can react fast to the demand of the buyer. A. Parasuraman, A. Malhotra and V. Zeithaml (2012) point out, that efficiency is characterized site accessibility and ease of use, also operating speed (Parasuraman, Malhotra, & Zeithaml, 2012). Some authors in their works emphasize such criteria as relations with customers and communication in general. J. Santos believes that the communication depends on quantity and quality of the links distributed by the website meanwhile the connection means descriptive information of customers, on-time provision of due information and communication in the language that customers understand (Santos, 2003). A. Parasuraman, A. Malhotra and V. Zeithaml (2012), in their turn, considered communication the accessibility of a particular help through phone or Internet. R. Stehenaus, M. Rama, N. Alam and M. Kuppusamy attribute a similar feature to the communication criterion explained as the availability of the website to the customers meaning the possibility to contact the provider of the website and offer different communication means and channels aimed to reach the support service of the site (Stehenaus, Raman, Alam, Kuppusamy, 2008). Personalization of the provided services is also important since every customer wishes to feel unique. D. Ribbink, A. C. van Riel, S. Streukens and V. Liljander (2004) stated that the personalization can be elaborated basing on previous purchases as well as on information provided by other customers. The users of electronic services await fast feedback to their orders and suggested improvements (Ribbink, van Riel, Streukens & Liljander, 2004). Stehenaus R., Raman M., Alam, N. un Kuppusamy M. (2008) also focuses on personalization. The individualization must be adapted to the user’s interface in a way that is beneficial for the customer. R. T. Wigand and S. I. Swaid stated that personalization includes the perception of the customers about individualized attention and differentiation of services adapted particularly for a maximum satisfaction of customers’ needs (Wigand, Swaid, 2009).

According to Y. Lin and Y. Lee (2005), the personalization requires personal attention, for instance, sending personal recognition letters on behalf of the online shop, provision of feedback responding to the questions and comments of customers. R.T. Vidgen and S. J. Barnes (2000) view personalization as the part of such criterion as empathy which relates to the quality of feedback (Vidgen, Barnes, 2000). Several authors emphasize such criterion as initiative or stimulus. J. Santos (2003) identifies both notions and considers initiative a stimulus transmitted by the seller to the customer in order to achieve more frequent views of the website by additional bonuses and rewards. R. Stehenaus, M. Raman, N. Alam and M. Kuppusamy regarded initiative as the component of promotion carried out by the website provider aiming to keep the current clients and to attract new customers (Stehenaus, Raman, Alam, Kuppusamy, 2008). Less than a half of the authors consider operativeness important among the website assessment criteria. Y. Lin and Y. Lee (2005) claimed that operativeness shows the frequency of services provided voluntarily by an online shop responding to customer requests regarding information browsing, navigation and service speed important to the target audience. Operativeness means efficient reaction to the problems and returning customer through the website. R.T. Wigand and S.I. Swaid connects operativeness to the assistance to the customer and customer's perception regarding the support, when necessary either in automatized way or using the human factor. (Wigand, Swaid, 2009). Maintenance includes the perception of the customers about the loyalty and reliability of the website. The support mentioned by J. Santos can be also included in this criterion, since its characteristics are similar to the previously quoted definition of operativeness. Author believes that the support relates to technical assistance, user instructions and personal advices available on website for the convenience of the customers.

3. CONCLUSIONS

The analysis performed leads the author to several important conclusions regarding the assessment criteria of online services:

1. The largest part of the attention turns to the website design and image, credibility of information, security and confidentiality, meanwhile the degree of quality compliancy and customer loyalty are not in the focus.
2. None of the lists provided by the authors includes all necessary and unified assessment criteria, despite many criteria lists are similar.
3. The studies of the technical aspects of services are very limited in terms of quality assessment parameters. Therefore, there is plenty of criteria for online service quality assessment, but not a general unified list of criteria suitable to assess the quality level of Internet services. In order to find out the most important assessment criteria, it is necessary to know, which criteria are most important for the customers.

LITERATURE:

1. Barnes, S.J., Vidgen, R.T. (2002). An Integrative Approach to the Assessment of E-Commerce Quality. *Journal of Electronic Commerce Research*, 3(3), 114-127.
2. Chaffey, D. (2016). E-business and e-commerce management. Prentice Hall Ltd., p.31.
3. Cristobal, E., Flavian, C., & Guinaliu, M. (2007). Perceived E-Service Quality: Measurement Validation and Effects on Consumer Satisfaction and Website Loyalty. *Managing Service Quality: An International Journal*, 17(3), 317-340.
4. Feng, L. (2015). What is e-business? How the Internet transform organization, Blackwell publishing Ltd., p.28.
5. Gilly M., Wolfenbarger M. (2003). eTailQ: dimensionalizing, measuring and predictingetail quality. *Journal of Retailing*. Vol.79, p.187
6. Internet Banking. (2008). *Journal of Internet Banking and Commerce*. Vol. 13(2).p.1.

7. Lin, Y., Lee, Y. (2005). Customer Perceptions of E-service Quality in Online Shopping, *International Journal of Retail & Distribution Management*, 33(2-3), pp.161-176.
8. Marimon, F., Vidgen, R., Barnes, S. & Cristobal, E. (2010). Purchasing behaviour in an online supermarket: the applicability of E-S-QUAL. *International Journal of Market Research*, 52(1), 111-129.
9. Oterwalder, A., Pigneur, Y. (2012). E-business model design, classification and measurments. *Thunderbird International Business Review*, p.27.
10. Parasuraman A., Malhotra A., Zeithaml V.A.(2012). E-S-QUAL: A multiple-item scale for assessing electronic service quality. *Journal of Service Research*. Vol. 7(3).p. 213.
11. Ribbink, D., van Riel, A.C., Streukens, S., Liljander V. (2004). Comfort your online customer: quality, trust and loyalty on the Internet. *Managing Service Quality*. Vol. 14(6).p.359.
12. Santos, J. (2003).E-service Quality: A Model of Virtual Service Quality Dimensions. *Managing Service Quality*, 13(3), pp. 233-246.
13. Stehenaus R., Raman M., Alam, N., Kuppusamy M. Information Technology in Malaysia: E-Service Quality and Uptake of and Uptake of Internet banking. *Journal of internet banking and commerce*.Vol. 24 (3), p.9.
14. Suppliers of trade. Retrieved 20.01.2020. from : <http://www.ltvclv>.
15. Vidgen, R.T., Barnes, S.J. (2000). An Integrative Approach to the Assessment of E-Commerce Quality. *Journal of Electronic Commerce Research*. Vol. 3(3).p.114.
16. Watson, R.T., Berthon, P., Pitt.F. L, Zinkhan, G.M. (2008). Electronic Commerce: The Strategic Perspective.A Global Text, Zurich, p.11.
17. Wigand, R.T.,Swaid S.I. (2009). Measuring the quality of e-service: Scale development and initial validation. *Journal of Electronic Commerce Research*. Vol. 10(1). p.13.

THE EU UNEMPLOYMENT UNDER THE RECENT DEVELOPMENTS OF THE GLOBAL ECONOMIC GLOBALIZATION

Athanasios G. Panagopoulos

University of Macedonia

Egnatia str. 156, GR546 36, Thessaloniki, Greece

thpanag@uom.edu.gr

ABSTRACT

The literature recognizes that the gradual countries' involvement in the economic globalization has generated competitive environments that stimulate innovation and economic growth. Yet, globalization has also apparently led to the increase of inequality, contributing for waves of populism and discontent, claiming for justice in sharing these benefits. Thus, it is not surprising that the interaction globalization/social justice is paying attention to politicians and academics, seeking to identify if there is reason to fear that the globalization leads to increase inequality. The paper deals with the link between globalization and social justice, measured by updated indicators that improved the data quality and broadened their baseline. In what globalization concerns are applied the renewed KOF index, including de facto and de jure perspectives. Concerning social justice, are used the latest "EU Social Justice Index". Structural unemployment trends, such as the long duration distressing people's skills and motivation, as well as youth unemployment, which has stimulated immigration and led to the departure of skilled young people, have greatly reduced their potential for growth. GDP declined, corporate failures increased, as did unemployment and poverty. Governments have greatly limited their spending, particularly at the social level, in order to meet the targets, set in the adjustment programs. In addition, countries no longer have financial conditions to implement measures to stimulate the economy, in order to promote a faster recovery. It has recently been surprising that the escalation of globalization has put people in a precarious employment position, who felt they were protected from the competition of low wages. This paper, also, reflects on the effects of the recent global financial crises in the EU members, which especially hit the Euro zone.

Keywords: *Globalization, Indicators, Justice, Unemployment*

1. INTRODUCTION

The link between globalization and social justice plays a key role in the current political debate, based on the general conviction that the inequality caused by globalization is a major stimulus to populism (Pastor & Veronesi, 2018). Overall, globalization seems to support the gradual convergence of incomes across countries, even as trade liberalization has allowed many emerging countries, especially China, to achieve very substantial and sustained levels of economic growth over a long period (Harger, Young & Hall, 2017). However, the centre of the current discussion focuses on income inequality within countries, particularly in the more developed and industrialized economies. Not surprisingly, the United States, for example, is widely recognized as the country experiencing the most pronounced increase in income inequality, partly because competition from emerging economies has affected the jobs of less qualified people (Saez, 2018). While research recognizes and identifies a number of factors which have influenced those trends, there is also some consensus that the trends in economic globalization, technological change, especially in the field of information and communication technologies, biased reforms in tax systems. Particularly, the labour market and the deregulation of financial markets have contributed to growing social inequalities and territorial disparities within countries (Herr, 2015). This global economic and financial crisis that has hit the European Union, particularly some euro zone countries, has caused unsettling symptoms of

opposition to the European project and the growth of waves of populism and nationalism (Guiso et al., 2019). The US-initiated crisis quickly changed the centre of gravity for Europe and revealed the fragility of some economies, notably the high levels of public debt of euro zone countries and the effects on their economic and financial sustainability and the single currency itself. This process has resulted in the deterioration of economic conditions, provoking social unrest and contestation and even hostility towards the process of European integration, which has had electoral consequences in recent years (Hernandez & Kriesi, 2016). In this context, the paper focuses on the interaction between the levels of economic globalization of the countries that make up the European Union and the components that embody Social Justice. The paper analyzes the impacts that the economic and financial crisis, which occurred after 2007, had on social justice indicators, especially on access to the labour market, in the various groups of European Union countries, i.e. those that integrate or not the European Monetary Union. The paper is considered relevant from the point of view of the literature, as, to the best of our knowledge, this is the only paper so far that analyzes the impacts of the recent financial crisis on the twofold levels of globalization and social justice and unemployment. Additionally, the paper explores the new indicators produced by the KOF, separating the *de jure* and *de facto* dimensions, as well as updated data from the EU Social Justice Index.

2. TRADITIONAL INTERNATIONAL TRADE THEORIES AND DISTRIBUTION OF TRADE GAINS

Traditional theories of international trade, including the classical approach and neoclassical models, provide rationality for countries' economic specialization and advocate trade as a creator of wealth. These theories thus justify economic globalization as the result of a worldwide liberalization process in which countries specialize according to their comparative advantages and from which everyone can benefit. They do not attach much importance on the distribution of trade gains by countries and economic agents and, as such, have not provided coherent answers to understand some current trends in globalization, especially with regard to the growing inequality in income distribution in the world within countries. In our opinion, it justifies to stress the argument of these theories and to counter the criticism of the unrealistic assumptions on which they are based. Thus, the emphasis we give to these theories in the literature review allows us to gauge their limits and the need to seek more robust theoretical frameworks that take into account the specificity of resources and the quality of production factors available in the several countries. This makes it possible to understand the criticism of the way economic and financial liberalization has taken place and the growing marginalization of less skilled labour in income sharing. Therefore, considering the interaction between the dynamics of globalization and the variables of social justice, being complex, is entirely pertinent. The term "globalization" used today involves multiple and complex features, ranging from culture, technology, politics and economics, to the notion of interdependence as the standard of personal relationships. In reality, people are increasingly dependent on each other, in the various territorial levels that we consider, reflecting the growing number of contacts made, mostly financial and commercial, generating a greater flow of goods, services and technologies on a global scale, which reinforced the economic dimension of the phenomenon. The increasing dependency of relations on a global scale is at the heart of globalization, although there are different perspectives in the various social sciences that deal with the subject. Thus, since Wallerstein (1974) the approaches recognize the disparate effects of dependence on the geography and nature of economic flows, emphasizing their effects on global inequality. The dependency ratio is explicitly characterized by asymmetry in per capita income, since most of the wealth is concentrated in developed countries, and at the same time there is a growing divergence in income distribution within countries, regardless of their level of development. In economic terms, globalization has been treated as a phase of the world capitalist system, whose

main causal mechanisms stem from the economic requirements of multinational corporations penetrating foreign markets, resulting in significant competition and expansion of trade flows. Globalization is also seen as a form of convergence of interconnected production systems, basically from the neoclassical economic model that presents the convergence of prices of goods and factors such as the effect of market arbitrage. The modern economy emerged from criticism of the mercantilist tradition and builds the theoretical basis for the industrialization, international trade, and the building of European states. The basic principles of liberalism can be summarized by the competition in all markets and then by the creation of the gold-standard monetary system. Such conditions ensure the passage of individual interests into a global harmonious order, based on the invisible hand argument. Smith (1976) considers the territorial distribution of markets as a requirement of the division of labour, which he conceives as the principal source of the wealth of nations and defends free trade to generate prosperity for the various stakeholders. The theoretical foundation of free trade is due to Ricardo, by explaining the international division of labour on the basis of differences in labour productivity. The reasoning on the relative cost advantage grounds the conviction that trade can be a positive sum game if countries specialize in products where it has the lowest opportunity cost. So, all countries must participate in the world trade system for the benefit of all (Ricardo, 1970). Nowadays, this position on country specialization and free trade, as promoters of growth, is a powerful anti-protectionist reason in trade policy debates. This optimism on the economic and social effects of trade was strengthened identifying a set of positive political effects from trade liberalization (Hirschman, 1986). However, the optimism of free trade has also been challenged in terms of social issues when it became clear that large-scale poverty and subjection to the economic system left deep traces in allegedly wealth-generating processes. Nationalist and socialist ideas, in relation to the latter standing out the thought of Marx, assume that there are strong conflicts of interests in the functioning of the capitalist system, leading to the need for capital to expand in the various national markets in order to generate profits on a permanent basis as condition of their survival. Capital goes beyond the nation-state, but depends on it for its survival (Engels & Marx, 1969). In addition, labour exploited as a source of profit is reduced to poverty, accelerated by gradual automation and, as a consequence, consumer demand in domestic markets decreases. To explain the role of factor endowments in trade, the Stolper and Samuelson model (SS), based on factors - labour and land - and two goods, using different factorial intensities, predicts a linear relation between commodity prices and factor prices. Thus, the real wage will increase in both sectors (goods), while the real remuneration of the landowners will decrease in both productions. In an ideal world, free trade would tend to promote the equalization of prices of goods and factors of production. However, the persistence of trade barriers, transport costs and technological differences between countries prevents such a convergence in the real world from being verified, as evidenced by the empirical tests carried out (Deardorff, 1994). These models of trade and distribution of gains allow us to sketch the effects of price changes on the well-being of identifiable economic groups with severe distributional implications. There are similar results in models that show that under competitive conditions, as long as the importable good remains to be produced, there is at least one production factor that worsens its position with trade liberalization (Rodrik, 2018). That is, in an impressive way the trade generically always produces losers and winners. The pattern of gains and losses will depend on the details of the model. In the case of the SS model, the result is a relative change in workers' income, in favour of those with high skills. So, trade has an influence on the distribution of income within countries, for two reasons: first, because factors cannot move instantly and at no cost between industries and, on the other, because changes in product composition have effects on the demand for factors. Traditional trade theories show that trade equals an exchange of factors embodied in commodities, so buying them in a low-wage country implies procuring low-cost factors.

So, imports from low-wage countries threaten some labour in countries where wages are high. The distributional effect is that unskilled workers in low-wage countries earn from free trade as well as skilled workers in developed countries. The losers with free trade would be skilled workers in poor countries and unskilled workers in rich countries. However, the reality did not confirm such predictions. Skilled workers in poor countries have improved with globalization and the less skilled have lost, so most unequal distributions in income have arisen in poor countries. In fact, income distribution in poor countries has become more unequal as a result of globalization mounting (Hillmann, 2008).

3. INFLUENCES OF GLOBALIZATION ON INEQUALITY AND SOCIAL JUSTICE

Most traditional theories do not consider the effect of trade on the income distribution is a reason to limit it. Though, the distributive impacts have to be taken into account and must therefore be considered and regulated by the action of the states in their economic and social policy. In the 1980s and 1990s there were significant developments in favour of government intervention in trade policy orientations. On the one hand, the emergence of strategic trade policy (Brander & Spencer, 1985) provided additional reasons for countries to derive gains in promoting industries considered strategic. On the other hand, criticisms of globalization, centred on their effects on workers in less developed countries, but also on workers in industrialized countries, are strongly appearing. Many authors expressed their distress with some results of globalization. Stiglitz's position in *Globalization and its Discontents* is a clear example and an inexorable landmark (Stiglitz, 2002). He acknowledges that, while markets are efficient and provide the basis for growth, they are also a source of injustice because income earned and accumulated wealth are inconsistent with social equality standards. Thus, the author sustains that it is the responsibility of governments to moderate social inequality arising from the play of markets through public policies in the fields of taxation and income redistribution (Stiglitz, 2017). Globalization hampers the distributive effects of social justice, limiting the ability of governments to intervene with effective distributive policies. In integrated capital markets, the mobility flows occur to places where taxes are lower (Benassy-Quere et al., 2005), so, if capital is mobile and does not escape the highest taxes, the tax bases will then be limited to the income of immobile labour. Thus, capital cannot be taxed as labour, making globalization socially unfair and undesirable, while acting as a brake on redistribution policies. For some, globalization is seen not only as a barrier to social justice due to the constraints it imposes on governments, but it is the main reason for the inequality in the distribution of income because of the injustice of the markets (Ravallion, 2018). Equality in income distribution is generally seen as one of the determinants of social justice, making it a topic of greater concern, where the search for it allows one to confront the efficiency of markets and public policies oriented towards equity. Social justice is a salient topic in public discourse and political decision, as politicians vow to promote social justice. Globalization has been a widely studied phenomenon in different variants and some care is acknowledged in whether it is consistent with social justice. The debate has been controversial, even because the different concepts of social justice show that it is multifaceted, which makes measurement very difficult. An essential question concerns what gives rise to or impedes social justice and there several studies have tested the causal links between the two phenomena (Merkel & Giebler, 2009). Contestants of globalization admit that it has negative effects on social justice for whom the poor have been penalized by the waves of globalization. They assume that social justice is limited when social spending is reduced or when labour markets are deregulated. Stiglitz believes that trade liberalization so quickly has gone too far at the cost of rising unemployment, with the problem being the way it has been managed (Stiglitz, 2006). The political prescription is that governments must protect social agreements and if they collide with the demands of the global economy, it is this that must give way (Rodrik, 2011).

The empirical evidence is contrasted in relation to the link between globalization and social justice. We will briefly highlight some results obtained in the search for interaction between the two processes. Kauder & Potrafke (2014) investigate how social justice correlates with globalization between 1991- 2007 and the results show that OECD countries with a rapid globalization process enjoy greater social justice, suggesting that voters demand active governments when globalization is intensified, validating the compensation thesis. According to Meinhard & Potrafke (2012), a higher social security benefit due to the risks of international competition induces the State to broaden its intervention in order to ensure welfare levels, rising social spending in the course of globalization. In another sense, Sinn (2003) considers that globalization influenced the attributes associated with social justice, mainly reducing the weight of the public sector and the social state, limiting cohesion in the countries. In short, most studies acknowledge that the most globalized countries, with the highest insertion in value creation chains worldwide, also display higher levels of social justice. It is under this background that we will then develop our empirical application by testing the interaction between various dimensions of economic globalization and social justice in the countries of the European Union. It should be noted that the EU member-states are very different realities, both in terms of economic and technological development, as well as in the way in which their social and political models are organized and operated. The application covers the period 2008-16, which means that the impacts of the latest economic and financial crisis are assessed in the paper.

4. DATA AND METHODOLOGY

Here we will use two recently updated and renewed indicators with new methodologies that seek to cover the diverse dimensions of globalization and social justice. We refer specifically to the KOF indicators on globalization produced by the KOF Swiss Economic Institute¹ and the Social Justice indicator compiled by the Bertelsmann Stiftung. In methodological terms, we will use regression and correlation analyzes between the variables of interest, after their graphic visualization. As we have seen, the impacts of globalization on different economic and social aspects have been widely discussed in the literature. To analyze such effects in the analytical level it is necessary to have variables that allow to measure globalization as a multidimensional phenomenon, which suggests the use of multifaceted indicators. Such indicators should reflect how the process manifests itself in the lives of the citizens of the various countries that communicate with each other, exchange goods and services, ideas and information, or governments that cooperate to address global political problems. Thus, the measurement of globalization is usually made using composite indicators that try to capture the different manifestations of the phenomenon. Indicators such as KOF are presented as a solution, allowing the combination of different levels of globalization in a final index, becoming the globalization indicator most used in the literature. The KOF indicator was created by Dreher (2006), updated in Dreher et al. (2008) and has recently broadened its scope with the work of Gyglia et.al. (2018). Inherent in composite indicators is the risk of excessive simplification, which may result in misinterpretation of the results. Therefore, instead of building an index based on a broad definition, the new version of the KOF allows the flexible aggregation of different dimensions and characteristics of globalization, introducing the clear distinction between *de facto* and *de jure* measures. Thus, while *de facto* measures of globalization include variables representative of flows and activities, *de jure* actions encompass variables that represent policies that generate flows and activities. Quinn et al. (2011), had already shown that the use of measures of *de facto* or *de jure* financial opening produced very different results in the causal link between the growth of financial integration and economic opening. This separation between *de facto* and *de jure* variables was applied to all sub-dimensions of the index.

¹ <https://www.kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html>, accessed on March 2, 2019

The new version also introduces a differentiation in the economic dimension between the commercial and the financial side that proved to be very useful in the results obtained in our work. In addition, some 70 experts from different countries were asked to collect opinions on qualitative measures of social justice and also included the general indicator, which then included variables of a quantitative and qualitative nature. Based on Merkel & Giebler (2009), the dimensions of poverty prevention, access to education and inclusion in the labour market have been given a greater weight and are therefore a weighted and normalized indicator on a scale of 1 to 10.

5. A GENERAL OVERVIEW ON GLOBALIZATION AND SOCIAL JUSTICE IN THE EUROPEAN UNION

In this section we will study the dynamics of the relationship between globalization and social justice in the European Union; see Kauder and Potrafke (2015) for the OECD case. As European Union countries will be considered, our sample is made up of the, to date, twenty-eight member states. With regard to these, there are data for the SJI, for 2008, 2011, 2014, 2015, 2016, and 2017. With regard to data for the KOFGI, there are no restrictions on the data set, since they exist for all EU member states on an annual basis, long before 2008 and until 2016. In empirical terms, it seems acceptable to consider that the process of globalization through which countries have passed is accompanied by changes in the level of social justice, with some time lag. Thus, the correlation coefficients between the time series of the KOFGI and the SJI were determined for the different countries, considering time lags between 0 and 4 years. For most countries, the highest correlation between the KOFGI_{it} and the SJI_{it+s} ($s = 0, 1, 2, 3, 4$) was obtained for a 2-year lag. In addition, the correlation signal for this lag is also equal to that of the lag with even greater correlation, in all the other cases. Following this procedure, the KOFGI data for the years 2006, 2009, 2012, 2013, 2014 and 2015 were then selected for the countries under analysis. Figure 1 corresponds to the graphical representation of the six pairs of years under analysis, considering the data for the KOFGI_{it} and SJI_{it+2}. It shows clearly that there is a positive association between globalization and social justice in the period under review, albeit with a (slight) tendency towards a fall in the degree of association between those two variables. The dynamics of the relationship between globalization and social justice, as can be seen in Figure 1, over the period under analysis, can best be understood by analyzing the evolution of regression lines in terms of their intercepts, slopes and explanatory power. Figure 2 thus corresponds to the graphical illustration of the six pairs of years under analysis, considering the data for the de facto KOFGI_{it} and SJI_{it+2}. In general terms, it confirms the above stated, i.e. that there is a positive association between globalization (in this case, de facto) and social justice, although the degree of association between these two variables has been declining throughout the period under analysis. Comparing the results with the previous ones, it is undoubtedly relevant to note that an increase in the de facto KOFGI exerts, in general terms, a smaller effect on the SJI, than in the case of the KOFGI, which indicates that the effect will be greater on the SJI resulting from an increase in de jure KOFGI. In what concerns de jure globalization, Figure 3 confirms the positive association of this measure of globalization and social justice in the EU. However, it should be noted that, unlike the previous cases, the degree of association between the variables increased until the pair (KOFGI_{it}2012, SJI_{it}2014), having, from only then on, decreased. As anticipated, comparing the results with the previous ones, it is certainly important to note that an increase in the de jure KOFGI generally has a greater effect on the SJI, than in the case of the KOFGI. As is well known, the globalization index reflects several components, namely economic, social and political. Thus, it becomes relevant to understand which of these dimensions is best related to social justice.

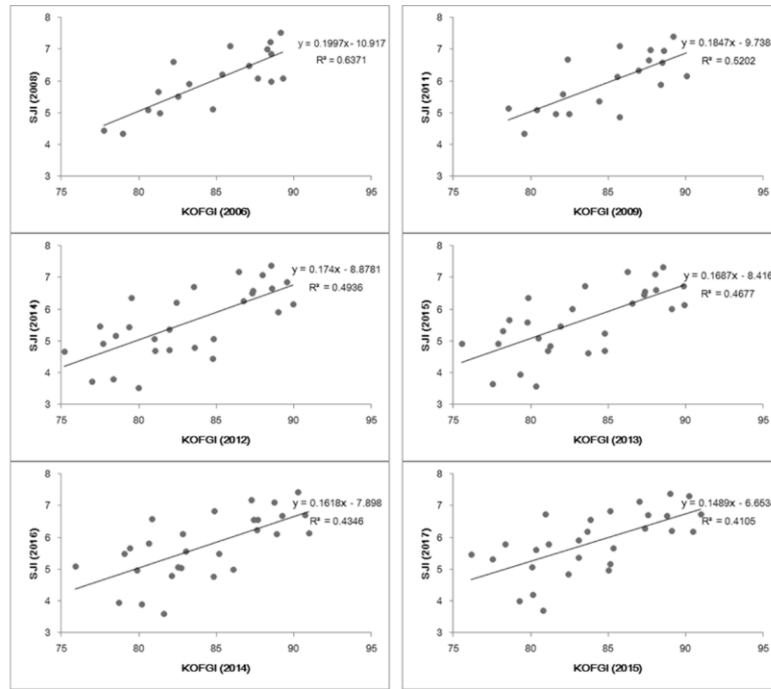


Figure 1: The association between globalization and social justice in the EU

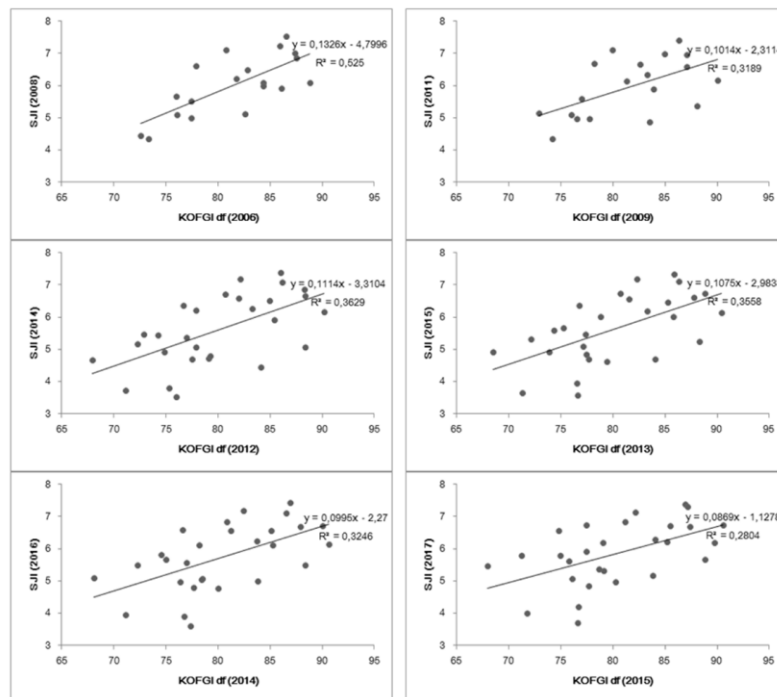


Figure 2: The association between de facto globalization and social justice in the EU

The arguments presented above justify a more detailed analysis in terms of the two strands of the globalization index. As mentioned, we consider data for the revised version of the KOF by Gygli et al. (2019). These authors distinguish de facto globalization as meaning of actual flows and activities from de jure globalization as a means of policy measures that, in principle, facilitate or aim to facilitate globalization. Indeed, if globalization can have positive consequences, in particular an increase in social justice, de jure globalization can be expected to present itself more clearly, possibly even more than defacto globalization, since this reflects less controllable exogenous aspects by the economic authorities of each country.

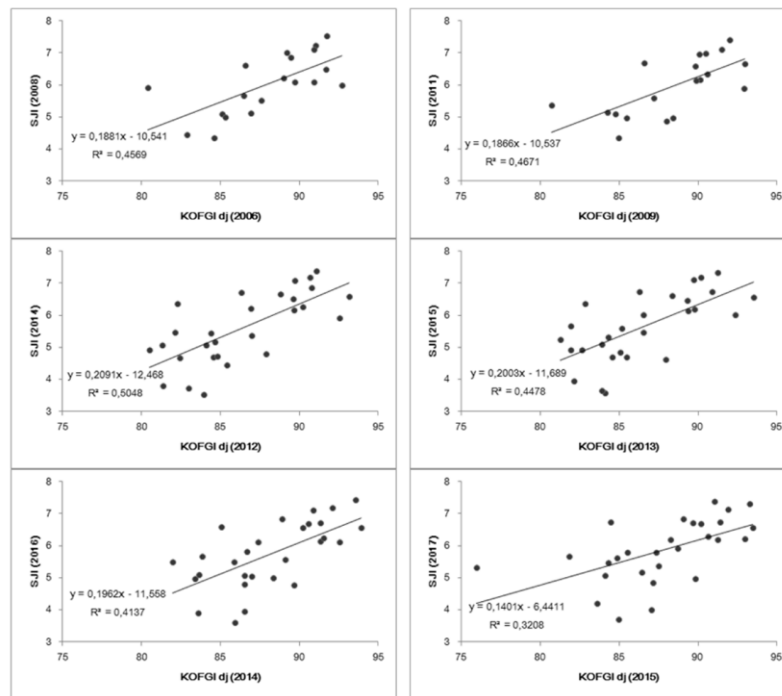


Figure 3: The association between de jure globalization and social justice in the EU

6. FINANCIAL GLOBALIZATION AND SOCIAL JUSTICE IN A DETAILED OVERVIEW ON THE EUROPEAN UNION

As we have seen, economic literature remains somewhat divided in the debate on the effects of free trade on income distribution. With regard to financial globalization, the application of the principles of liberalization, by allowing savings to be channelled to countries where returns are highest, have also been unquestionable for many years. In fact, capital flows between countries enable inter-temporal consumption between them as a result of external borrowing and allow investors to diversify portfolios globally. In the period after the financial crisis of 2007, several studies were carried out on the impact of financial globalization on inequality in world terms. For example, Jaumotte, Lall (2013) and Furceri et al. (2017) report the existence of negative impacts of financial integration on inequality. In general, studies have argued that the liberalization of external capital flows has led to significant and lasting declines in labour participation in National Income and to corresponding increases in inequality, which can be observed in the changes registered by the Gini coefficient. In this perspective, financial globalization seems to have complemented the impacts of trade by exerting downward pressure on labour share in the National Income. The question has therefore been asked to understand why financial globalization contributes to this situation. There seems to be no great analogy to the theorems of neoclassical theory of international trade, so that, as Rodrik (2018) acknowledges, to some extent, the distributive effects of financial globalization are a real surprise. In fact, the extreme volatility of financial flows is abruptly depressing the countries most exposed to international markets, which significantly reduces their ability to react and the effectiveness of any adjustment measures. Also in the euro area, financial integration has played a major role in the dynamics of globalization and, in particular, in the evolution of social justice in those countries. As a first step, monetary unification and the creation of the euro in 1999 led to the reduction of risk premiums in countries where it was higher, such as Greece, Spain and Portugal, leading to the convergence of borrowing costs amongst member countries. Such developments have enabled the emergence of large current account deficits and the accumulation of significant levels of external debt (Baldwin & Gros, 2015). Sectors that produced non-tradable goods were boosted in the countries receiving foreign investment, to the

detriment of the tradable goods sectors. This imbalance led to an accumulation of current account deficits which, in the countries referred to, quickly became an economic and social collapse, due to the sudden stoppage of external capital inflows that provoked financial and economic crisis in the most indebted countries (Kang & Shambaugh, 2016). The crisis has shown that trade and financial integration processes are of a different nature and may have different effects on the stability of countries. Aizenman (2016) recognizes that trade impacts are deeper and more structural than the effects of financial integration, which are more volatile and revocable, affecting the countries involved and the European monetary union itself. This distinction results from the inter-temporal nature of financial flows, which is undoubtedly different from that of trade flows. Thus, financial globalization in conjunction with the monetary unification, joining countries with high structural divergences in their economies and with non-synchronized business cycles, has also produced adverse distributional impacts within the group of countries of the euro zone, more expressively than in countries that had their own currency (Raitano, 2016). It is in this background that we will further examine the empirical analysis of this work, taking into account the developments in some of the EU Member States regarding the KOF and SJI indicators in the period after the global financial crisis and the subsequent sovereign debt crisis that affected some of the more fragile economies of the euro zone. As is well known, despite all attempts at convergence, the European Union is made up of countries with considerably different characteristics. Firstly, a possible approach would be to separate countries according to whether or not they belong to the euro zone. Yet, within the euro zone, a group of central countries and a group of peripheral countries can be identified. Similarly, for countries outside the euro zone, a group of countries that have decided voluntarily not to join and another group that may join the euro zone (but do not fulfil Maastricht criteria) can be identified. Having this into account, we proceed with our analysis of the relationship between globalization and social justice in the European Union, in a detailed way, by considering the following four groups of member-states:

- Euro zone periphery (EYP) – Greece; Italy; Portugal; Spain.
- Euro zone core (EZC) – Austria, Belgium, Finland, France, Germany, Ireland, Luxembourg, Netherlands.
- Opting out (OPT) – Denmark; Sweden, United Kingdom,
- Visegrad group (VIS) – Czech Republic; Hungary; Poland; Slovakia.

Figure 4 shows the evolution of the relationship between globalization and social justice, between 2008 and 2016. The OPT group clearly constitutes a cluster with the highest levels of globalization and social justice, the relationship of which shows some dynamics, apparently in the direction of greater globalization, accompanied by a reduction of social justice. In turn, the EZC group is also plainly identifiable as a cluster, for which the dynamics of the link between globalization and social justice have not changed significantly. With respect to the VIS group, the dynamics of the relationship between globalization and social justice seem to point to an inverse association between both, being apparent an increase in the level of social justice. The EYP group stands out from the relationship between globalization and social justice, as globalization levels have increased, but this has been associated with increases, but also a sharp decline, from 2011 to 2014, in the levels of social justice.

Figure following on the next page

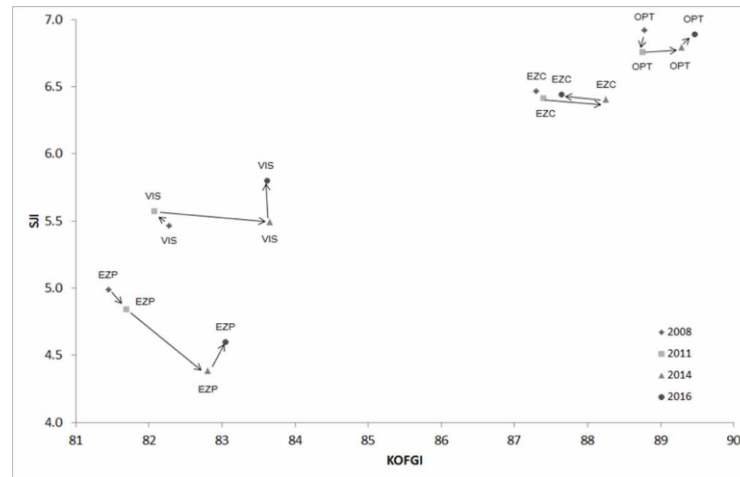


Figure 4: The evolution of the relationship between globalization and social justice

The situation previously reported did not have the same expression when we used the indicator of de facto financial globalization. In fact,, despite the fall in access to the labour market, the level of financial integration of the EZA group remained unchanged during the crisis. On the other hand, the globalization of the trade side has risen sharply in these countries, settling to the loud rise in trade deficits in these countries, offset by Germany's strong trade surpluses. For many authors, the euro crisis has been seen as having at its origin the excessive fiscal deficits that lead to the accumulation of significant public debts. This diagnosis applies mainly to Greece and Italy, but also to Portugal and Spain, countries included in the EZA group. Implicitly, the analysis suggests that these countries had a lax behaviour in their fiscal policy, which removed their international competitiveness. It is a fact that the export-led growth strategy has generated strong trade deficits in some euro area countries in the first decade of this currency's life. When the global financial crisis hit Europe, trade deficits have become unsustainable. With the exception of Greece, neither public debts nor fiscal deficits were a major problem in euro zone countries before 2008 (Weeks, 2014). Of course, the euro zone is not a closed economy and its members are trading separately with the rest of the world, although most of the flows take place inside the euro area. This means that the largest share of the external demand of each member comes from within the monetary area itself. Therefore, the expansion or contraction in the domestic demand of each member has an impact on the external demand of the partners. Since countries use the same currency, in the case of the Euro, adjustments in relative prices cannot be made by means of nominal reductions in the exchange rate, which can then become deflationary and recessive for the whole area. In this way, asymmetric functioning within Monetary Union is generated which is not limited to adjustments in the current account, but is expressed in the crystallization of groups of creditor countries and debtors within the euro zone, influencing the political orientations of the respective countries.

7. CONCLUSION

A basic principle of economics is that real life involves choices and trade-offs. Economic globalization widens the influence of markets and limits the discretionary power of national governments, hence the dilemmas posed between the efficiency of global markets and the constraints in domestic markets to the redistributive policies of governments. The neoclassical models of international trade have spurred the expectation that trade liberalization would promote social justice, as the incomes of the less skilled in the poorer countries should increase. However, although often overlooked, they also predicted that the incomes of the low-skilled in developed countries should be reduced as a result of competitive imports from less developed countries. The question is whether our conception of social justice is global or strictly national.

The challenge of globalization then arises because it has increased the incomes of the most highly skilled people in all quarters, promoting the reduction of inequality between countries and, at the same time, aggravating inequality within (almost) all countries. There seems to be strong evidence that the situation of the less skilled (poorer) has deteriorated in relative terms, in both the more developed and less developed countries. At the same time, the welfare state that must protect the poorest has been threatened by migration and the strong mobility of the tax base, principally of capital. It has recently been surprising that the escalation of globalization has put people in a precarious employment position, who felt they were protected from the competition of low wages. The early stage of trade liberalization has led to deindustrialization in developed countries, plagued by the relocation of sectors to low-cost countries, and subsequently the liberalization of trade in services has exposed to competition those that produce services that were previously not traded. Thus, global competition creates widespread uncertainty and apprehension, which has grown as globalization has allowed the universal diffusion of models that have made the Western world richer. The results of the empirical application show that the countries with the greatest degree of globalization, regardless of whether or not they are integrated into the euro zone, have better resisted the impacts of the crisis and have not revealed significant declines in the social justice levels during the period. Also, the countries that most recently joined the EU and which have a lower level of globalization and maintain their monetary and exchange rate autonomy have not suffered losses in terms of social justice, especially in access to the labour market and poverty risk indicators. Finally, the southern countries that are part of the euro area and which have lower levels of economic globalization have seen their levels of social justice deteriorate significantly during the crisis, in particular as regards access to the labour market and the risk of poverty. Summing up, the results obtained attest to the relevance of the interaction between the variables considered in the paper: Globalization and Social Justice. Therefore, in later studies it is justified to deepen and to detail the analysis the characteristics covered by the new methodologies and variables considered in the indicators that we used. On the other hand, the results also justify the apprehensions of many authors about the deficient architecture and implementation of the European Monetary Union, which in a period of global financial crisis did not have the capacity to provide support for the states that are hardest hit by the financial markets and so to prevent the waves of contagion between the several member countries of the single currency.

LITERATURE:

1. Aizenman, J. (2016). *Optimal currency area: A 20th century idea for the 21st century?* NBER Working Paper, 22097. doi:10.3386/w22097
2. Aspers, P., & Kohl, S. (2015). *Economic theories of globalization*. In B. S. Turner & R. J. Holton (Eds.), *The Routledge international handbook of globalization studies*. Routledge.
3. Baldwin, R. & Gros, D. (2015). *What caused the Euro zone crisis?* Retrieved from <https://www.ceps.eu/system/files/What%20caused%20the%20EZ%20Crisis%20B%20DG%20CEPS%20Commentary.pdf>
4. Brander, J. A., & Spencer, B. J. (1985). *Export subsidies and international market share rivalry*. Journal of International Economics, 18(1-2), 83–100. doi:10.1016/0022-1996(85)90006-6
5. Deardorff, A. (1994). *The possibility of factor price equalization, revisited*. Journal of International Economics, 36(1–2), 167–175. doi:10.1016/0022-1996(94)90063-9
6. Dreher, A., Gaston, N., & Martens, P. (2008). *Measuring globalization – Gauging its consequences*. Berlin, Germany: Springer.

7. Engels, F., & Marx, K. (1969). *Die Deutsche Ideologie. MEW 3*. Berlin, Germany: DietzVerlag. *Review of International Organizations*, 1–32. doi:10.1007/11558-019-09344-2
8. Harger, K., Young, A. T., & Hall, J. C. (2017). *Globalization, institutions, and income convergence*. *The Journal of Regional Analysis & Policy*, 47(2), 110–125.
9. Hernández, E., & Kriesi, H. (2016). *The electoral consequences of the financial and economic crisis in Europe*. *European Journal of Political Research*, 55(2), 203–224. doi:10.1111/1475-6765.12122
10. Herr, H., & Ruoff, B. (2015). *Labour and financial markets as drivers of inequality*. In A. Gallas, H. Herr, F. Hoffer, & C. Scherrer (Eds.), *Combating inequality: The global north and south* (pp. 77–95). Routledge.
11. Hillman, A. L. (2008). *Globalization and social justice*. *The Singapore Economic Review*, 53(02), 173–189. doi:10.1142/S0217590808002896
12. Hirschman, A. O. (1986). *Rival views of market society and other recent essays*. New York: Viking.
13. Jaumotte, F., Lall, S., & Papageorgiou, C. (2013). *Rising income inequality: technology, or trade and financial globalization?* *IMF Economic Review*, 61(2), 271–309. doi:10.1057/imfer.2013.7
14. Jones, R. W. (1979). *A three-factor model in theory, trade and history*. In R. W. Jones (Ed.), *International Trade: Essays in Theory* (pp. 85–101). Amsterdam, The Netherlands: North-Holland.
15. Kang, J. S., & Shambaugh, J. C. (2016). *The rise and fall of European current account deficits*. *Economic Policy*, 31(85), 153–199. doi:10.1093/epolic/eiv018
16. Kauder, B., & Potrafke, N. (2015). *Globalization and social justice in OECD countries*. *Review of World Economics*, 151(2), 353–376. doi:10.1007/10290-015-0213-1
17. Merkel, W., & Giebler, H. (2009). *Measuring social justice and sustainable governance in the OECD*. In B. Stiftung (Ed.), *Sustainable governance indicators 2009, policy performance and executive capacity in the OECD* (pp. 187–215). Gótersloh, Germany: Bertelsmann Stiftung.
18. Pastor, L., & Veronesi, P. (2018). *Inequality aversion, populism, and the backlash against globalization (No. w24900)*. National Bureau of Economic Research. doi:10.3386/w24900
19. Potrafke, N. (2015). *The evidence on globalization*. *World Economy*, 38(3), 509–552. doi:10.1111/twec.12174
20. Raitano, M. (2016). *Income inequality in Europe since the crisis*. *Intereconomics*, 51(2), 67–72. Retrieved from <https://link.springer.com/article/10.1007%2Fs10272-016-0579-x>
21. Ravallion, M. (2018). *Inequality and globalization: A review essay*. *Journal of Economic Literature*, 56(2), 620–642. doi:10.1257/jel.20171419
22. Ricardo, D. (1970). *On the principles of political economy and taxation*. Cambridge, UK: Cambridge University Press.
23. Samuelson, P. A. (1971). *Ohlin was right*. *The Swedish Journal of Economics*, 73(4), 365–384. doi:10.2307/3439219
24. Smith, A. (1976). *An inquiry into the nature and causes of the wealth of nations*. Oxford, UK: Clarendon Press.
25. Stiglitz, J. E. (2002). *Globalization and its discontents*. New York: W. W. Norton & Company.
26. Stiglitz, J. E. (2006). *Making globalization work*. New York: W. W. Norton & Company.

SLOVAK R&D STRATEGIC INFRASTRUCTURES AND SMART SPECIALIZATION

Miroslav Balog

*Centre of Social and Psychological Sciences, Slovak Academy of Sciences
Šancová 56, 811 05, Slovak Republic
progmiba@savba.sk*

ABSTRACT

The Slovak Republic shows low innovation performance compared to developed countries. One of the reasons is the significant technological gap of public R&D organizations. In order to improve this status, technological upgrading in public R&D organizations was systematically supported by the national government. In total, 14 strategic research infrastructures, university science parks and research centres were funded via European Structural Investment Funds (ESIF). These infrastructures were built by the most respected national public universities and the Slovak Academy of Sciences. The infrastructures show a tendency to specialize in line with the R&D priority areas identified by the national Smart specialization strategy (RIS3). The aim of the paper is to introduce the trends in cooperation with companies, as well as the services provided to foster economic development.

Keywords: *Science Park, Research Center, R&D, Innovation, Smart Specialization, ESIF, RIS3*

1. INTRODUCTION

The first science parks emerged in the US in the early 1950s (Link, 2003), as a crucial institutional innovation of the US innovation system. Science parks in the US created the preconditions for economic development in the coming decades. Thanks to science parks, the role of universities was highlighted, in terms of providing knowledge creation and the wide spread of innovation into the economy. The importance of universities as a knowledge-provider for business innovation is acknowledged (Bozeman, 2000) in the triple spiral concept as well as the open innovation concept (Chesbrough, 2006). Science parks represent the catalytic interface between traditional creators of (scientific) knowledge, such as universities, and industry. Science parks can also be defined as a technology transfer vehicle for modernizing (often regional) production systems. Other definitions consider science parks as real estate that combines scientific skills from universities. Despite some variation in the definitions, the science park is generally a physical site that differs from general property management by providing opportunities for the transfer of knowledge between industry and academia (Hansson, 2005). As well as in the US, parks were created in many countries throughout the world. They were set up in particular to support regional development and industries, as well as to stimulate academia-industry interactions that would promote the emergence of new technology companies (Henriques, 2018). Currently, there are many parks within the European Union whose activities have almost doubled over the past 15 years (EC, 2013). The success of these parks has also inspired many non-European countries (Şimşek, 2016; Phan, 2005; Yang, 2009). In terms of strategic profiling, parks can be characterized by the specialization and services provided (McCarthy, 2018). First, specialization represents the focus on the specific industry or technology domain; it is strategic decision as to which kinds of companies are located in the park (Bergek, 2008). Specialized parks are able to provide highly specific technology solutions, making them more attractive across a particular industry that includes the companies located within parks. Companies co-located within specialized science parks have similar needs and interests, which encourage mutual cooperation and use of the same resources (Schwartz, 2010). The second dimension is the extent of services provided to firms (Breznitz, 2017). The parks can provide a wide range of services in different areas, and differ in the scope of services

provided to firms. The range of services may be broad or narrow, as in the case of specialization (McCarthy, 2018). By providing a wide range of services at favourable prices, the development of companies can be effectively stimulated (Vanderstraeten, 2016). However, possible negative consequences can be generated. For example, a firm's dependence on the subsidized services is seen as a negative effect. This may affect its ability to survive in the real market, as start-ups in parks have higher mortality in general (Criaco, 2014), which may be associated with this effect. The main components of all parks that underlie their activities are as follows: real estate, technology transfer, and partnership amongst academia, the private sector and government (Link, 2003). Science parks carry out some or all of these activities, providing space for their tenants, especially for innovative start-ups which undertake applied R&D. For this reason, parks include business incubators, and also accommodate other non-R&D entities that support start-ups (Link, 2003). The overall setting depends on the extent to which they meet the needs of tenant companies (Vanderstraeten, 2016). As these types of specific R&D infrastructures with high expertise specialize in technological domains, they are capable of promoting economic specialization and regional development. Therefore, they have become part of strategies for smart specialization, which is a concept broadly implemented across the EU.

2. METHODOLOGY

Slovakia is classed as a low-innovation economy; this means that it is driven by multinational companies, while local SMEs are not performing well due to their low innovation activities. The main goal of the research was to evaluate selected aspects of new unique comprehensive R&D infrastructures, namely science parks and research centres. These were created by the public R&D organizations, namely universities and the Slovak Academy of Sciences (SAS). The research was carried out by means of qualitative methods. The survey addressed all science parks and research centres, to which questionnaires with closed and semi-open questions were sent. Subsequently, in-depth interviews were conducted with parks/centres' CEOs or financial managers. The questionnaire survey was carried out in two series from October 2017 until March 2018. This method of empirical research allowed the collection of both quantitative and qualitative data. The questionnaire survey was focused on the collection of basic information, as well as specific data in the area of provided services. After the questionnaire survey and data processing, direct in-depth interviews with representatives of individual strategic infrastructures took place from March to May. In case of any irregularities, telephone interviews with authorized representatives were carried out from September to December.

3. MAIN FINDINGS

University science parks and research centres were built in Slovakia thanks to European structural and investment funds, during the so-called 2007–2013 programming period. These EU funds allowed the creation of a total of 14 science parks and research centres; these may be considered strategic R&D infrastructures. From the budget perspective, research centres projects were half the size of science parks. The projects were mostly realized on the basis of consortia involving several organizations. Therefore, networking of public R&D organizations and the selection of specialized technology domains were carried out. For example, the Research Centre of Advanced Materials and Technologies (Promatech) involves respected national universities, as well as the Slovak Academy of Sciences: these are the Institute of Materials Research of SAS, Institute of Experimental Physics of SAS, Institute of Geotechnics of SAS, Institute of Materials and Machine Mechanics of SAS, Technical University of Košice, and Pavol Jozef Šafárik University in Košice. The support did not determine the preferred technological areas; rather, these were selected by the consortia, who identified their R&D strengths that were suitable for prospective cooperation with the industry.

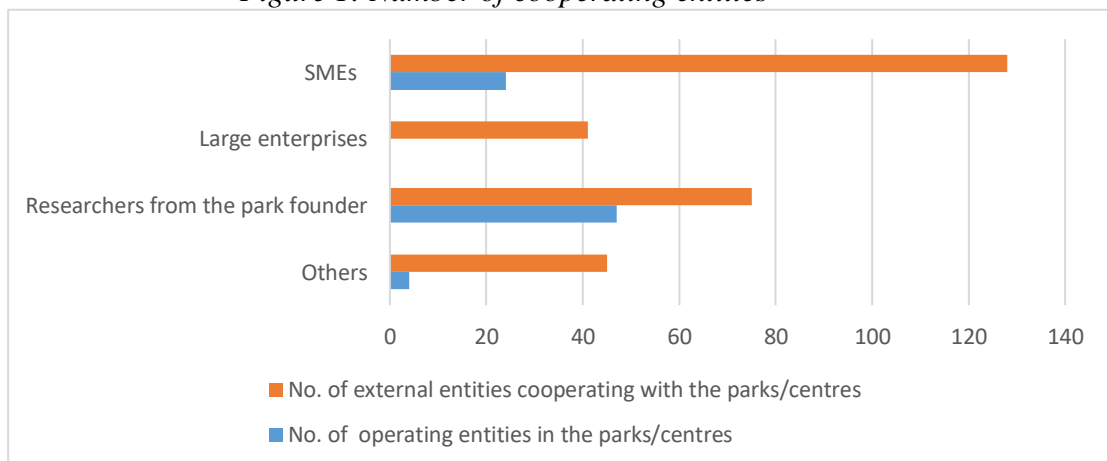
3.1. Promoting R&D commercialization

The main goal of the parks/centres is to support the commercialization of R&D undertaken by the universities and the Slovak Academy of Sciences. For this purpose, some parks/centres established technology transfer offices or took advantage of university-wide workplaces. Some parks/centres have established brokerage offices, in order to catalyze networking and deepen cooperation with the businesses. In addition, another way to commercially utilize R&D results has been promoted, through the development of start-ups and spin-offs. To achieve higher interaction with the industry, Promatech established regional branches in Žiar nad Hronom, near to the strong and long-established aluminum clusters. This branch includes the full technology facilities required by the aluminum sector, as well as a technology transfer office. Moreover, staff have been trained to efficiently deal with cooperation, broadly defined innovation activities, the protection of IPR, and supporting technology transfer. In addition, specialized business incubators have been established in several parks/centres in order to create preconditions for innovative technology-oriented start-ups that will commercialize R&D, as well as for other businesses wishing to address innovative projects and acquire unique technology capacities. Some incubators are specialized in selected technology domains. For example, the University Science Park of the Slovak University of Technology in Bratislava has set up a new ICT incubator. In order to maximize the possible effects, the incubator is directly located in the premises of the Faculty of Informatics and Information Technologies. Hence, it is easily accessible to researchers and students with business ideas. Furthermore, a biotechnology-oriented incubator was established by Comenius University in Bratislava.

3.2. Cooperation

The parks/centres have created the conditions for cooperation, despite a relatively short existence. At the time of the survey, various organizations directly operated in their premises, especially researchers and various SMEs. Large businesses were not directly operating there (Fig. 1). Unique technological capacities were also made available to other types of organizations, such as variety of public or private R&D organizations. Managers consider that the unique technologies available at the parks/centres, with a direct connection to other technologies/teams at the relevant university, are the main attractor that stimulates cooperation with other organizations, specifically SMEs.

Figure 1: Number of cooperating entities



Source: EC, 2013; own research

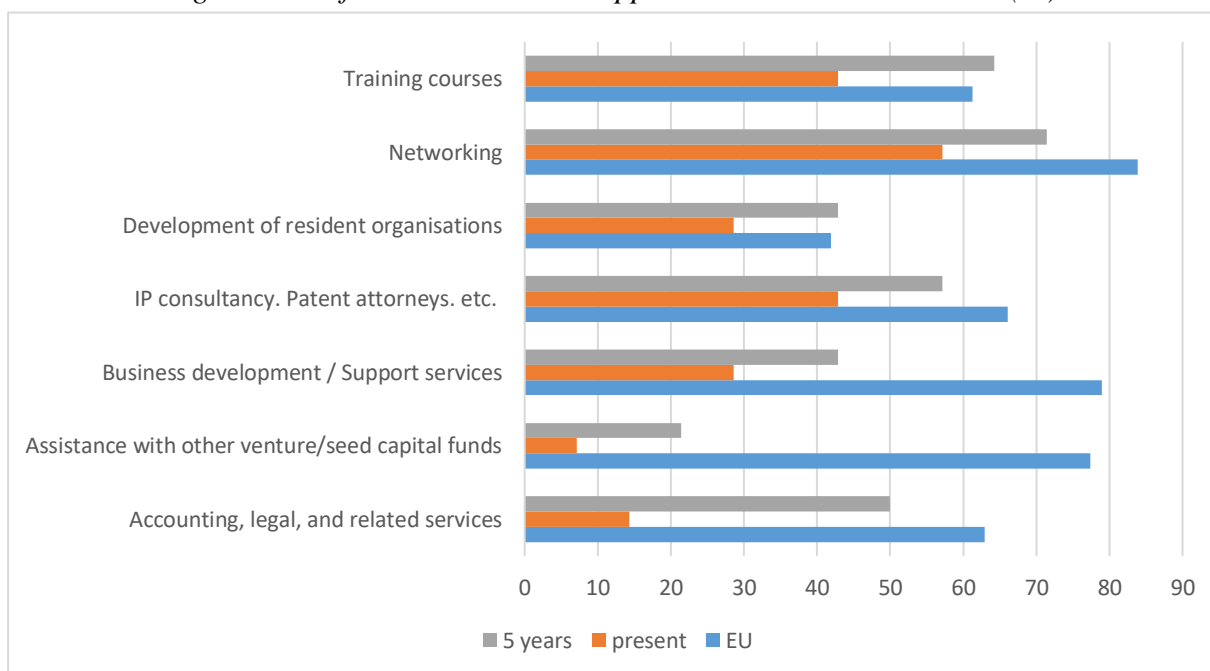
Likewise, parks/centres have cooperated with various organizations that do not directly operate in their premises. In this way, they most closely cooperate with small and medium-sized enterprises. There was also a high level of cooperation with various founder's units.

The cooperation was also relatively intensive with large enterprises as well as other public R&D organizations (Fig. 1). All parks/centres expect a boost in the direct involvement of various R&D organizations, such as enterprises and other R&D organizations, which will use their technological capabilities. This implies a gradual intensification of cooperation with market actors. All parks/centres carry out various activities in order to stimulate this kind of cooperation, and broader commercialization of R&D is broadly undertaken by universities and the Slovak Academy of Sciences.

3.3. Services provided

Similar types of infrastructures in other countries provide a wide range of services. In general, the services provided differ according to the type of park, technological focus, as well as the development stage. Mapping at European level has divided the services provided into three categories: i. Professional Business Support and Innovation Services; ii. Property-related Services; and iii. Social and Recreational Services (EC, 2013). Slovak parks/centres also provide a wide range of different types of services in these categories. The first category, Professional Business Support and Innovation Services, includes consulting, business development, IPR and fundraising. The most European parks (EC, 2013) provide networking (83.9%), business development (79%), assistance with venture/seed capital funds (77.4%), IPR consultancy (66.1%), and accounting, legal and related services (62.9%). Slovak parks/centres provide services to a much lower extent than the EU entities (Fig. 2). Most of them provide networking (57.1%), training courses (42.9%) and IPR (42.9%). Only 7.1% provide assistance with other venture/seed capital funds. It is expected that all types of services provided would increase over the next five-year period. A greater increase is expected in the provision of accounting, legal and related services (50%), but also in assistance with other venture/seed capital funds (21.4%). A significant boost of venture/seed capital needs is linked with the increased commercialization, via start-ups and spin-offs that will need external funding. Within five years, it is anticipated that Slovak parks/centres will reach the level of their European counterparts in terms of training courses (64.3%). It is also indicated that innovative enterprises will need support in knowledge and skills development.

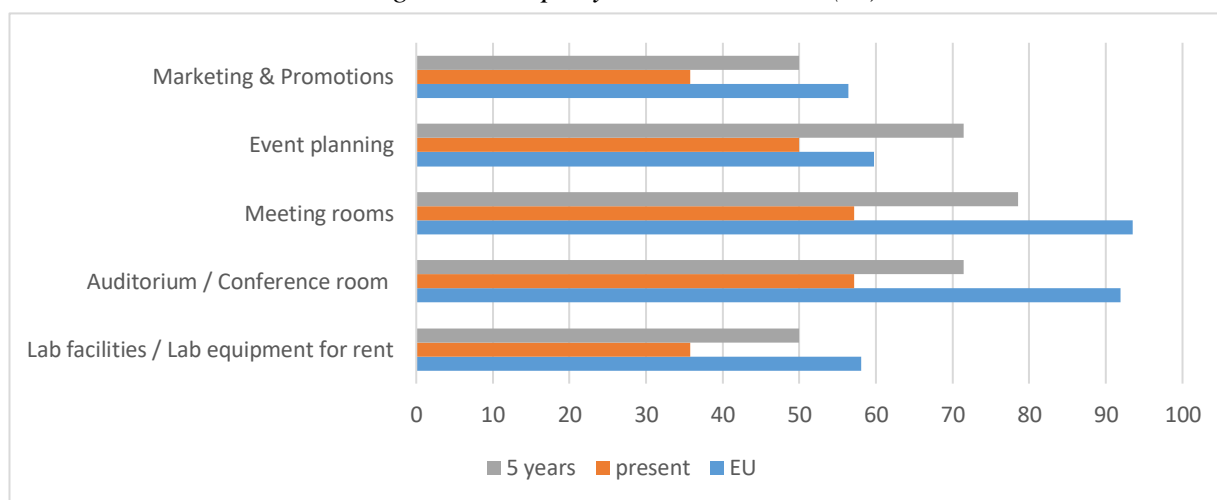
Figure 2: Professional Business Support and Innovation Services (%)



Source: EC, 2013; own research

Within the second category, Property-related Services, a variety of services relevant to property management are provided. At European level (EC, 2013), most parks offer services related to the provision of meeting-rooms (93.5%) and conference rooms (91.9%). More than 50% of all European parks also provide other services in this category. Mainly meeting rooms (57.1%) and conference rooms (57.1%) are provided by the Slovak ones (Fig. 3). There is also expected to be the greatest increase in the five-year horizon (78.6%). It is assumed that event planning will be provided by an above-average number of Slovak parks compared to the European average, within five years. According to managers, these types of services are important for businesses settled within their premises, as well as for external organizations. The provision of a specific broad range of services in a competitive manner is one way to stimulate cooperation.

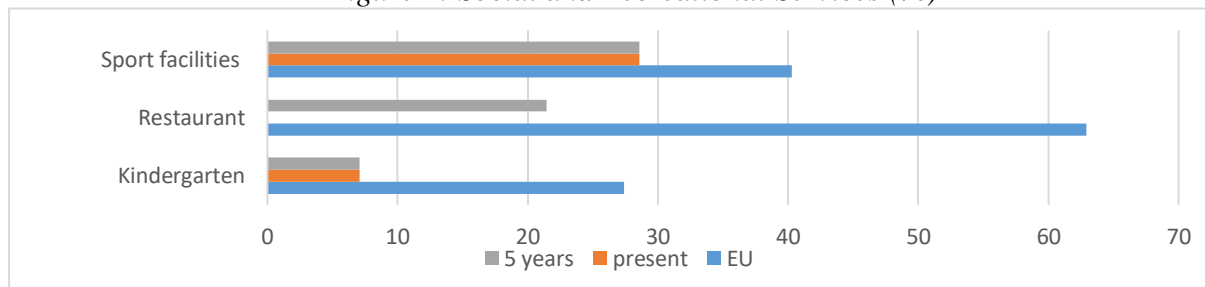
Figure 3: Property-related Services (%)



Source: EC, 2013; own research

In the third category, Social and Recreational Services, European parks provide various services with additional added value. At European level (EC, 2013), most parks provide dining options in restaurants (62.9%); this is not currently provided by Slovak ones (Fig. 4). Within a five-year horizon, this additional service is planned for implementation in Slovakia. In addition, while kindergarden (27.4%) or various sport facilities (40.3%) are available at the EU level, these are not significantly represented in Slovakia (kindergarden 7.1%, sport facilities 28.6%), also in five years.

Figure 4: Social and Recreational Services (%)



Source: EC, 2013; own research

It can be concluded that Slovak parks/centres provide a wide range of services, such as are standard in developed countries, despite a relatively short period of existence. A boost to the services provided is expected in the immediate future, which will lead to increased satisfaction of the internal as well as external customers.

3.4. Specialization

In order to execute efficient R&D-related funds planning, the concept of smart specialization strategies (RIS3) has been widely implemented at EU level (EC, 2012). This concept was a significant impulse at national level, which shifted policy focus from the traditional science-oriented priorities to market-oriented needs, as well as addressing crucial challenges such as Industry 4.0. The national Research and Innovation Strategy for Smart Specialisation of the Slovak Republic was approved in 2013. The strategy's broad vision is defined as follows: To drive a structural change in the Slovak economy towards growth, based on increasing innovation capability and R&D excellence, in order to promote self-sustaining growth in income, employment and standard of living. The strategy's vision is intended to be achieved through the following strategic objectives (RIS3 SK, 2013):

1. Deepening the integration and embeddedness of key major industries; increasing local value, added through the cooperation of the local supply chains; and turning local supply chains into embedded clusters
2. Increased contribution of research to the economic growth, via global excellence and local relevance
3. Creating a dynamic, open and inclusive innovative society as one of the preconditions for the increase in the standard of living
4. Improving the quality of human resources for an innovative Slovakia

The development of RIS 3 was the so-called ex-ante condition for obtaining European Structural and Investment Funds resources for the 2014–2020 programming period. The aim of this approach is to deliberately identify a limited number of priority areas to which sufficient resources are subsequently allocated. Based on the national RIS 3, the Operational Programme Research and Innovation was prepared, with an allocation of EUR 2.3 billion. In 2017, the RIS 3 Implementation Plan was developed to identify the technological priorities in detail (IP RIS3 SK, 2017). Five domain platforms have been created for this goal:

- Vehicles for the 21st century
- Industry for the 21st century
- Digital Slovakia and the creative industry
- Population health and health technologies
- Healthy food and the environment

Parks/centres carry out a number of different types of R&D activities that are in line with the focus of all domains. This means that parks/centres have the potential to contribute to the fulfillment of objectives in all priority areas under the national RIS3. Most of the parks/centres reported specialization in multiple domains. Most of them (9) operate only in the Population Health and Health Technology domain. The smallest number are operating in the domain of Healthy Food and the Environment.

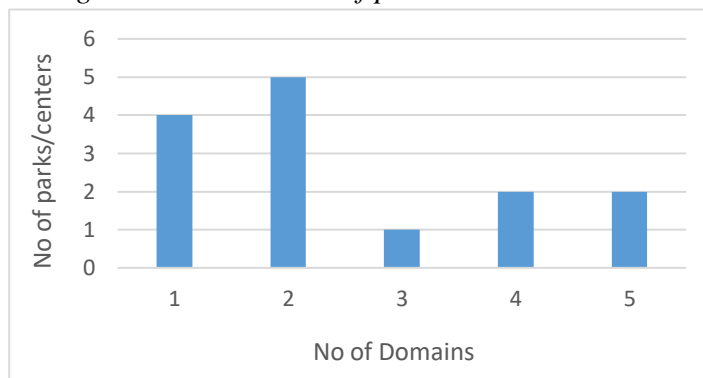
Domain	No. of parks/centres
Vehicles for the 21st century	8
Industry for the 21st century	8
Digital Slovakia and the creative industry	5
Population health and health technologies	9
Healthy food and the environment	5

Table 1: Specialization in strategic Domains

A total of four parks/centres carry out R&D only in one domain; these are exclusively biomedical-oriented organizations, which means that they are highly specialized entities.

Only one park carries out research in three interlinked domains: this university science park operates in automotive, engineering and digital technologies. Two parks of the largest Slovak universities operate across all domains defined by the national RIS3.

Figure 5: Distribution of parks/centres in domains



Source: EC, 2013; own research

These results indicate a relatively high specialization of parks/centres, as ten of them are dealing with a maximum of three domains. According to the responsible managers, parks/centres would specialize more in carefully identified technology areas, in line with the intensive cooperation with high-tech companies. They could specialize according to the companies' needs, their business ideas, as well as their development stage (e.g. start-up versus mature companies). This type of selection is commonly used for incubators and accelerators (Bergek, 2008). In addition, they can specialize in specific sectors (Vanderstraeten, 2016), and possess complementary assets, such as university expertise, anchored tenants' knowledge, or capacity in a local/regional environment.

4. CONCLUSION

In the Slovak Republic, 14 science parks and research centres were built with the aid of European Investment and Structural Funds. These entities are new types of infrastructures that represent a significant institutional innovation in the Slovak Republic's national innovation system. Almost EUR400 million was invested in technology-oriented capacity building. The established science parks and research centres are in line with the domains of specialization intended for the implementation of the National Smart Specialization Strategy. Therefore, they have the potential to contribute to the fulfillment of the national R&D objectives, as well as to support development of the economy at national as well as regional level. They cover all areas defined in the national smart specialization strategy. In particular, biomedical-oriented parks/centres are showing a higher degree of domain specialization. Various organizations – mainly universities' own researchers, other public R&D organizations and innovative SMEs – are directly active in these premises. The main task of the parks/centres is to support the commercialization of the results of R&D activities, and to cooperate with innovative companies. Therefore, they carry out a number of different activities, and have established technology transfer offices and regional brokerage centres. In order to better reflect the needs of the real economy, a regional branch of one centre near an aluminum cluster was created. This market-oriented approach allows higher interaction with local technology companies. In addition, the parks/centres operate incubators to support the creation and development of innovative start-ups and spin-offs, with some incubators specializing in ICT or biotechnology. Parks and centres provide a wide range of different services designed for a variety of actors. The structure of Property-related Services and of Business Support and Innovation Services depend on the technology focus and broader strategy of the individual park/centre.

Most of the parks provide key services in the field of networking, as well as training courses, IPR, meeting rooms and conference rooms. Relatively few parks provide services in the field of assistance with other venture/seed capital funds; this is mainly due to insufficient deal flow. Slovak parks/centres provide the services provided in European parks, in all categories. However, these services are provided by fewer parks compared to the EU ones; the main reason is that they are still in start-up phase.

ACKNOWLEDGEMENT: *This work was supported by grant VEDA No. 2/0002/18.*

LITERATURE:

1. Bergek, A., Norrman, C. (2008). *Incubator best practice: a framework*. Technovation, 28, 20-28.
2. Bozeman, B. (2000). *Technology transfer and public policy: a review of research and theory*. Research Policy, 29(4-5), 627-655.
3. Breznitz, S.M., Clayton, P. A., Defazio, D., Isett, K. R. (2017). *Have you been served? The impact of university entrepreneurial support on start-ups' network formation*. The Journal of Technology Transfer, 1-25.
4. Chesbrough, H. (2006). *Open innovation: A new paradigm for understanding industrial innovation*. In H. Chesbrough, W. Vanhaverbeke, and J. West (Eds.), *Open Innovation. Researching a New Paradigm* (pp. 1-12). New York, NY: Oxford University Press.
5. Criaco, G., Minola, T., Migliorini, P., Serarols-Tarrés, C. (2014). *To have and have not'': founders' human capital and university start-up survival*. The Journal of Technology Transfer, 39(4), 567-593.
6. EC, European Commission (2012). *Guide to Research and Innovation Strategies for Smart Specialisations*. Luxembourg: Publications Office of the European Union.
7. EC, European Commission (2013). *Setting up, managing and evaluating EU Science And Technology Park. An advice and guidance report on good practice*. European Commission, Directorate-General for Regional and Urban policy. REGIO DG Unit G1 - Competence Centre: Smart and Sustainable Growth.
8. Hansson, F., Husted, K., Vestergaard, J. (2005). *Second generation science parks: from structural holes jockeys to social capital catalysts of the knowledge society*. Technovation, 25(9), 1039-1049.
9. Henriques, I.C., Sobreiro, V. A., Kimura, H. (2018). *Science and technology park: Future challenges*, Technology in Society, 53, 144-160
10. IP RIS3 SK (2017). *Implementation Plan of the Research and Innovation Strategy for Smart Specialization of the Slovak Republic*, Office of the Deputy Prime Minister of the Slovak Republic for Investments and Informatization
11. Link, A.N., Scott, J. T. (2003). *U.S. science parks: the diffusion of an innovation and its effects on the academic missions of universities*. International Journal of Industrial Organization, 21, 1323-1356.
12. McCarthy, I. P., Silvestre, B. S., Nordenflycht, A., Breznitz, S. M. (2018). *A typology of university research park strategies: What parks do and why it matters*. Journal of Engineering and Technology Management, 47, 110-122.
13. Phan, P. H., Siegel, D. S., Wright, M. (2005). *Science parks and incubators: observations, synthesis and future research*. Journal of Business Venturing, 20(2), 165-182.
14. RIS3 SK. (2013). *Research and Innovation Strategy for Smart Specialization of the Slovak Republic*. Ministry of Economy of the Slovak Republic
15. Schwartz, M., Hornych, C. (2010). *Cooperation patterns of incubator firms and the impact of incubator specialization: empirical evidence from Germany*. Technovation, 30(9-10), 485-495.

16. Şimşek, K., Yıldırım, N. (2016). *Constraints to Open Innovation in Science and Technology Parks*. Procedia - Social and Behavioral Sciences, 235, 719-728.
17. Vanderstraeten, J., van Witteloostuijn, A., Matthyssens, P., Andreassi, T. (2016). *Being flexible through customization—the impact of incubator focus and customization strategies on incubatee survival and growth*. Journal of Engineering and Technology Management, 41, 45-64.
18. Yang, C., Motohashi, K., Chen, J. (2009). *Are new technology-based firms located on science parks really more innovative? Evidence from Taiwan*. Research Policy, 38(1), 77-85.

ENTREPRENEURSHIP IN RENEWABLE ENERGY AND THE POWER OF INNOVATION

Maria-Floriana Popescu

The Bucharest University of Economic Studies, Romania

maria.popescu@rei.ase.ro

ABSTRACT

Climate change has become one of the world's greatest problems and is widely recognized as the world's most important environmental issue. In this study, we try to understand the complex system of the renewable energy sector of entrepreneurial initiative. There is a radical threat to the energy sector and while renewable sources gain exponential momentum and become more and more incorporated into the energy mix, there is an increasing need for energy experts to manage change with both the technical understanding and the mentality of business innovation, and therefore take full advantage of an emerging world of possibilities. The article aims to examine what are an entrepreneur's key motives in this field and what factors affect the process of creating a project for renewable energy. Moreover, the paper tries to present a conceptual model of sustainable entrepreneurship in the renewable energy sector while taking into account the power of innovation.

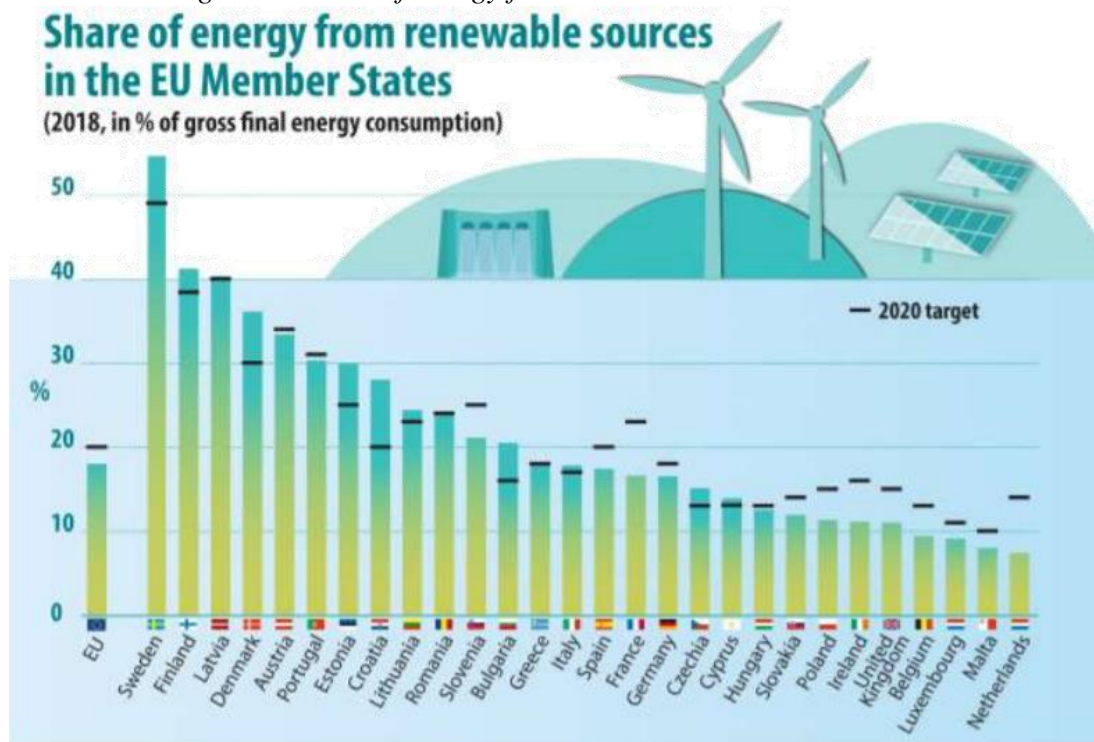
Keywords: *Renewable Energy, Entrepreneurship, Innovation, Climate Change*

1. INTRODUCTION

The threat of climate change has led in recent decades to a growing drive for companies operating in the energy sector to find sustainable ways to meet energy demand. This move has led to a rapid rise in the deployment of variable renewable energy capacity, such as wind and solar, in the energy markets, resulting in an explosion of companies (and technology) seeking to compete in the historically slow-moving and highly vertically integrated energy distribution market (1, 2). Such new entrants bring with them new business models for how companies build, develop and capture value, trying to address somewhat the gap between business as usual in the energy sector and a fully renewable build energy sector. In addition, national strategic energy strategies for the adoption of renewables and the transition to a zero carbon free emission system (3, 4, 13–18, 5–12) do not usually discuss the potentially dramatic changes expected by energy utilities and suppliers to implement variable renewable energy and to reach government renewable goals, nor the effect this will have on the economic viability of their business models (19–24). Similarly, although many traditional energy utilities have built strategic company visions around increasing their use of renewable resources in the energy mix, few provide concrete steps to adjust their business models to the future-proof, let alone profitable, of their companies against a sustainable energy future (the European Union is though committed to become climate neutral by 2050 and it has proposed the Climate Law – the legal expression of European Union's political engagement, which sets us on the road towards a more sustainable future, the heart of the Green Deal, and it gives European industry and investors the predictability and transparency, as well as guidance to EU's green growth strategy, ensuring a smooth and equitable transition for every Member State). In view of the emergence of new business models for energy utility and along with the incentives give to SMEs and entrepreneurs in the field, this paper seeks to examine the different business models currently employed by companies operating in the energy utility area, both conventional models and those emerging by companies trying to fulfil the role of energy utility. An important prerequisite for achieving sustainable socio-economic systems is the transition from fossil fuels to renewable energy sources (RES). In particular, the intertwined problems of climate change and depletion of fossil fuel require active action towards a rapid transition to RES (25–32).

This transition is very difficult for developed industrialized countries, where energy consumption has risen 10-15 times since the Industrial Revolution and is currently dominated by fossil fuel resources, as well as for so-called “developing” countries due to their lack of financial resources and expertise while facing rapid rises in energy demand and transition towards RES. For example, the latest data from the European Union regarding the share of energy from renewable sources in gross final energy consumption (33) reached 18% in 2018 and it is more than double compared to 2004 when it was 8.5% (Figure 1).

Figure 1: Share of energy from RES in the EU Member States



Source: Eurostat, 2020

2. ENTREPRENEURSHIP IN RENEWABLE ENERGY

We used to hear in the past century that “business means business”. What that meant was that money for profit and shareholder trumped over employee health or environmental protection. To some, this laissez faire mentality may have built a foundation to prosperity, but for many significant social costs and for the planet enduring environmental costs. Corporate social responsibility has been all the rage for many years as it meant for a company to align its activities with social values. We’re in a different era now, where other things matter. Over the last fifty years, the role of entrepreneurship in society has changed dramatically. The value of entrepreneurship seemed to fad off during the immediate post-World War II era. A generation ago, the entrepreneurial firm did not seem to be influential in the approach of public policy to boost growth and create employment within the framework of regional clusters. It was presented to the public, for example Servan-Schreiber cautioned of the “American Challenge” in the context of the “dynamism, organisation, innovation and boldness that characterize the giant American corporations” (34) in proposing a new public policy strategy to foster growth and international competitiveness at European level. Since giant companies were regarded as the engine of development and innovation, Servan-Schreiber supported the “creation of large industrial units which are able both in size and management to compete with the American giants”(34). In recent years, the condition has been completely reversed as entrepreneurship has become known throughout the world as an engine for economic and social development.

“Entrepreneurship is an economic phenomenon worthy of attention from those who worry about economic growth and particularly from those charged with sustaining that growth” (35). While the global population rises, finite-resource reality is creeping in. The energy needs will not forever be reliant on fossil fuels. Advances in technology have helped us to tap into reserves that were previously inaccessible but that only delayed the inevitable. Together with negative effects from fossil fuels, these concerns have generated an environmentally and socially conscious attitude between different groups of economic actors, including consumers, investors, companies and governments. Businesses and investors looking for gains have taken advantage of consumer interest in cleaner energy options and green business projects start to be encouraged by the government. Sustainability and sustainable growth are slowly gathering traction in public discourse, and in academic research, with more focus and respect. The need for “traditional” entrepreneurship is still needed and crucial to the ongoing growth of profound innovation and market change, but a new generation of entrepreneurs emerges. A permanent shift in the creation of communities is needed to guarantee an enduring potential. Sustainable development is crucial not only to the long-term well-being of the environments, but also to curbing the inevitable slow decline of the human race. Environmentally and socially responsible economics is imperative. Sustainable development sets the foundations for an emerging new area of entrepreneurship-Sustainable Entrepreneurship which represents aspects of environmental, economic, and social sustainability in a holistic approach to a venture start-up.

3. INNOVATIONS IN RENEWABLE ENERGY SOURCES

Fossil fuels are distinguished, given their impact on the environment, by favourable physical-chemical characteristics (e.g., high power density, storable, inert under normal environment conditions, etc.) enabling stable, high-quality energy flows that easily supply human societies. By comparison, RES are typically characterized by lower power density levels, their usage competes with other biosphere processes, while those with higher potential (i.e. wind, solar) are critically impacted by their intermittency and volatility (36, 37, 46–53, 38–45). However, because of their modularity and capacity to produce energy at a local level, RES offer a crucial transformative ability from a social point of view, allowing for the creation of local, democratic and participatory bottom-up initiatives from citizens. Thus, RES’ mutual ownership allows for the democratization of access to resources (or means of production), and therefore has the ability to contribute to the energy transition in a way that is far more meaningful than a mere technical fix (25, 54, 62–70, 54–61). Energy systems undergo quick changes to meet the rising volumes of integrated renewable energy, such as wind and solar. Recent years have seen massive development of RESs. Privatization, the unbundling of the energy sector and financial incentives and energy related policies have helped boost this progress. For example, in 2016, RES generated 24.6 per cent of United Kingdom’s gross electricity consumption, mainly from onshore and offshore wind farms and solar photovoltaic plants, representing 44.9 per cent and 12.5 per cent of the total RES capacity installed at 35.7 GW, respectively (71). RES are variable, difficult to forecast and dependent on weather conditions, thus posing new challenges in the management and operation of electricity systems, as more flexibility measures are needed to ensure safe operation and stability. These measures include integration of fast-acting supply, demand response and energy storage facilities. In addition to the improvements that have been triggered by energy distribution and renewable resources, energy systems are at the edge of the digital age. The massive deployment of smart meters in numerous countries has shown that they are ready to commit for change in the digital technology transformation era, Industry 4.0 (72–77). Energy systems will need significant investment in meeting ambitious targets for reducing emissions. The EU alone is expected to require €200 billion per year for generation, network and energy efficiency development (78) for the transition to a more sustainable and stable energy system. Upgrades to the power grid in the US will cost \$2 trillion by 2030 (79).

Tasks that are increasingly daunting as energy systems evolve, to become more dynamic, decentralized, complex and ‘multiagent’ with a growing number of actors and possible actions, need to be adopted to mitigate needed investment. Enhanced communication and data sharing between different parts of the power network is increasingly necessary, making it more difficult for central and operation management. In order to accommodate these trends of decentralization and digitisation, local centralized control and management techniques are required. One of the most promising global innovations in recent history to tackle the problem of sustainable energy supply can be seen the transition to renewable energies (80, 81). Renewable energies deliver though two significant benefits: they are fairly clean, and they can be used in a decentralized manner (82). Although the first advantage is widely known, it seldom receives the attention it deserves. Decentralization has also played a crucial role in the energy transition, as private households and businesses have invested in self-consumption solar systems to reduce their energy bills. It leads though to a more competitive energy industry, and energy supply “democratization”. The democratization, in addition to conventional energy companies, brings new entrants to energy markets. The rise of Renewable Energy Cooperatives (RECs) can be considered as one of the most prominent current trends. Based on the well-known idea of cooperatives that originated in Europe in the 19th century (83), RECs offer incentives for individual citizens and businesses outside the energy industry to, on one hand, combine resources and become renewable power producers, and, on the other, engage in cooperative energy usage. RECs have gained ground in many countries thanks to the growing international recognition of renewable energy resources. For example, the European federation for renewable energy cooperatives (REScoop) currently has 1500 RECs as members within its federation, and a total of 1,000,000 European citizens (84).

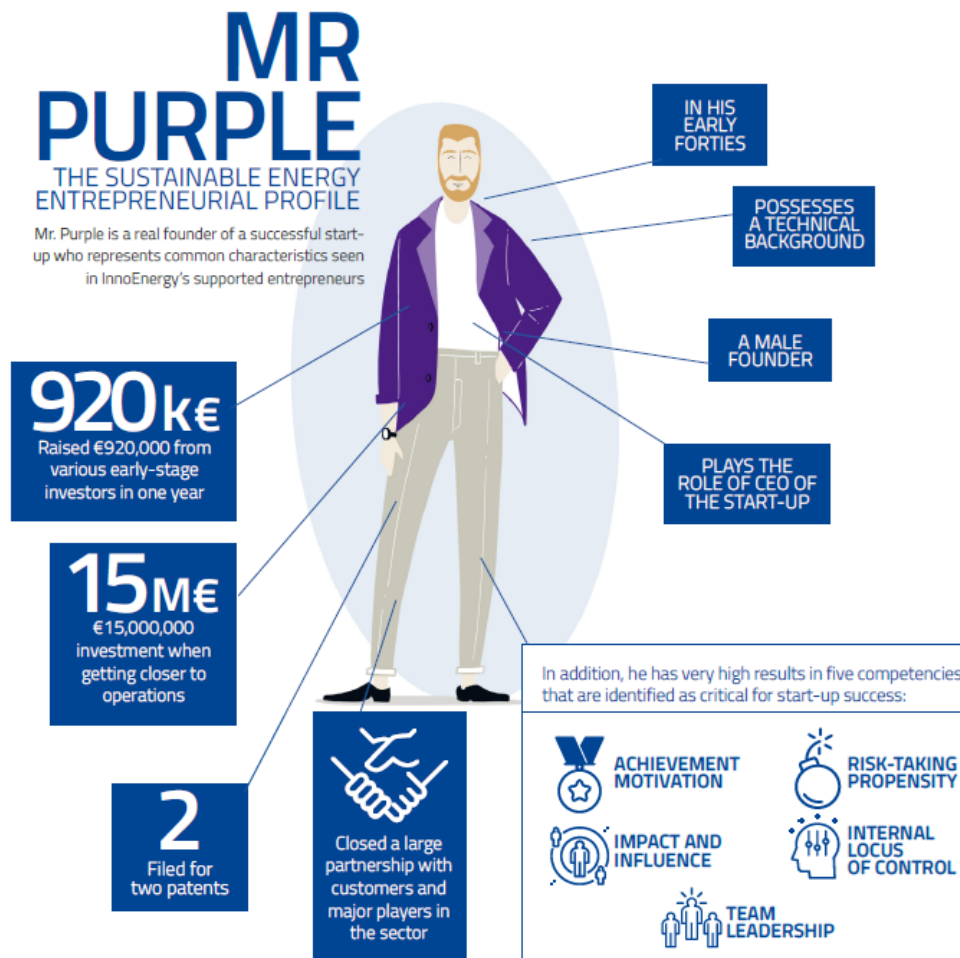
4. KEY RESOURCES FOR A SUSTAINABLE ENTREPRENEUR

The development of a private profit-making company is not limited to entrepreneurship. In a variety of contexts, entrepreneurship and entrepreneurial innovation, including small or large corporations, non-profit organizations and government agencies, are commonly assumed to be individuals who establish new business enterprises and gain private benefit, while it can be concentrated on a local, regional or international marketplace. Entrepreneurship that focuses on value for society is often called a social entrepreneurship (85–90), while entrepreneurship focusing on value creation, both personally and privately, is simply called entrepreneurship. Addressing ecological and social concerns would create economic and social incentives. This is one of the core philosophies and a subject of this paper. Sustainable companies may help address the concerns of society, while providing business owners with profit-making opportunities. Therefore, the sustainable industry is primarily about improving business practices as the successful businesses concentrate on developing innovative products / services / activities that resolve or alleviate current environmental and social concerns. Performance in adopting sustainable business practices depends on innovation and entrepreneurship, the core subjects of this paper (an apparently more and more debated in current times). Entrepreneurship and creativity / innovation, in many specific sustainable business contexts, are important. These are crucial to the success of start-ups that provide innovative solutions to the environmental or social challenges we face nowadays. Entrepreneurship and creativity are also of great interest for mature and notorious companies. Companies pursue sustainability entrepreneurship for a number of purposes like improving their brand identity and reputation, or simply financially gaining from becoming industry leaders in corporate practices that reduce environmental and social impacts in their operating sphere. Some also engage in corporate innovation which affects meaningful societal change (also there are individuals that engage in social entrepreneurship, pursuing to change the society we live in today and aiming for the grated good – such an example can be Bill Drayton who is regarded as one of our time’s most influential and

innovative social entrepreneurs, who in 1980 founded Ashoka which aims to find and support social entrepreneurs globally). If we are to talk about successful entrepreneurial initiatives, they require quickly and efficiently mobilizing a wide range of capital. All entrepreneurial projects must have resources such as capital, talent, and know-how (e.g., accounting, finance, operations, management, legal, and regulatory), equipment, and facilities (91). Successful entrepreneurial initiatives might even require quickly and efficiently mobilizing a wide range of capital. Although management teams need to be hired fairly quickly, usually one or two individuals are driving the entrepreneurial process initially through hard work and determination to succeed. The business team becomes the key factor as the business grows, as the expertise, knowledge, and capabilities of the entrepreneur must be improved and complemented by the talents of other team members. Before beginning every new entrepreneurial venture, it is important to have sufficient financial resources; this is no different for tackling a sustainable business operation. Funding may come from a range of sources while typically, when there are expectations for high growth in the industry, a new business may attract private investors. Of this reason, clean technology is a business field that could potentially draw investors. Above all the tools listed above, which are critical in the entrepreneurial phase, there is a single most important factor in the shoes of the individual entrepreneur – their ability to recognize a market opportunity and create an innovative solution to that opportunity with market potential, to get a product or service out, to sell to consumers, to assemble an organizational team, and to gain confidence, is the core of each new entrepreneurial endeavour, as they need to be passionate, inspiring, motivated, and willing to do what they do and engage to do in the future. There are various studies made on this subject and field, but the profile of an energy entrepreneur role model in terms of key demographics and competencies developed by EIT InnoEnergy can be found in Figure 2 (92), and it comprises the data collected from five different European regions – namely, Iberia (Spain and Portugal), Benelux (The Netherlands, Belgium and Luxemburg), Scandinavia (Sweden and Finland), France and Germany – from a total of more than 800 entrepreneurial profiles.

Figure following on the next page

Figure 2: The profile of a sustainable energy entrepreneur



Source: EIT InnoEnergy, 2020

Being though a successful entrepreneur is not easy and success is not guaranteed, as it needs extensive experience across a number of functional areas – finance, accounting, policy, marketing, management and operations, and strong interpersonal competencies. There are also significant risks and the probability of failure is significant. Therefore, an important part of being an entrepreneur is risk assessment and management. An entrepreneur comes also with the skills of being competitive and persistent. As an entrepreneur, difficulties and difficult times will always occur and it is important for businesspeople to survive the difficult times and to work persistently to achieve success. Entrepreneurship as an attitude, or sort of behaviour, is well adapted for sustainable business practices. Entrepreneurship is continuously looking for creative ways to protect the environmental or improve social conditions in sustainable business practice by providing new goods, services or approaches that reduce hazardous activities and at the same time generate profits for the entrepreneur.

5. CONCLUSION

In recent years, a number of developments have come to the fore which could potentially revolutionize the energy technology worldwide. In addition, customer and investor interest in the renewable industry has grown, factors that make it a mature market for entrepreneurial success, provided one has a worthy concept and strategic execution plan. There's also a variety of end users of renewable energy technology. They include private households, corporations, governmental agencies, and public utilities.

End users can use public incentives and can also affect public discourse and procurement strategies, regulations, mandates and policies. Above all, green companies and sustainable pioneers have an impact on their choices regarding new products and services. As end-users are becoming more aware of the impact of a product on the environment from manufacturing to discontinued use, customers might need cleaner production processes and recycling facilities for the end of the life of a product. And this provides a business / entrepreneurial opportunity. Moreover, innovation, as a further commitment towards it, will lower the barriers and costs of pollution and efficiency standards in public policy, and this can also be true for some policies to tackle social injustices (e.g. innovations that increase workers' productivity and output and can lower the costs of increasing minimum wages). Entrepreneurship and innovation, the concepts that go hand in hand nowadays, also need success in sustainable entrepreneurial practices. This paper provided an overview of entrepreneurship and innovation in terms of sustainable development as the trend nowadays is on delivering new products and services as a response to societal issues for a sustainable and proactive way to answer to climate change and all other issues mankind is facing nowadays that threat the smooth existence of future generations. The value of entrepreneurship and innovation also extends to businesses that change the way products and services are created. Innovative practices and entrepreneurship can be used by the latter to build their brand identity and to be market leaders in doing things that generate mutual value for society and their companies and also contribute to improvements in practices in their industry and entire society in the long run.

ACKNOWLEDGEMENT: *This work was cofinanced from the European Social Fund through Operational Programme Human Capital 2014-2020, project number POCU/380/6/13/125015 "Development of entrepreneurial skills for doctoral students and postdoctoral researchers in the field of economic sciences"*

LITERATURE:

1. S. T. Bryant, K. Straker, C. Wrigley, The typologies of power: Energy utility business models in an increasingly renewable sector. *J. Clean. Prod.* (2018) <https://doi.org/10.1016/j.jclepro.2018.05.233>.
2. P. Nillesen, M. Pollitt, "New Business Models for Utilities to Meet the Challenge of the Energy Transition" in *Future of Utilities - Utilities of the Future: How Technological Innovations in Distributed Energy Resources Will Reshape the Electric Power Sector*, (Elsevier Inc., 2016), pp. 283–301.
3. L. Krog, K. Sperling, A comprehensive framework for strategic energy planning based on Danish and international insights. *Energy Strateg. Rev.* 24, 83–93 (2019).
4. S. Cajot, *et al.*, Obstacles in energy planning at the urban scale. *Sustain. Cities Soc.* 30, 223–236 (2017).
5. C. Morlet, J. Keirstead, *A comparative analysis of urban energy governance in four European cities* (2013).
6. M. Procesi, *et al.*, Strategic use of the underground in an energy mix plan: Synergies among CO₂, CH₄ geological storage and geothermal energy. Latium Region case study (Central Italy). *Appl. Energy* 110, 104–131 (2013).
7. S. Koskela, *et al.*, Estonian electricity supply scenarios for 2020 and their environmental performance. *Energy Policy* 35, 3571–3582 (2007).
8. J. F. Mercure, P. Salas, An assesement of global energy resource economic potentials. *Energy* 46, 322–336 (2012).
9. F. Hvelplund, S. Djørup, Multilevel policies for radical transition: Governance for a 100% renewable energy system. *Environ. Plan. C Polit. Sp.* 35, 1218–1241 (2017).

10. B. Müller, The case for Japanese–Russian joint implementation in implementing the Kyoto protocol. *Clim. Policy* 1, 403–410 (2001).
11. W. Poortinga, M. Aoyagi, N. F. Pidgeon, Public perceptions of climate change and energy futures before and after the Fukushima accident: A comparison between Britain and Japan. *Energy Policy* 62, 1204–1211 (2013).
12. W. Uddin, *et al.*, Current and future prospects of small hydro power in Pakistan: A survey. *Energy Strateg. Rev.* 24, 166–177 (2019).
13. B. Lin, J. Liu, Y. Yang, Impact of carbon intensity and energy security constraints on China's coal import. *Energy Policy* 48, 137–147 (2012).
14. A. Mirakyan, R. De Guio, Integrated energy planning in cities and territories: A review of methods and tools. *Renew. Sustain. Energy Rev.* 22, 289–297 (2013).
15. H. Al Garni, A. Kassem, A. Awasthi, D. Komljenovic, K. Al-Haddad, A multicriteria decision making approach for evaluating renewable power generation sources in Saudi Arabia. *Sustain. Energy Technol. Assessments* 16, 137–150 (2016).
16. C. Meza, A review on the Central America electrical energy scenario. *Renew. Sustain. Energy Rev.* 33, 566–577 (2014).
17. N. Edomah, C. Foulds, A. Jones, Policy making and energy infrastructure change: A Nigerian case study of energy governance in the electricity sector. *Energy Policy* 102, 476–485 (2017).
18. European Parliament, Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009. *Off. J. Eur. Union* 140, 16–62 (2009).
19. I. Gallego-Álvarez, I. M. García-Sánchez, C. da Silva Vieira, Climate Change and Financial Performance in Times of Crisis. *Bus. Strateg. Environ.* 23, 361–374 (2014).
20. R. W. Bacon, J. Besant-Jones, Global electric power reform, privatization, and liberalization of the electric power industry in developing countries. *Annu. Rev. Energy Environ.* 26, 331–359 (2001).
21. S. Ruggiero, H. Lehtonen, Renewable energy growth and the financial performance of electric utilities: A panel data study. *J. Clean. Prod.* 142, 3676–3688 (2017).
22. S. T. Bryant, K. Straker, C. Wrigley, The discourses of power – governmental approaches to business models in the renewable energy transition. *Energy Policy* 130, 41–59 (2019).
23. S. T. Bryant, K. Straker, C. Wrigley, The typologies of power: Energy utility business models in an increasingly renewable sector. *J. Clean. Prod.* 195, 1032–1046 (2018).
24. F. P. Sioshansi, “The Implications of Distributed Energy Resources on Traditional Utility Business Model” in *Renewable Energy Integration: Practical Management of Variability, Uncertainty, and Flexibility in Power Grids: Second Edition*, (Elsevier, 2017), pp. 271–278.
25. N. W. Arnell, *et al.*, A global assessment of the effects of climate policy on the impacts of climate change. *Nat. Clim. Chang.* 3, 512–519 (2013).
26. J. Wang, L. Feng, X. Tang, Y. Bentley, M. Höök, The implications of fossil fuel supply constraints on climate change projections: A supply-side analysis. *Futures* 86, 58–72 (2017).
27. I. Arto, I. Capellán-Pérez, R. Lago, G. Bueno, R. Bermejo, The energy requirements of a developed world. *Energy Sustain. Dev.* 33, 1–13 (2016).
28. A. Garcia-Olivares, Energía para una sociedad post-carbono sostenible. *Sci. Mar.* 80, 257–268 (2016).
29. Y. Y. Deng, *et al.*, Quantifying a realistic, worldwide wind and solar electricity supply. *Glob. Environ. Chang.* 31, 239–252 (2015).
30. I. Capellán-Pérez, C. de Castro, I. Arto, Assessing vulnerabilities and limits in the transition to renewable energies: Land requirements under 100% solar energy scenarios. *Renew. Sustain. Energy Rev.* 77, 760–782 (2017).

31. K. Bithas, P. Kalimeris, Re-estimating the decoupling effect: Is there an actual transition towards a less energy-intensive economy? *Energy* 51, 78–84 (2013).
32. I. Capellán-Pérez, M. Mediavilla, C. de Castro, Ó. Carpintero, L. J. Miguel, Fossil fuel depletion and socio-economic scenarios: An integrated approach. *Energy* 77, 641–666 (2014).
33. Eurostat, SHARES (Renewables) (2020) (March 7, 2020).
34. J.-J. Servan-Schreiber, *The American Challenge* (Hamish Hamilton, 1968) (March 6, 2020).
35. D. M. Hart, *The emergence of entrepreneurship policy: Governance, start-ups, and growth in the U.S. knowledge economy* (Cambridge University Press, 2003) <https://doi.org/10.1017/CBO9780511610134>.
36. D. Connolly, H. Lund, B. V. Mathiesen, E. Pican, M. Leahy, The technical and economic implications of integrating fluctuating renewable energy using energy storage. *Renew. Energy* 43, 47–60 (2012).
37. W. F. Pickard, D. Abbott, Addressing the intermittency challenge: Massive energy storage in a sustainable future [Scanning the Issue] in *Proceedings of the IEEE*, (2012), pp. 317–321.
38. T. Trainer, Some problems in storing renewable energy. *Energy Policy* 110, 386–393 (2017).
39. A. Harjanne, J. M. Korhonen, Abandoning the concept of renewable energy. *Energy Policy* 127, 330–340 (2019).
40. E. K. Hart, M. Z. Jacobson, A Monte Carlo approach to generator portfolio planning and carbon emissions assessments of systems with large penetrations of variable renewables. *Renew. Energy* 36, 2278–2286 (2011).
41. T. Trainer, Can renewables etc. solve the greenhouse problem? The negative case. *Energy Policy* 38, 4107–4114 (2010).
42. T. Trainer, A critique of Jacobson and Delucchi’s proposals for a world renewable energy supply. *Energy Policy* 44, 476–481 (2012).
43. M. Meinshausen, *et al.*, Greenhouse-gas emission targets for limiting global warming to 2°C. *Nature* 458, 1158–1162 (2009).
44. T. Trainer, Can renewables etc. solve the greenhouse problem? The negative case. *Energy Policy* 38, 4107–4114 (2010).
45. V. Smil, Power density: a key to understanding energy sources and uses (2015).
46. V. Smil, “Energy in nature and society: general energetics of complex systems” (2009) (March 6, 2020).
47. C. A. S. Hall, K. Klitgaard, C. A. S. Hall, K. Klitgaard, “How We Do Economics Today” in *Energy and the Wealth of Nations*, (Springer International Publishing, 2018), pp. 5–21.
48. C. A. S. Hall, K. Klitgaard, C. A. S. Hall, K. Klitgaard, “How We Got to Where We Are Today: A Brief History of Economic Thought and Its Paradoxes” in *Energy and the Wealth of Nations*, (Springer International Publishing, 2018), pp. 23–65.
49. C. A. S. Hall, K. Klitgaard, *Energy and the wealth of nations: An introduction to biophysical economics* (Springer International Publishing, 2018) <https://doi.org/10.1007/978-3-319-66219-0>.
50. C. De Castro, M. Mediavilla, L. J. Miguel, F. Frechoso, Global solar electric potential: A review of their technical and sustainable limits. *Renew. Sustain. Energy Rev.* 28, 824–835 (2013).
51. C. Schade, D. Pimentel, Population crash: Prospects for famine in the twenty-first century. *Environ. Dev. Sustain.* 12, 245–262 (2010).
52. J. Rockström, M. Lannerstad, M. Falkenmark, Assessing the water challenge of a new green revolution in developing countries. *Proc. Natl. Acad. Sci. U. S. A.* 104, 6253–6260 (2007).

53. P. A. Kharecha, J. E. Hansen, Implications of “peak oil” for atmospheric CO₂ and climate (2007) <https://doi.org/10.1029/2007GB003142> (March 6, 2020).
54. I. Capellán-Pérez, N. Johanisova, J. Young, C. Kunze, Is community energy really non-existent in post-socialist Europe? Examining recent trends in 16 countries. *Energy Res. Soc. Sci.* 61 (2020).
55. R. Hueting, Why environmental sustainability can most probably not be attained with growing production. *J. Clean. Prod.* 18, 525–530 (2010).
56. R. Salvador, M. V. Barros, L. M. da Luz, C. M. Piekarski, A. C. de Francisco, Circular business models: Current aspects that influence implementation and unaddressed subjects. *J. Clean. Prod.* 250 (2020).
57. V. Fournier, Escaping from the economy: The politics of degrowth. *Int. J. Sociol. Soc. Policy* 28, 528–545 (2008).
58. Research, Degrowth Declaration of the Paris 2008 conference. *J. Clean. Prod.* 18, 523–524 (2010).
59. F. Schneider, G. Kallis, J. Martinez-Alier, Crisis or opportunity? Economic degrowth for social equity and ecological sustainability. Introduction to this special issue. *J. Clean. Prod.* 18, 511–518 (2010).
60. S. Becker, C. Kunze, Transcending community energy: collective and politically motivated projects in renewable energy (CPE) across Europe. *People, Place and Policy Online* 8, 180–191 (2014).
61. S. D’Alessandro, T. Luzzati, M. Morroni, Energy transition towards economic and environmental sustainability: feasible paths and policy implications. *J. Clean. Prod.* 18, 291–298 (2010).
62. F. Berkhout, P. Marcotullio, T. Hanaoka, Understanding energy transitions. *Sustain. Sci.* 7, 109–111 (2012).
63. C. Kunze, S. Becker, Collective ownership in renewable energy and opportunities for sustainable degrowth. *Sustain. Sci.* 10, 425–437 (2015).
64. N. Johanisova, S. Wolf, Economic democracy: A path for the future? *Futures* 44, 562–570 (2012).
65. R. P. Thombs, When democracy meets energy transitions: A typology of social power and energy system scale. *Energy Res. Soc. Sci.* 52, 159–168 (2019).
66. W. Bell, Futures studies comes of age: Twenty-five years after the limits to growth. *Futures* 33, 63–76 (2001).
67. N. Johanisova, S. Wolf, Economic democracy: A path for the future? *Futures* 44, 562–570 (2012).
68. B. Hamm, The study of futures, and the analysis of power. *Futures* 42, 1007–1018 (2010).
69. M. Redclift, In our own image: the environment and society as global discourse. *Environ. Hist.* 1, 111–123 (1995).
70. S. Barca, Energy, property, and the industrial revolution narrative. *Ecol. Econ.* 70, 1309–1315 (2011).
71. Department for Business Energy & Industrial Strategy, “DIGEST of United Kingdom energy statistics 2017 - Chapter 6 Renewable sources of energy” (2017) (March 7, 2020).
72. A. B. Jaffe, R. G. Newell, R. N. Stavins, A tale of two market failures: Technology and environmental policy. *Ecol. Econ.* 54, 164–174 (2005).
73. S. Zhou, D. C. Matisoff, G. A. Kingsley, M. A. Brown, Understanding renewable energy policy adoption and evolution in Europe: The impact of coercion, normative emulation, competition, and learning. *Energy Res. Soc. Sci.* 51, 1–11 (2019).
74. R. Veugelers, Which policy instruments to induce clean innovating? *Res. Policy* 41, 1770–1778 (2012).

75. C. Cuijpers, B. J. Koops, “Smart metering and privacy in Europe: Lessons from the Dutch case” in *European Data Protection: Coming of Age*, (Springer Netherlands, 2013), pp. 269–293.
76. S. S. S. R. Depuru, L. Wang, V. Devabhaktuni, Smart meters for power grid: Challenges, issues, advantages and status. *Renew. Sustain. Energy Rev.* 15, 2736–2742 (2011).
77. S. Zhou, M. A. Brown, Smart meter deployment in Europe: A comparative case study on the impacts of national policy schemes. *J. Clean. Prod.* 144, 22–32 (2017).
78. European Commission, “A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy” (2015).
79. P. Bronski, *et al.*, “The economics of load defection: How grid-connected solar-plus-battery systems will compete with traditional electric service—why it matters, and possible” (2015) (March 7, 2020).
80. S. Chehbi-Gamoura, R. Derrouiche, Big valuable data in supply chain: Deep analysis of current trends and coming potential in *IFIP Advances in Information and Communication Technology*, (Springer New York LLC, 2017), pp. 230–241.
81. W. Ketter, M. Peters, J. Collins, A. Gupta, Competitive Benchmarking: An IS Research Approach to Address Wicked Problems with Big Data and Analytics. *SSRN Electron. J.* (2015) <https://doi.org/10.2139/ssrn.2700333>.
82. B. Robyns, A. Davigny, B. François, A. Henneon, *Electricity production from renewable energies* (2012) (March 7, 2020).
83. H. Bonus, Das Selbstverständnis moderner Genossenschaften: Rückbindung von Kreditgenossenschaften an ihre Mitglieder (1994).
84. REScoop.eu (2020) (March 7, 2020).
85. J. Kickul, T. Lyons, *Understanding social entrepreneurship: The relentless pursuit of mission in an ever changing world* (2016) (March 7, 2020).
86. C. Durkin, R. Gunn, *Social entrepreneurship: A skills approach* (2016) (March 7, 2020).
87. T. Saebi, N. J. Foss, S. Linder, Social Entrepreneurship Research: Past Achievements and Future Promises. *J. Manage.* 45, 70–95 (2019).
88. C. Hervieux, A. Voltan, Framing Social Problems in Social Entrepreneurship. *J. Bus. Ethics* 151, 279–293 (2018).
89. H. Rawhouser, M. Cummings, S. L. Newbert, Social Impact Measurement: Current Approaches and Future Directions for Social Entrepreneurship Research. *journals.sagepub.com* 43, 82–115 (2019).
90. D. M. Kee, Defining social entrepreneurship: A Schumpeterian non-solution. *Int. J. Entrep. Small Bus.* 31, 416–433 (2017).
91. R. Gittell, M. Magnusson, M. Merenda, *Sustainable Business Cases* (Flat World Knowledge, Inc, 2013).
92. EIT InnoEnergy, “An analysis of entrepreneurial competencies in sustainable energy start-ups in Europe” (2018) (March 8, 2020).

FACTORS INFLUENCING ONLINE SHOPPING BEHAVIOR WITH MEDIATING ROLE OF CUSTOMER PERCEIVED VALUE

Samar Rahi

*Assistant Professor at Hailey College of Banking and Finance,
University of the Punjab Lahore, Pakistan
sr_adroit@yahoo.com*

Maheen Ishaq

*Research Scholar at Hailey College of Banking and Finance,
University of the Punjab Lahore, Pakistan
Maheen.ishaq96@gmail.com*

ABSTRACT

The internet has developed new ways of customer-firm interactions by changing the way services are delivered to the customers. For Pakistan, though, the reception of such patterns has been increasingly problematic. As admiration for online shopping cherished in Pakistan several online websites popped up. Different variables are accountable to make a customer to shop online, which is enormously helping the IT businesses in Pakistan to prosper. After the adoption of online shopping in Pakistan, the main concern is to create customers satisfaction. The aim of this paper is to present conceptual framework which identify and access the perception of online shopping customers through the identification of factors having impact on customer satisfaction. The motivation behind this study is to comprehend a model of web-based shopping just as to bring up the real determining elements towards consumer satisfaction. The customer satisfaction is the most important factor towards the development and expansion of online stores.

Keywords: *Information Quality, Website Design, Responsiveness, Privacy, Price, Delivery, Customer Perceived Value, Customer Satisfaction*

1. INTRODUCTION

The entry of the web has completely changed the manner in which businesses are directed worldwide. Nowadays, users have a great network through which they can keep themselves in touch with various online businesses. One of the options accessible to them is that of electronic commerce, which can be characterized as an electronic atmosphere where purchasers and dealers meet to trade certain goods and services. Electronic commerce is forcefully altering the means for shopping. Nowadays, individuals are more enthusiastic to utilize technology in every single field of their life, hence integrating advancement in their purchasing procedure too. Fundamentally, the idea of online store was extended in 1990's Chen and Chang (2003). When contrasted with regular or conventional shopping there has been a move towards internet shopping because of simplicity, luxury, suitability, cost sparing and effectiveness. Web based shopping is turning into an appropriate method of buying, regardless of whether you're at home, in office, or in another nation. This is particularly valid for established nations, where each store has its site you can purchase from. This tendency to shop online is now emerging in the Asia also, particularly in Pakistan. Progression in technology has altered the way of delivering services to the customers and has also changed the way by which a firm and a customer interacts. Now the days are gone where one must go to the store for shopping. With the help of up-to-date technology now presence of customer is not necessary because services are provided over long distances without any physical presence. Online shopping is simplified by the availability of internet to the consumers (Rahi & Ghani, 2018a, 2018b). As admiration for online shopping cherished in Pakistan several online websites popped up.

It is astonishing but welcoming development and an appropriate means of spending due to its 24-hour accessibility by the user as well as its worldwide range and well-ordered communication of consumer and retailer. Preceding few years there is a huge traditional shift of companies to online retailing (S. Rahi, 2017). This is due to the improved acceptance and obtainability of Internet to a large number of users that has directed several business units to have confidence in that now internet is irrefutable, an authentic and money-spinning network of sales. As indicated by Economic Survey of Pakistan (2015-16), the number of internet users have arrived at 30.99 million as compared to 2.10 million in (2011-12). However, the internet entrance is 17.5% as per Internet Usage Stats, 2017. This development has generated the online retail industry and culture of web-based shopping like Daraz.pk, Kaymu, Shophive.com, Symboos.pk, Yayvo.com and some more. Numerous little online retailers have also made their entrance into digital markets. Statistics released by SBP sets the scope of e-commerce market at Rs99.3 billion in 2018 as compared to 51.8 billion in 2017 with a yearly growth of 92 percent. The number of e-commerce payments have rushed 2.3-times while the figure of registered e-commerce merchants has enlarged by 2.6 times. At the end of 2017, the number of total registered e-commerce merchants has enlarged to 905 as compared to 344 registered merchants in 2016 (Samar Rahi, 2018). Businesses in Pakistan have embraced e-commerce. Hundreds of retailers are now selling online goods to customers ranging from clothing to electronic equipment. Quick increase in trend to shop online in Pakistan has undervalued the significance of satisfaction of the customer which is an important factor to be kept in mind while scheming any online retail outlet. Customers will return if they must not be satisfied with their experience of online shopping (S. Kim & Stoel, 2004; S. Rahi, 2018a). For years, the satisfaction of customer has been so significant in this sector of online shopping. Generating customer satisfaction basically provides distinction and advantage over the competitors. A lot of factors can create satisfaction of customers by meeting customer's perception concerning online services such as website design, information quality, price, delivery, response and confidentiality. Dissatisfaction among customers usually lead to loss of the customers and income. Dissatisfaction among customers arises if the quality of services being delivered doesn't meet the perception of the customers. Therefore, to e-commerce the factors creating satisfaction of customers of online shopping in Pakistan is of prior significance. Perception of customer is basically customer's perception regarding quality of online shopping services being delivered. Thus, customer's satisfaction is created if perceived value of customers is positive. As, there is direct link between satisfaction of customer and performance of organization shown through research on satisfaction of customer and market orientation. So, if companies wanted to gain competitive advantage then there is a need to understand their customers completely, as a result they can provide services to their customers more competently and improve them uninterruptedly Garver and Gagnon (2002). Subsequently, to attain growth and share in the market, internet companies are required to know how to create customers satisfaction, in this choppy e-commerce environment McKinney, Yoon, and Zahedi (2002). To compute satisfaction of customers through online shopping, researchers have evolved and verified various factors, from various perspectives Szymanski and Hise (2000); Koivumäki (2001); Evanschitzky, Iyer, Hesse, and Ahlert (2004); S. Kim and Stoel (2004). Based on earlier researches, this research seeks to empirically evaluate the perception of customer playing the role of mediating variable in between online shopping services and customer satisfaction. This errand is cultivated by plotting a consumer satisfaction model in nature of internet business, perceiving key builds recommended by earlier examinations and building up a lot of theories.

2. LITERATURE REVIEW

Topic of satisfaction has been discussed extensively in the traditional retailing literature J. B. Mason and Bearden (1979); Oliver and Linda (1981); E. W. Anderson, Fornell, and Lehmann

(1994);Terblanche and Boshoff (2001);Ofir and Simonson (2007). Research on determining the constructs of customer satisfaction under the context of e-commerce is at an encouraging stage (Heiner, Gopalkrishnan, Josef, & Dieter, 2004; Rahi, Alnaser, & Ghani, 2019). The earlier studies have been providing extensive foundation to gain understanding regarding satisfaction of customer with respect to online shopping. From the viewpoint of purchasing process and retail expertise, few experimental studies have been conducted in context of online shopping to discover the fundamental determinants of customer satisfaction. Zhang, Prybutok, and Huang (2006); Yang and Fang (2004) have made several attempts to examine the satisfaction of customers when online services are provided to them. Various determinants have been examined in context of e-services to determine the impact of customer's perception on its satisfaction (F. M. Alnaser, Ghani, & Rahi, 2019; Zhang et al., 2006). When online retailing sites are such ordered and directed that shopping is supposed to be very pleased for the customers then ultimately it will create customer satisfaction. Johnson, Nader, and Fornell (1996) suggested that services being provided to the customer's on-line store, must be reliable, correct and based on up to standard data. Likewise, the information quality of a product has a positive impact on the satisfaction of customer, founded on the evidence provided by Johnson et al. (1996). Quality of information delivered by e-commerce markets is based on the wholeness, correctness, set-up and currency features Wixom and Todd (2005). Usually, it deals with trustworthiness, elasticity, incorporation, availability and appropriateness of an online system. Product quality, service quality, system's design, product quality of software and quality of interaction between computer and human, are the various prospects through which information quality of online websites is monitored (F. M. Alnaser et al., 2018; Kuo & Chen, 2011). In e-commerce retailing, the factor of privacy is also a critical concept Shergill and Chen (2005); Stead and Gilbert (2001). This is due to the expectation of customers who requires confidentiality of its financial and private data being shared with the retailer. Customer perceived value is an essential marketing and branding concept entrenched in equity theory. This concept is collaborating, relativistic preference and experience Holbrook (2005). To predict buying behavior of customer, the concept of perceived value is considered a firm paradigm R. E. Anderson and Srinivasan (2003). Therefore, the way customers perceive, increases their willingness to buy and decreases their search intentions for substitutes. Chia Chi Lin (2003) found that customer perceived value (saving money, convenience, time saving, prompt delivery, warranty and free home delivery) has a significant impact on satisfaction of customer.

2.1. Customer Satisfaction

Writing on satisfaction started in 1970's Day and Hunt (1982). In this writing, to characterize the term, 'satisfaction' two words have been used. A Latin term of 'satis' signifying 'adequate' has been utilized to characterized initial segment of word satisfaction, though the subsequent part contains a Latin term of 'faction' which signifies 'furious to do'. In past investigations, the word itself has been utilized for level of solace and composure achieving from incorrect and immoral deeds Aigbavboa and Thwala (2013). The idea of satisfaction has been utilized in different disciplines in unexpected ways and associated to anybody of them: customers, sick persons, laborers and workers. Satisfaction has been significantly related to clients utilizing the items, in the field of marketing. A large portion of the work has been made regarding satisfaction. This topic has been pondered by merchant concerning its consumer values and assessments (Kim, 1997). Satisfaction is identical and equal for every user. This delineates that satisfaction is a subjective term rather than any typical term. It has been a mistaken belief that satisfaction is a feeling, rather it as an assessment of a feeling. Hoyer, Macinnis, and Pieters (2001) related satisfaction with acknowledgment, relief, enjoyment, contentment, and energy sensation.

Furthermore, it is suggested that satisfaction acts as a linkage in the purchasing procedure or occasionally it might function as a result of the purchasing procedure. Satisfaction has been determined by related factors when it is seen as an utilization action or a result, whereas satisfaction working as a procedure, indicate its precursors not simply the satisfaction Parker and Mathews (2001). Swan and Combs (1976) stepped up to relate the term performance with satisfaction. It has been suggested that either performance has a positive or a negative impact on satisfaction. Perceived value of performance can determine the positive or a negative effect on satisfaction when related with expectations. Satisfaction ends up being negative if perceived value of performance falls beneath expectations and similarly, satisfaction ends up being positive if the perceived value of performance falls above expectations. Oliver (1980) proposed expectancy disconfirmation theory which displays more relevant, proper and summed up meaning of this concept. As indicated by this concept, satisfaction of customer is related with the change in performance of the product. Distinction among expectation and perception of the performance of products leads to the satisfaction of customer. More prominent the expectations, more noteworthy the satisfaction of customer will be Aigbavboa and Thwala (2013). Satisfaction might be positive or negative disconfirmation. When perceived performance of the product or services ends up being better, as compared to expectations then it is said to be positive disconfirmation. Similarly, if the perceived performance of a product or services ends up being not as much as it what was expected then it is termed as negative disconfirmation. This concept basically, develops a link between satisfaction and the concept of expectations. In majority of the latest literature, this is the most broadly accepted explanation of satisfaction. Creation of satisfaction by the utilization of various rare assets of an organization turns out to be positive Bearden and Teel (1983). Satisfaction of customer is constructively connected with the retention of customer. Customer will perform various transactions, if he is satisfied with a specific vendor, which will lead the business towards development and progression Zeithaml (2000).

2.2. Information Quality

The actual D&M model was based on R. O. Mason (1978), modification of Shannon and Weaver (1949) numerical theory of communication, who determined three degrees of information: (1) accurateness and effectiveness of the framework producing information known as technical level, (2) capacity to move the expected message known as semantic level, and (3) its effect on the recipient known as effectiveness level (Shannon and Weaver, 1949). This theory was adapted by R. O. Mason (1978) for information system and therefore extended the level of effectiveness into three sub-classes: (1) receipt of data, (2) influence on the receiver, and (3) influence on the framework. DeLone and McLean model for the achievement of information system is based on six variables: (1) quality of system, (2) quality of information, (3) use of system, (4) satisfaction of user, (5) individual's impact, (6) organizational impact. This theory developed for information system postulates that the matchup between quality of data and information positively affects performance, in case the client experiences satisfaction and utilize the system (S. Rahi, 2018b). Quality of information involves the desired attributes (for example significance, exactness, appropriateness, fulfillment, comprehension, and availability) of the framework yields; that is basically web pages and reports of administration (Petter, DeLone, & McLean, 2013). For Akter, D'Ambra, and Ray (2013) quality of information performs an analytical part in building up an inspirational frame of mind toward the benefits of utilizing a particular IT. As a whole, quality of information incorporates the attributes of usefulness, appropriateness, completeness and accurateness Guo, Ling, and Liu (2012). Relationship between information quality of a product and online satisfaction of a customer has been analytically investigated by many researchers Szymanski and Hise (2000); Cho and Park (2001); X. Liu, He, Gao, and Xie (2008); Maditinos and Theodoridis (2010); Eid

(2011); Lin, Wu, and Chang (2011); Polites, Williams, Karahanna, and Seligman (2012); Guo et al. (2012); Dharmesti and Nugroho (2013); Khan et al., 2015). X. Liu et al. (2008) and Maditinos and Theodoridis (2010) have recognized that information quality of a product is a solid predictor of customer satisfaction. During the search of information and valuation of substitutes clients extremely depend on the provided information. Quality information exhibited by the site helps clients in contrasting items, taking known decision regarding purchases and improving the security of transaction C. Liu and Arnett (2000); Park and Kim (2003); Lin, 2007). Positive relationship between information quality of product and online client satisfaction have also been recognized by (Khan et al., 2015). Eid (2011) determined that satisfaction and trust of customers is upgraded regarding online site, when the information provided through website is more precise and dependable. Moreover, X. Liu et al. (2008) research discovers that increased level of quality information will in turn increase customer satisfaction. This indicates that quality information has a positive effect on satisfaction of customer. Thus, we hypothesized information quality as:

- **H1a.** *Information quality has a positive influence on customer perceived value.*
- **H1b.** *Information quality has a positive impact on customer satisfaction.*

2.3. Website Design

Online customer satisfaction is associated with the characteristics of web design (Cho & Park, 2001; Rahi, 2019). Lee and Lin (2005) experienced that the design of website had a positive impact on online customer satisfaction and perceived quality of services. Efficient design of website consists of capability of navigation as well as graphical attraction Cyr (2008). Spiller and Lohse (1997) indicate the impact of website design on online customer satisfaction. As stated by Szymanski and Hise (2000) the vibe related with the site and how it operates play an important role in determining the satisfaction of client regarding website. The current research work has additionally contended that another significant factor which guarantees the success of website is user friendly design Hsu, Chang, and Chen (2012). When website is quick, organized, systematic and simple to explore then shopping is supposed to be more satisfying and enjoyable Szymanski and Hise (2000). As per Dharmesti and Nugroho (2013) great web architecture requires perfect screen appearance, well-defined path of data and fast loading of data which will render web-based shopping increasingly pleasant to the clients and may influence satisfaction of customer. It was recognized further that, numerous attributes of website design have an impact on quality of services which as a result influences satisfaction of customers (D. J. Kim, 2012; Rahi, Abd.Ghani, & Hafaz Ngah, 2019; Rahi, Ghani, & Ngah, 2020). The impact of design of website on satisfaction of consumer has been considered broadly. Maditinos and Theodoridis (2010) determined that, an important determining factor of online satisfaction of consumer is the design of website. X. Liu et al. (2008) determined that website design has a positive relation with online consumer satisfaction and their results are compatible with the results of Szymanski and Hise (2000) and Eid (2011). The investigation of Szymanski and Hise (2000) further shows that ample struggle on design of website proves to be significant because clients' early reaction on website is determined through page structure, design and match of colours. Similarly, a well-made website catches the attention of client and enhance the opportunity of buying by increasing online customer satisfaction, Evanschitzky et al. (2014) have further examined this impact and determined that design of website is an effective indicator of online customer satisfaction. Thus, website design is proposed as:

- **H2a.** *Website design has a positive influence on customer perceived value.*
- **H2b.** *Website design has a positive impact on customer satisfaction*

2.4. Responsiveness

In online atmosphere the rapidness of services providers responds properly to client is known as responsiveness (Hu, Wang, & Hung, 2012; Rahi & Abd. Ghani, 2018; Zeithaml, Parasuraman, & Malhotra, 2002). Sohn and Tadisina (2008) define responsiveness as readiness or eagerness of workers. In this research, responsiveness is described as quick reply to the request of clients and rapid processes. Responsiveness demonstrates how proficiently a firm tends to deal with queries of client and offer explanation for their issues. In this situation, it is necessary for firms to recognize the needs of client regarding their everyday tasks and make these processes secure and effective (Parasuraman, Zeithaml, & Berry, 1988; Rahi & Abd. Ghani, 2019b, 2019c). Researchers have discovered that responsiveness isn't just an essential factor of SERVQUAL model, yet it has an additional impact on satisfaction of customer (Al-Azzam, 2015; R. Samar & Mazuri, 2019a, 2019b). Degree of consumer satisfaction is increased if workers respond actively to the queries of client Al-Azzam (2015). The level of responsiveness is greatly reliant on the attitude and conduct of representatives. Therefore, it is significant for firms to provide mandatory training to their representatives regarding consistent dealing of clients. Thus, it will bring about increased online customer satisfaction and better association with firms (Loke, Taiwo, Salim, Downe, & PETRONAS, 2011; Rahi & Abd. Ghani, 2019a). Thus, we proposed following hypothesis:

- **H3a.** *Responsiveness has a positive influence on customer perceived value.*
- **H3b.** *Responsiveness has a positive impact on customer satisfaction.*

2.5. Privacy

Zeithaml et al. (2002) built up a seven-dimensional model known as e-SERVQUAL for determining quality of electronic services. The factors comprise of effectiveness, dependability, satisfaction, privacy, responsiveness, recompense and contact. The first four factors constitute the core of service quality model (F Alnaser, Ghani, & Rahi, 2018; S. Samar, Ghani, & Alnaser, 2017). The dimension of privacy incorporates confirmation of secrecy of data of transaction, for instance, data of credit card (Zeithaml et al. (2002); Parasuraman, Zeithaml, and Malhotra (2005)). Securing people's recognizable data on the web is an important issue of privacy to be deal with. Selling and disclosing data of customer for the purpose of money-making were discovered to be the critical predictor of privacy and trust (FMI Alnaser, Ghani, & Rahi, 2017). As indicated by Schaupp and Bélanger (2005), in electronic commerce privacy can be termed as the readiness to share individual's personal data over the web, which is necessary when a transaction is to be made concerning purchase. Numerous websites have set up policies regarding privacy in order to facilitate minds of people McGinity (2000). In context of online shopping, there are particular firms that confirm, audit and then declare policies regarding privacy (Rahi, Ghani, & Ngah, 2018; Ranganathan & Ganapathy, 2002). As per Pan and Zinkhan (2006), problem about privacy has a great impact on the trust of online customer with regards to the online retailer. Indeed, a few investigations state that the main problem in the extension of Internet shopping is the issue of privacy (Hoffman, Novak, & Peralta, 1999; Hou & Rego, 2002; Rahi, Ghani, Alnaser, & Ngah, 2018). It is understood that more the clients have a sense of security as well as assured of effective transactions or suitable reactions in the event of any trouble, the more positive is their approach towards the online framework and the more noteworthy is their level of satisfaction. Therefore, we proposed privacy as:

H4a. *Privacy has a positive influence on customer perceived value.*

H4b. *Privacy has a positive impact on customer satisfaction.*

2.6. Price

According to Zeithaml (1988), from the client's point of view, "to obtain a product or a service the amount what is given up or sacrificed is termed as price". Bei and Chiao (2001) determined

that "the cost is characterized as what is forfeited or given up to obtain a certain product or service ", while Kotler and Armstrong (2012) proposed that "price is the sum of money being charged for the purpose of utilizing a certain product or a service ". Phillip and Keller (2012) and Kusdyah (2012) described price as a measurable factor which comprises of a number of indicators, for instance, reasonable cost, discounted cost, adequate cost, contender cost, and suitability of cost. As per Oliver (1997), depending upon the principle of equity the price is being judged by the customers in conformity to the quality of services being delivered to them which brings about satisfaction or dissatisfaction of customer. In a macroeconomic research based on seven industrial areas it was discovered that the perception of price impacts on client's satisfaction (F. Alnaser, M. Ghani, S. Rahi, M. Mansour, & H. Abed, 2017; Fornell, Johnson, Anderson, Cha, & Bryant, 1996). In internet shopping, clients can't really observe or deal with the item: they are uncertain that what is displayed on the web is compatible with what is really gotten. In such an insecure environment, the perception of price plays a significant part in calculating the post purchase satisfaction of client as well as client's intention to return (F. M. I. Alnaser, M. A. Ghani, S. Rahi, M. Mansour, & H. Abed, 2017; Crisp, Jarvenpaa, & Todd, 1997; C. Liu & Arnett, 2000). As there is a positive impact of price on customer satisfaction so, firms should enhance their client's satisfaction by meeting up their perception regarding prices and offering them affordable, economical, appealing and low prices (S Rahi, 2017; Rahi, Ghani, & Alnaser, 2017; R. Samar, Norjaya, & Feras, 2017). Thus, we advance the following hypothesis on price:

- **H5a.** *Price has a positive influence on customer perceived value.*
- **H5b.** *Price has a positive impact on customer satisfaction.*

2.7. Delivery

The delivery of services is linked with the aptitude and ability of the service provider to deliver certain products or services to the customer on time. It is essential as it will indicate towards the customer's satisfaction and loyalty. Therefore, to deliver desired products and services on time proper planning as well as effective strategy is required [38]. In an investigation directed by (X. Liu et al., 2008), the problem of delivery is a very common observable fact prevailing in the atmosphere of online shopping and has a positive influence on shopping as well as satisfaction of customer. Delay in delivery of certain product or services leads to dissatisfaction of customer. Discoveries from various research work shows the positive impact of delivery on satisfaction of customer. Therefore, we proposed following hypothesis:

- **H6a.** *Delivery has a positive influence on customer perceived value.*
- **H6b.** *Delivery has a positive impact on customer satisfaction.*

2.8. Customer Perceived Value

Customer perceived value is a major marketing idea established in theory of equity. This idea is collaborative, understanding and relativistic (Rahi, 2016b; S. Rahi & M. Ghani, 2016). The concept of customer perceived value is viewed as a firm standard to foresee purchasing conduct (R. E. Anderson & Srinivasan, 2003; Rahi, 2015). As a result, an increase in perceived value of customer reduces the intent of customer to look for another possibility, hence a long-term relationship is developed with dealers (Ghani, Rahi, Yasin, & Alnaser, 2017; S. Rahi & M. A. Ghani, 2016). Author like Chia C Lin (2003) discovered that perceived value of customer is a significant predictor of customer satisfaction. Customer perceived value and quality are the basic elements influencing the satisfaction of a customer, which further impacts the loyalty of customer (Rahi, 2016a; Rahi, Ghani, & Muhamad, 2017; Turel & Serenko, 2006). Thus, customer perceived value is hypothesized as:

- **H7.** *Customer perceived value has a positive impact on customer satisfaction*

3. RESEARCH MODEL

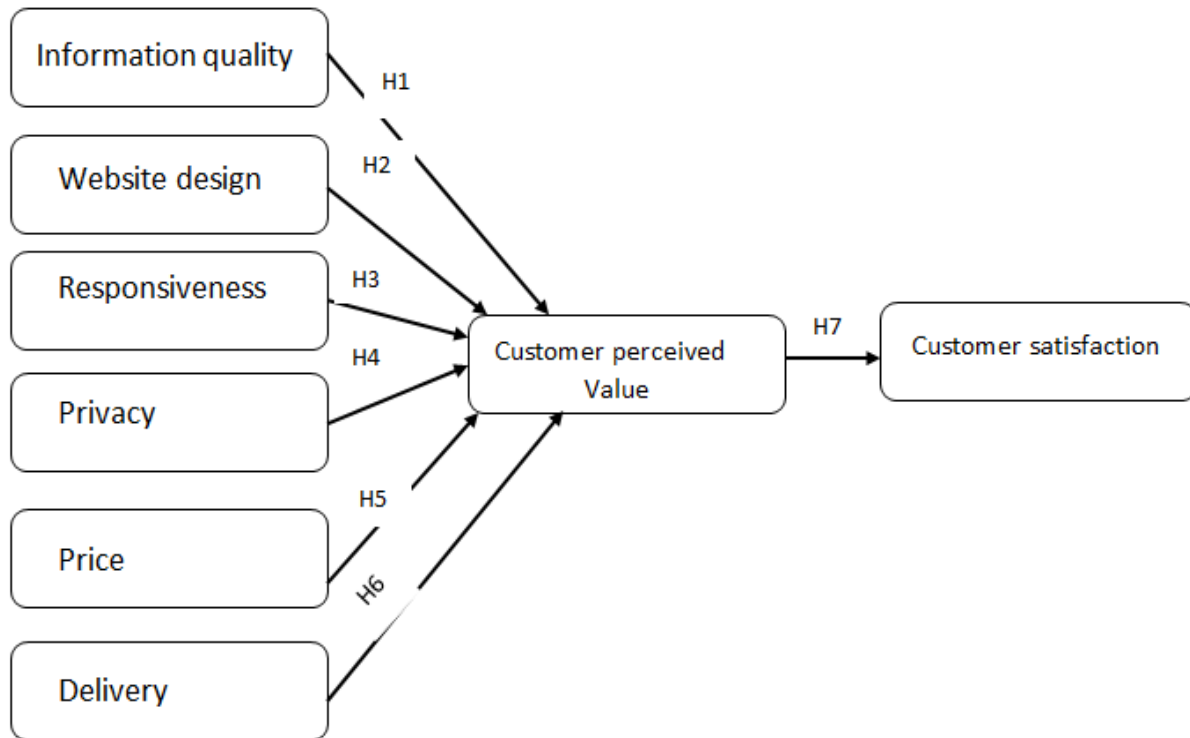


Figure 1: Research model

4. CONCLUSION

The main concern is to create customer satisfaction after the adoption of online shopping in Pakistan, so this research work basically adds value to the sparse literature by investigating online shopping customer satisfaction through a conceptual framework in e-commerce environment. This conceptual model identifies and accesses the perception of online customer all the way through identifying such factors having impact on customer's satisfaction. Furthermore, this research model incorporates variables known as information quality, website design, responsiveness, price, delivery and customer perceived value as a mediator, having impact on the satisfaction of customers. Customers who buy online are more concerned regarding information quality, website design, responsiveness, price and delivery. All these variables positively impact on the satisfaction of customers. Other variables having impact on customer satisfaction such as customer trust, customer education, loyalty etc. needs to be examined. All this lays down the foundation for future research work. In order to make research work more representative and generalizable these parameters should be investigated at large scale. This study will help businessmen, retailers, merchants, customers and scholars. In order to get better understanding of customers in the context of online shopping, this research work can also be conducted in other countries.

LITERATURE:

1. Aigbavboa, C., & Thwala, W. (2013). *A theoretical framework of users' satisfaction/dissatisfaction theories and models*. Paper presented at the 2nd International Conference on Arts, Behavioral Sciences and Economics Issues (ICABSEI'2013) Dec.
2. Akter, S., D'Ambra, J., & Ray, P. (2013). Development and validation of an instrument to measure user perceived service quality of mHealth. *Information & Management*, 50(4), 181-195.

3. Al-Azzam, A. F. M. (2015). The impact of service quality dimensions on customer satisfaction: A field study of Arab bank in Irbid city, Jordan. *European Journal of Business and Management*, 7(15), 45-53.
4. Alnaser, F., Ghani, M., & Rahi, S. (2017). The Impact of SERVQUAL Model and Subjective Norms on Customer's Satisfaction and Customer Loyalty in Islamic Banks: A Cultural Context. *Int J Econ Manag Sci*, 6(5), 455.
5. Alnaser, F., Ghani, M., & Rahi, S. (2018). Service quality in Islamic banks: The role of PAKSERV model, customer satisfaction and customer loyalty. *Accounting*, 4(2), 63-72.
6. Alnaser, F., Ghani, M., Rahi, S., Mansour, M., & Abed, H. (2017). Determinants of Customer Loyalty: The Role of Service Quality, Customer Satisfaction and Bank Image of Islamic Banks in Palestine. *Int J Econ Manag Sci*, 6(461), 2.
7. Alnaser, F. M., Ghani, M. A., & Rahi, S. (2019). The Implementation of Partial Least Square Modelling (PLS) For Marketing Research in Arab Countries: Introduction to Beginner Users-Evidence from Islamic Banks of Palestine. *Economic and Social Development: Book of Proceedings*, 1134-1141.
8. Alnaser, F. M., Ghani, M. A., Rahi, S., Mansour, M., Abed, H., & Alharbi, A. H. (2018). *Extending the Role of Servqual Model in Islamic Banks with Subjective Norms, Customer Satisfaction and Customer Loyalty*. Paper presented at the Economic and Social Development (Book of Proceedings), 32nd International Scientific Conference on Economic and Social.
9. Alnaser, F. M. I., Ghani, M. A., Rahi, S., Mansour, M., & Abed, H. (2017). The Influence of Services Marketing Mix (7 Ps.) and Subjective Norms on Customer's Satisfaction in Islamic Banks of Palestine. *European Journal of Business and Management*, 9(27).
10. Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of marketing*, 58(3), 53-66.
11. Anderson, R. E., & Srinivasan, S. S. (2003). E-satisfaction and e-loyalty: A contingency framework. *Psychology & marketing*, 20(2), 123-138.
12. Bearden, W. O., & Teel, J. E. (1983). Selected determinants of consumer satisfaction and complaint reports. *Journal of Marketing Research*, 20(1), 21-28.
13. Bei, L.-T., & Chiao, Y.-C. (2001). An integrated model for the effects of perceived product, perceived service quality, and perceived price fairness on consumer satisfaction and loyalty. *Journal of consumer satisfaction, dissatisfaction and complaining behavior*, 14, 125.
14. Chen, S. J., & Chang, T. Z. (2003). A descriptive model of online shopping process: some empirical results. *International Journal of Service Industry Management*.
15. Cho, N., & Park, S. (2001). Development of electronic commerce user-consumer satisfaction index (ECUSI) for Internet shopping. *Industrial Management & Data Systems*.
16. Crisp, C. B., Jarvenpaa, S. L., & Todd, P. A. (1997). Individual differences and internet shopping attitudes and intentions. *Graduate School of Business Working Paper, University of Texas*.
17. Cyr, D. (2008). Modeling web site design across cultures: relationships to trust, satisfaction, and e-loyalty. *Journal of Management Information Systems*, 24(4), 47-72.
18. Day, R. L., & Hunt, H. K. (1982). *New findings on consumer satisfaction and complaining*.
19. Dharmesti, M. D. D., & Nugroho, S. S. (2013). The antecedents of online customer satisfaction and customer loyalty. *Journal of Business and Retail Management Research*, 7(2).
20. Eid, M. I. (2011). Determinants of e-commerce customer satisfaction, trust, and loyalty in Saudi Arabia. *Journal of electronic commerce research*, 12(1), 78.
21. Evanschitzky, H., Emrich, O., Sangtani, V., Ackfeldt, A.-L., Reynolds, K. E., & Arnold, M. J. (2014). Hedonic shopping motivations in collectivistic and individualistic consumer cultures. *International Journal of Research in Marketing*, 31(3), 335-338.

22. Evanschitzky, H., Iyer, G. R., Hesse, J., & Ahlert, D. (2004). E-satisfaction: a re-examination. *Journal of retailing*, 80(3), 239-247.
23. Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: nature, purpose, and findings. *Journal of marketing*, 60(4), 7-18.
24. Garver, M. S., & Gagnon, G. B. (2002). Seven keys to improving customer satisfaction programs. *Business Horizons*, 45(5), 35-42.
25. Ghani, M. A., Rahi, S., Yasin, N. M., & Alnaser, F. M. (2017). Adoption of Internet Banking: Extending the Role of Technology Acceptance Model (TAM) with E-Customer Service and Customer Satisfaction. *World Applied Sciences Journal*, 35(9), 1918-1929.
26. Guo, X., Ling, K. C., & Liu, M. (2012). Evaluating factors influencing consumer satisfaction towards online shopping in China. *Asian Social Science*, 8(13), 40.
27. Heiner, E., Gopalkrishnan, R., Josef, H., & Dieter, A. (2004). E-satisfaction: a re-examination. *Journal of retailing*, 80(3), 239-247.
28. Hoffman, D. L., Novak, T. P., & Peralta, M. A. (1999). Information privacy in the marketspace: Implications for the commercial uses of anonymity on the Web. *The Information Society*, 15(2), 129-139.
29. Holbrook, M. B. (2005). Customer value and autoethnography: subjective personal introspection and the meanings of a photograph collection. *Journal of business research*, 58(1), 45-61.
30. Hou, J., & Rego, C. (2002). Internet marketing: An overview. *Office of Naval Research (ONR), Grant N, 140110917*, 2002.
31. Hoyer, W. D., Macinnis, D. J., & Pieters, R. (2001). Customer behavior. *Boston, Houghton Mifflin Company*.
32. Hsu, C.-L., Chang, K.-C., & Chen, M.-C. (2012). The impact of website quality on customer satisfaction and purchase intention: perceived playfulness and perceived flow as mediators. *Information Systems and e-Business Management*, 10(4), 549-570.
33. Hu, Y. C., Wang, J. H., & Hung, L. P. (2012). Evaluating microblogging e-service quality using ANP. *Journal of Multi-Criteria Decision Analysis*, 19(1-2), 89-111.
34. Johnson, M. D., Nader, G., & Fornell, C. (1996). Expectations, perceived performance, and customer satisfaction for a complex service: The case of bank loans. *Journal of Economic Psychology*, 17(2), 163-182.
35. Kim, D. J. (2012). An investigation of the effect of online consumer trust on expectation, satisfaction, and post-expectation. *Information Systems and e-Business Management*, 10(2), 219-240.
36. Kim, S., & Stoel, L. (2004). Apparel retailers: website quality dimensions and satisfaction. *Journal of Retailing and Consumer Services*, 11(2), 109-117.
37. Koivumäki, T. (2001). Customer satisfaction and purchasing behaviour in a web-based shopping environment. *Electronic Markets*, 11(3), 186-192.
38. Kotler, P., & Armstrong, G. (2012). Principles of marketing 14th edition. *New Jearsey: Pearson Education Inc*.
39. Kuo, H.-M., & Chen, C.-W. (2011). Application of quality function deployment to improve the quality of Internet shopping website interface design. *International Journal of Innovative Computing, Information and Control*, 7(1), 253-268.
40. Kusdyah, I. (2012). Persepsi Harga, Persepsi Merek, Persepsi Nilai, dan Keinginan Pembelian Ulang Jasa Clinic Kesehatan (Studi Kasus Erha Clinic Surabaya). *Jurnal Manajemen Pemasaran*, 7(1), 25-32.
41. Lee, G. G., & Lin, H. F. (2005). Customer perceptions of e-service quality in online shopping. *International Journal of Retail & Distribution Management*.

42. Lin, C.-C., Wu, H.-Y., & Chang, Y.-F. (2011). The critical factors impact on online customer satisfaction. *Procedia Computer Science*, 3, 276-281.
43. Lin, C. C. (2003). A critical appraisal of customer satisfaction and e-commerce. *Managerial Auditing Journal*.
44. Lin, C. C. (2003). The role of customer perceived value in generating customer satisfaction: An e-business perspective. *Journal of Research in Marketing & Entrepreneurship*, 5(1), 25-39.
45. Liu, C., & Arnett, K. P. (2000). Exploring the factors associated with Web site success in the context of electronic commerce. *Information & Management*, 38(1), 23-33.
46. Liu, X., He, M., Gao, F., & Xie, P. (2008). An empirical study of online shopping customer satisfaction in China: a holistic perspective. *International Journal of Retail & Distribution Management*.
47. Loke, S.-P., Taiwo, A. A., Salim, H. M., Downe, A. G., & PETRONAS, U. T. (2011). *Service quality and customer satisfaction in a telecommunication service provider*. Paper presented at the International conference on financial management and economics.
48. Maditinos, D. I., & Theodoridis, K. (2010). Satisfaction determinants in the Greek online shopping context. *Information Technology & People*.
49. Mason, J. B., & Bearden, W. O. (1979). Satisfaction/dissatisfaction with food shopping among elderly consumers. *Journal of Consumer Affairs*, 13(2), 359-369.
50. Mason, R. O. (1978). Measuring information output: A communication systems approach. *Information & management*, 1(4), 219-234.
51. McGinity, M. (2000). Staying connected: surfing the turf. *Communications of the ACM*, 43(4), 19-21.
52. McKinney, V., Yoon, K., & Zahedi, F. M. (2002). The measurement of web-customer satisfaction: An expectation and disconfirmation approach. *Information systems research*, 13(3), 296-315.
53. Ofir, C., & Simonson, I. (2007). The effect of stating expectations on customer satisfaction and shopping experience. *Journal of Marketing Research*, 44(1), 164-174.
54. Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469.
55. Oliver, R. L. (1997). Emotional expression in the satisfaction response. *Satisfaction: A behavioral perspective on the consumer*, 291-325.
56. Oliver, R. L., & Linda, G. (1981). Effect of satisfaction and its antecedents on consumer preference and intention. *ACR North American Advances*.
57. Pan, Y., & Zinkhan, G. M. (2006). Exploring the impact of online privacy disclosures on consumer trust. *Journal of retailing*, 82(4), 331-338.
58. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual: A multiple-item scale for measuring consumer perc. *Journal of retailing*, 64(1), 12.
59. Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). ES-QUAL: A multiple-item scale for assessing electronic service quality. *Journal of service research*, 7(3), 213-233.
60. Park, C. H., & Kim, Y. G. (2003). Identifying key factors affecting consumer purchase behavior in an online shopping context. *International Journal of Retail & Distribution Management*.
61. Parker, C., & Mathews, B. P. (2001). Customer satisfaction: contrasting academic and consumers' interpretations. *Marketing Intelligence & Planning*.
62. Petter, S., DeLone, W., & McLean, E. R. (2013). Information systems success: The quest for the independent variables. *Journal of management information systems*, 29(4), 7-62.
63. Phillip, K., & Keller, K. L. (2012). Marketing Management 14th edition Jakarta: PT. Indeks Kelompok Gramedia.

64. Polites, G. L., Williams, C. K., Karahanna, E., & Seligman, L. (2012). A theoretical framework for consumer e-satisfaction and site stickiness: An evaluation in the context of online hotel reservations. *Journal of Organizational Computing and Electronic Commerce*, 22(1), 1-37.
65. Rahi, S. (2015). Moderating Role of Brand Image With Relation to Internet Banking and Customer Loyalty: A Case of Branchless Banking. *The Journal of Internet Banking and Commerce*, 20(3).
66. Rahi, S. (2016a). Impact of Customer Perceived Value and Customers Perception of Public Relation on Customer Loyalty with Moderating Role of Brand Image. *The Journal of Internet Banking and Commerce*, 21(2), ---.
67. Rahi, S. (2016b). Impact of Customer Value, Public Relations Perception and Brand Image on Customer Loyalty in Services Sector of Pakistan. *Arabian J Bus Manag Review* S2, 004.
68. Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5.
69. Rahi, S. (2017). *Structural Equation Modeling Using SmartPLS*: CreateSpace Independent Publishing Platform.
70. Rahi, S. (2018). Examining the Effects of Travel Constraints, Tourist Satisfaction and Website Image on Tourist Loyalty in Developing Countries Context. *Economic and Social Development: Book of Proceedings*, 478-487.
71. Rahi, S. (2018a). *Research Design and Methods*: CreateSpace Independent Publishing Platform.
72. Rahi, S. (2018b). *Technology Adoption Issues in Banks*: CreateSpace Independent Publishing Platform.
73. Rahi, S. (2019). Integration of UTAUT model in internet banking adoption context. *Journal of Research in Interactive Marketing*, 13(3), 411-435. doi: 10.1108/jrim-02-2018-0032
74. Rahi, S., & Abd. Ghani, M. (2018). The role of UTAUT, DOI, perceived technology security and game elements in internet banking adoption. *World Journal of Science, Technology and Sustainable Development*, 15(4), 338-356. doi: doi:10.1108/WJSTSD-05-2018-0040
75. Rahi, S., & Abd. Ghani, M. (2019a). Does gamified elements influence on user's intention to adopt and intention to recommend internet banking? *International Journal of Information and Learning Technology*, 36(1), 2-20. doi: doi:10.1108/IJILT-05-2018-0045
76. Rahi, S., & Abd. Ghani, M. (2019b). Integration of expectation confirmation theory and self-determination theory in internet banking continuance intention. *Journal of Science and Technology Policy Management*, 0(0), null. doi: doi:10.1108/JSTPM-06-2018-0057
77. Rahi, S., & Abd. Ghani, M. (2019c). Investigating the role of UTAUT and e-service quality in internet banking adoption setting. *The TQM Journal*, 31(3), 491-506.
78. Rahi, S., Abd.Ghani, M., & Hafaz Ngah, A. (2019). Integration of unified theory of acceptance and use of technology in internet banking adoption setting: Evidence from Pakistan. *Technology in Society*, 58, 101120. doi: <https://doi.org/10.1016/j.techsoc.2019.03.003>
79. Rahi, S., Alnaser, F. M., & Ghani, M. A. (2019). Designing Survey Research: Recommendation for Questionnaire Development, Calculating Sample Size and Selecting Research Paradigms. *Economic and Social Development: Book of Proceedings*, 1157-1169.
80. Rahi, S., & Ghani, M. (2016). Internet Banking, Customer Perceived Value and Loyalty: The Role of Switching Costs. *J Account Mark*, 5(4), 188. doi: 10.4172/2168-9601.1000188
81. Rahi, S., Ghani, M., Alnaser, F., & Ngah, A. (2018). Investigating the role of unified theory of acceptance and use of technology (UTAUT) in internet banking adoption context. *Management Science Letters*, 8(3), 173-186.

82. Rahi, S., Ghani, M., & Muhamad, F. (2017). Inspecting the Role of Intention to Trust and Online Purchase in Developing Countries. *J Socialomics* 6(1). doi: 10.41 72/2167-0358.1000191
83. Rahi, S., Ghani, M., & Ngah, A. (2018). A structural equation model for evaluating user's intention to adopt internet banking and intention to recommend technology. *Accounting*, 4(4), 139-152.
84. Rahi, S., & Ghani, M. A. (2016). Customer's Perception of Public Relation in E-Commerce and its Impact on E-Loyalty with Brand Image and Switching Cost. *Journal of Internet Banking and Commerce*, 21(3).
85. Rahi, S., & Ghani, M. A. (2018a). *Investigating the Role of E-Service Quality and Brand Image in Internet Banking Acceptance Context with Structural Equation Modeling (SEM-PLS)*. Paper presented at the Economic and Social Development (Book of Proceedings), 30th International Scientific Conference on Economic and Social.
86. Rahi, S., & Ghani, M. A. (2018b). *A Structural Equation Modeling (SEM-AMOS) for Investigating Brand Loyalty and Customer's Intention towards Adoption of Internet Banking* Paper presented at the Economic and Social Development (Book of Proceedings), 29th International Scientific Conference on Economic and Social.
87. Rahi, S., Ghani, M. A., & Alnaser, F. M. (2017). The Influence of E-Customer Services and Perceived Value on Brand Loyalty of Banks and Internet Banking Adoption: A Structural Equation Model (SEM). *The Journal of Internet Banking and Commerce*, 22(1), 1-18.
88. Rahi, S., Ghani, M. A., & Ngah, A. H. (2020). Factors Propelling the Adoption of Internet Banking: The Role of E-Customer Service, Website Design, Brand Image and Customer Satisfaction. *International journal of Business Information System* 0(0). doi: 10.1504/IJBIS.2020.10020858
89. Ranganathan, C., & Ganapathy, S. (2002). Key dimensions of business-to-consumer web sites. *Information & Management*, 39(6), 457-465.
90. Samar, R., & Mazuri, A. G. (2019a). Does gamified elements influence on user's intention to adopt internet banking with integration of UTAUT and General Self-Confidence? *International Journal of Business Excellence*, 0(0). doi: 10.1504/IJBEX.2019.10016706
91. Samar, R., & Mazuri, A. G. (2019b). Integration of DeLone & McLean and Self-Determination Theory in internet banking continuance intention context. *International Journal of Accounting and Information Management*, 27(3).
92. Samar, R., Norjaya, M. Y., & Feras, M. A. (2017). Measuring the role of website design, assurance, customer service and brand image towards customer loyalty and intention to adopt internet banking. *The Journal of Internet Banking and Commerce*, 22(S8).
93. Samar, S., Ghani, M., & Alnaser, F. (2017). Predicting customer's intentions to use internet banking: the role of technology acceptance model (TAM) in e-banking. *Management Science Letters*, 7(11), 513-524.
94. Schaupp, L. C., & Bélanger, F. (2005). A conjoint analysis of online consumer satisfaction1. *Journal of electronic commerce research*, 6(2), 95.
95. Shannon, C. E., & Weaver, W. (1949). The mathematical theory of information. *Urbana: University of Illinois Press*, 97.
96. Shergill, G. S., & Chen, Z. (2005). WEB-BASED SHOPPING: CONSUMERS' ATTITUDES TOWARDS ONLINE SHOPPING IN NEW ZEALAND. *Journal of electronic commerce research*, 6(2), 78.
97. Sohn, C., & Tadisina, S. K. (2008). Development of e-service quality measure for internet-based financial institutions. *Total Quality Management*, 19(9), 903-918.
98. Spiller, P., & Lohse, G. L. (1997). A classification of Internet retail stores. *International Journal of Electronic Commerce*, 2(2), 29-56.

99. Stead, B. A., & Gilbert, J. (2001). Ethical issues in electronic commerce. *Journal of Business Ethics*, 34(2), 75-85.
100. Swan, J. E., & Combs, L. J. (1976). Product Performance and Consumer Satisfaction: A New Concept: An Empirical Study Examines the Influence of Physical and Psychological Dimensions of Product Performance on Consumer Satisfaction. *Journal of marketing*, 40(2), 25-33.
101. Szymanski, D. M., & Hise, R. T. (2000). E-satisfaction: an initial examination. *Journal of retailing*, 76(3), 309-322.
102. Terblanche, N., & Boshoff, C. (2001). Measuring customer satisfaction with some of the controllable elements of the total retail experience: an exploratory study. *South African Journal of Business Management*, 32(2), 35-42.
103. Turel, O., & Serenko, A. (2006). Satisfaction with mobile services in Canada: An empirical investigation. *Telecommunications policy*, 30(5-6), 314-331.
104. Wixom, B. H., & Todd, P. A. (2005). A theoretical integration of user satisfaction and technology acceptance. *Information systems research*, 16(1), 85-102.
105. Yang, Z., & Fang, X. (2004). Online service quality dimensions and their relationships with satisfaction. *International Journal of Service Industry Management*.
106. Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of marketing*, 52(3), 2-22.
107. Zeithaml, V. A. (2000). Service quality, profitability, and the economic worth of customers: what we know and what we need to learn. *Journal of the Academy of Marketing Science*, 28(1), 67-85.
108. Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002). Service quality delivery through web sites: a critical review of extant knowledge. *Journal of the Academy of Marketing Science*, 30(4), 362-375.
109. Zhang, X., Prybutok, V., & Huang, A. (2006). An empirical study of factors affecting e-service satisfaction. *Human systems management*, 25(4), 279-291.

CREATIVE ENVIRONMENT FOR DEVELOPMENT OF ENTREPRENEURIAL IDEAS IN TOURISM – MASH-UP EVENT AS AN INNOVATIVE EVALUATION MODEL

Tamara Floricic

*Juraj Dobrila University of Pula, Faculty of economics and tourism “Dr Mijo Mirkovic”
Preradovićeva 1, HR 52100 Pula, Croatia
tfloricic@unipu.hr*

Irena Sker

*Faculty of tourism and hospitality management, Primorska 42, Opatija, Croatia
Grad Poreč, Senior associate for economy and EU projects, Obala Maršala Tita 5/1, Croatia
irena.sker@porec.hr*

ABSTRACT

The idea represents a primary step towards entry into the entrepreneurial world; it is a core consideration which can result in future business ventures. However, in affirmation, there are numerous trials and corrections before the realisation of the idea itself, i.e. each idea does not necessarily result in a successful innovation. Mash-up represents an event of exceptional benefit for entrepreneurs, start-ups, educational institutions and creative people, i.e. target groups which have a common goal – evaluation of their own ideas as the basis for a successful entrepreneurial venture. The aim of this paper is to point to the significance of the Mash-up event as a creative and stimulating environment for development, evaluation and selection of successful entrepreneurial ideas in tourism. Apart from the actual testing of new ideas, this type of event represents a significant opportunity for development of creativity and innovativeness, potential participants' skills and interconnection as a possibility for realising mutual business synergies in tourism. The potential is significant from the educational aspect and also due to the possibility of inclusion of educational institutions, linking with entrepreneurship, thus forming the basis for further research. For the purposes of identification and development of successful business ideas, three phases of evaluation of ideas in tourism were analysed in the paper (initial evaluation of the presented ideas, evaluation of development of ideas by mentors and evaluation of modified ideas through specific criteria), which is conducted by experts from the field of tourism, entrepreneurship, technology, economics and management, and which form a considerable basis for decision making on future successful business performance. The importance of mentorship and individual approach are tested in the paper and the event structure methodology is proposed, which contributes to innovations, development of individuals, tourism and entrepreneurship. The paper's purpose and contribution follow from the afore-stated, i.e. presentation of an innovative model of development and evaluation of new ideas in tourism entrepreneurship, which contribute to the solution of challenges and to the development of micro and macro tourism environments.

Keywords: *business venture, creative thinking, entrepreneurship, idea development, innovations, Mash-up, start-up, tourism*

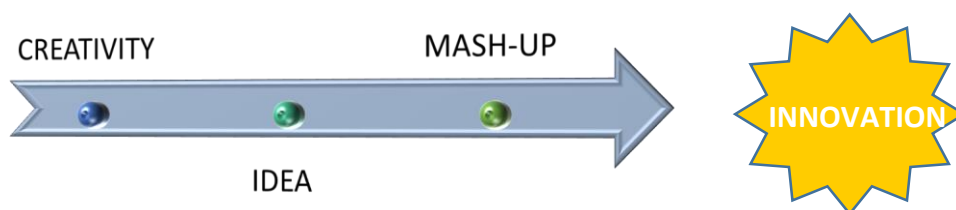
1. INTRODUCTION

Modern business is characterised by prompt changes, intensive competition, fast transfer of information, globalisation and considerable spreading of new technologies. For the purposes of survival in the turbulent market and realisation of competitive advantage, each existing and potential entrepreneurial subject must direct and adapt its business and thinking towards the challenges which the “modern” market imposes before them. The adaptation to the “modern” market includes encouragement of innovations, which are the result of creativity, new ideas and

company networking. Creativity is a term which is usually used for the activity of formation of new ideas, approaches or activities, while innovation is a process of creation and implementation of the stated creative ideas in a specific context. Therefore, in this paper, we start from the theoretical definition of the very terms of creativity and innovativeness and the explanation of the process from creativity to innovation, i.e. development of entrepreneurship. Company development, as well as development of whole economies, is based on new products, on finding new markets and consumer groups and on implementation of new technologies. Creation of something new or implementation of something old in a new way is creativity in itself, which is often mentioned as one of the important characteristics of entrepreneurs (Pupavac, 2015). Further to characteristics of entrepreneurship, i.e. entrepreneurs, the following F. Bahtijarević-Šiber's (2008) notion is important: "The question of entrepreneurial talent, creation of conditions for their development, encouragement and implementation in the promotion of individual and social development becomes a key question of modern societies". Creativity is wealth; there is no product or service in which an original idea could not generate value and create competitive advantage. Innovation and creativity are the main driving forces for any success (Srića, 2010). Development of entrepreneurship as a whole, as well as performance of the majority of companies, depends on creativity of the company management, creativity of staff and innovativeness of the overall organisation, i.e. the ability to generate innovative products and services in the market (Jakovljević, Radman Peša and Čovo, 2012). Each increase in the creativity competencies has a direct effect on the increase in efficiency and productivity and directly leads to greater profits. In every business it is of great importance to allow creative thinking which has a different approach to problem solving and, when such an approach is applied, the outcome can be both a useful and pleasant surprise. In the first place, it is a person who is creative, but a product or a process can also be creative, even the environment and the society as a whole. Creativity facilitates achievement of the difference between "mediocrity" and "excellence", linking of seemingly unbondable phenomena and creation of new behaviour and work patterns. Creativity itself, therefore, consists of what we already know about business and on our openness and preparedness to combine and link already familiar phenomena to get a completely new, satisfactory solution (Matković, 2016). Creativity is everything that an individual does, what he thinks of and, if, through the process of evaluation, an original pioneering solution has been reached, we talk about innovation. Innovation is something new, something someone creative turned into a creation. Creativity is, therefore, discovery, while innovativeness is creation (Glasser, 1997). An idea represents a primary step in the process itself of development of innovation and can result in a future successful business venture. Each creative idea does not necessarily have to become innovation, but there is no innovation without creativity. Creativity is the basis for changes and is not sufficient as such if there are no inventive and entrepreneurial individuals (Matković, 2016) who will breathe a new life and soul into a creative idea, i.e. applicability and purposefulness in everyday life. However, there are numerous series of trials and corrections before realisation of the idea itself, i.e. every idea does not result in a successful innovation. By analysing experiences and evidence, as well as the history of great ideas, it can be concluded that some individuals brought ideas effortlessly, naturally and completely intuitively, while others came across ideas just by chance, owing to circumstances, "assisted" by luck. The largest number of important inventions were, however, born out of the combination of inspiration and hard work and perseverance to elaborate, defend and consistently build a path towards the final success – often despite strong opposition, unfavourable circumstances and even total rejection by the environment. There are two possibilities for each creative thought: to be accepted or rejected. Namely, it occurs that ideas do not manage to reach those for whom they are intended or, even better said, that they are not presented in such a way as to be accepted and, of course, later implemented.

Unfortunately, many good ideas are wasted or forgotten and rejected for different reasons, maybe even without any reason whatsoever (Matković, 2016). The idea becomes the main factor that leads some products to success. But in the multitude of ideas there are only a small number of those, which on their own or together with other ideas, can result in successful products, and only a few that are revolutionary and lead, through innovation, to exceptional results (Stevanović, Marjanović and Štorga, 2012: 1952). Starting from the above stated reflections and perceived problems, the main purpose of this paper is to propose a methodology for an innovative model of development and evaluation of new ideas in tourism entrepreneurship through a Mash-up event, which represents an important and central approach in the process itself from creativity to innovation, as illustrated in Figure 1.

Figure 1: Process from creativity to innovation, i.e. process of entrepreneurship development



Source: Authors

Creativity represents a platform for consideration and development of ideas which can also be generated with different creative thinking methods. Once ideas have been generated, it is very important to make a selection of ideas which will be further elaborated and evaluated. One of the evaluation models is the Mash-up concept itself, which represents the core of this paper for realisation of successful innovation and entrepreneurship development. It is necessary to observe the development of entrepreneurs and entrepreneurial environment as a process which begins with creativity as a backbone of every creation. Endeavours of companies, start-ups, as well as of educational institutions, as institutions for the “creation of entrepreneurial profiles” should therefore be directed towards teamwork, creative thinking techniques, which, synergically, could result in new ideas and, ultimately, in innovations. A Mash-up event represents a crucial part of an integrated mechanism from creativity to innovation and development of entrepreneurship, i.e. a significant component in the phase of product development preparation, whose basis is networking and goal, evaluation and development of ideas as potential successful innovation. The term Mash-up can be interpreted as mess, mixture, i.e. fusion of different elements. Mash-ups are often defined by the type of content that they aggregate. A content Mash-up, for example, brings together various types of contents for presentation through an interface (Rouse, 2016). Analysing work on the topic of Mash-up leads us to the conclusion that the word itself primarily concerns a personal learning environment (Wild, Mödritscher and Sigurdarson, 2009), i.e. that it is more significantly associated with online learning platforms (Jarvis, Gauntlett and Collins, 2011), and that, from the aspect of digitalisation, can be defined as a Mash-up indicating a way to create new (Web) applications by combining existing data and services from several sources. In the past few years, Web Mashups have become a popular approach towards creating a new generation of customizable Web applications (Amine Chatti et al., 2009). However, in the context of this paper, we primarily focus on the combination of different elements, i.e. integration of different individuals, networked in the real environment which contributes to the development of individuals, groups, i.e. micro and macro environment. Creative environment is organised in the sense of events, where different subjects, from individuals, creative individuals, beginner entrepreneurs, i.e. start-ups, ICT experts, civil sector representatives, to developed

entrepreneurial subjects who, as their goal, have to improve their businesses by implementing innovative solutions and educational institutions, for the purposes of development and recognition of creative ideas, development of the skills of participants themselves and linking with entrepreneurship. The Event is directed towards different target groups, as an inspirational environment provides opportunities for transformation of innovative ideas into tangible results. Mash-up events are focused on activating the entrepreneurial talents and provide an opportunity to take raw ideas and turn them into successful innovations. With activation of entrepreneurial talent, the event also enables development of one's own creativity to critical consideration of one's own ideas, development of presentational and communication competencies, as well as innovation and teamwork skills.

2. RESEARCH DESIGN AND METHODOLOGY

In the phase of preparation for product development, i.e. the phase which represents the first part of the innovation process, participants do not have a sufficiently clear idea of what the end product will be like and not only in view of its appearance, but also in view of its functional and other characteristics. It is the large number of unknowns that present the biggest aggravating circumstances, but also the biggest creative opportunity. Classification, assessment, evaluation and selection of ideas are, therefore, carried out most often today based on the professional knowledge of reviewers, i.e. assessors (Soukhoroukova, Spann and Skiera, 2010). Different approaches to idea assessment can be noted in researches. One part of researches addresses general idea assessment, i.e. idea assessment independently from a specific product. Such assessments are based on a small number of attributes, which is not enough for various cases of product development. The second part of researches deals with detailed and more precise assessments of attributes but is too strongly determined by the characteristics of specific products that it can hardly be considered as general. A considerably smaller number of papers deal with a general approach to idea description, assessment and comparison, as well as qualitative and quantitative evaluation of ideas for the purposes of product development. It can, therefore, be concluded that there is a certain gap in researches, especially in consideration of the problem of idea description and selection (Stevanović, 2012). As a consequence of the previous conclusion, in this paper, definition of idea assessment methodology using a creative Mash-up event is examined by means of the research key field, i.e. the selection and recognition of those ideas which can contribute to product development, improve the process of decision making during the preparation for product development and, ultimately, lead to development of entrepreneurs and entrepreneurship. The paper analyses the applicability of Mash-up methodology in evaluation and development of entrepreneurial ideas with the focus on tourism. For the purposes of identification and development of successful business ideas, three phases of idea evaluation in tourism are analysed in this paper (initial evaluation of presented ideas, evaluation of idea development by mentors and evaluation of modified ideas through certain criteria), conducted by experts from the fields of tourism, entrepreneurship, technology, economics and management and represents an important ground for making decisions on future business performance. The significance of mentorship and individual approach are tested in the paper and the methodology of event structure is proposed, which contributes to innovations, development of individuals, tourism and entrepreneurship. The purpose and scientific contribution of the paper, presentation of the innovative development model and evaluation of new, i.e. modified ideas in tourism entrepreneurship, which contribute to the resolution of challenges and to development of the micro and macro tourism environment arise from the above stated. The research, as a part of applied researches, has a theoretical goal which is directed towards formulation and proposal of the methodology of evaluation and idea development, as a contribution to the product development theory, which can serve for improvement of the decision making process in the early phase of product

development and a practical goal, as development of the idea evaluation system based on the defined methodology through an innovative Mash-up event. The research methods used in this paper are the methods of analysis and synthesis, verification and discussion, abstraction and generalisation, as well as statistical methods, and the evaluation itself was carried out in Treviso, Italy, in March 2019, where the Mash-up event was organised as an international event with the purpose of development of entrepreneurship, development of “fresh” ideas, which represent a considerable potential for conversion into a higher dimension, i.e. a successful innovation. A total of 23 ideas were submitted at the Event, of which 20 entrepreneurial ideas in tourism were presented, structured according to 4 tourist areas.

2.1. Methodology of innovative evaluation model and entrepreneurial idea development

A Mash-up programme and event is designed to match people from the same or different communities with the knowledge, tools, and expert advice they need to figure out if there is a great business to be built around their great idea. The project meeting was held on 28th March, 2019 in Treviso, at Ciset International Centre of Studies on the Tourism Economy (which was set up in 1991, as a result of a partnership between Ca' Foscari University Venice, the Veneto Region and the Italian Touring Club) on the initiative of ATLAS Adriatic Cultural Tourism Laboratories, a project approved under the first call for standard plus projects Interreg VA Italy - Croatia CBC Programme 2014-2020, (Juraj Dobrila University of Pula, Faculty of Economics and Tourism “Dr. Mijo Mirković”, Pula which is a partner on the project ATLAS, Adriatic Cultural Tourism Laboratories). The initiative offered to the participants the opportunity to develop important aspects for the realisation of their ideas, in a dynamic and stimulating environment, with experts coming from Ciset - Ca' Foscari University of Venice, university professors and tourism and culture professionals. Participants had to present a sustainable innovative idea applicable to the culture and tourism sector, with particular reference to the development and enhancement of cultural and natural heritage. The ideas had to include and develop activities specifically related to one of the following topic areas:

- Experiential tourism - Innovative proposals of experiential tourism linked to the traditions of the territory;
- Digital tourism - Territorial and/or tourist valorisation of ideas through smart and ICT applications;
- Accessible tourism - Territorial and/or tourist valorisation of ideas having as the main focus the accessibility of cultural heritage sites and/or addressing a wider spectrum of target groups less considered by the standardised tourism offer (people with disabilities, elderly people, families) in order to develop also a new and diversified audience;
- Communication and Marketing - Communication and marketing activities for new travel modes, access to sites, integration of the overall chain of excellence (Unioncamere Veneto, 2019).

The Event was opened to operators of cultural tourism, representatives of civil society, creative people, ICT experts, project managers, video makers, start uppers, students, etc. from the eligible area of the Italy-Croatia programme¹, working as a team to gradually contribute to the realisation of the most diverse ideas in order to redesign the cultural tourism offer and launch innovative promotional actions. All those who had an idea (product or service) and want to learn how to develop it in a short time in a multicultural and multidisciplinary environment.

¹Eligible areas of the Italy-Croatia programme are 25 Provinces in Italy: Udine, Gorizia, Trieste, Pordenone, Venice, Padua, Rovigo, Ferrara, Ravenna, Forlì-Cesena, Rimini, Pesaro and Urbino, Ancona, Macerata, Ascoli Piceno, Fermo, Teramo, Pescara, Chieti, Campobasso, Brindisi, Lecce, Foggia, Bari, Barletta-Andria-Trani; 8 counties in Croatia: Istarska, Primorsko-goranska, Ličko-senjska, Zadarska, Šibensko-kninska, Splitsko-dalmatinska, Dubrovačko-neretvanska, Karlovačka.

Individuals or teams made up of at least two members and a maximum of five members were eligible to apply for the Event. After online registration, the Evaluation Commission, having verified the formal correctness of the applications and the presence of the eligibility requirements, examine and evaluate the proposal and define the ranking of the proponents at their own unquestionable judgement, maximum of 35 ideas. A Mash-up event is structured in three phrases which facilitate idea breakdown for the purposes of a higher quality idea evaluation and development. The first phase concerns the presentation of the "raw" idea and its features, the area in which it could be applied and the possibilities of developing other characteristics that may be important for the further improvement of ideas. Each idea in this phase can be subject to questions for the purposes of a more detailed explanation and recognition of a possibility for development. In this phase, one's own presentational and communication skills are identified, i.e. the ability of an individual or a team to present the important characteristics of an idea within a specific time period. After the first presentation, the idea is evaluated by the jury made up of 6 experts in the field of tourism, entrepreneurship, technology, economics and tourism and management. The second phase relates to further development of the initially presented idea, with professional mentorship and students as facilitators for additional questions and clarification. Mentors are specialists from the Ciset International Centre of Studies on the Tourism Economy, university professors and tourism experts. Ideas are selected according to 4 defined topics and participants are grouped together in teams and have the opportunity to exploit the synergies between their different skills to develop a real innovative solution to redesign the cultural tourism offer. This phase is considered as important due to the revision itself of one's own idea, which is presented again before the mentorship, facilitators and team which have ideas within the same topic area, additional questions are asked, and the idea is elaborated in line with each particular business plan element, with special attention to the approach of design thinking, brainstorming and learning by doing. Based on an analysis of the listed components, proposals are given for further development or modification of the idea, i.e. further activities which represent a possibility to transform the idea into a successful innovation. Following the completion of the second phase, the idea can no longer be considered as "raw", i.e. it now has an added value and we can call it "the idea of added value". The third phase commences with a repeated presentation of modified ideas before the initial jury, with emphasis on imperfections of the initial idea and improved characteristics of the idea, which represents a potential for development of a successful innovation in a specific field. It is the moment when the idea is revised among your captured users in a multicultural and inspirational environment. The questions which contribute to the revision and further development of the idea can be posed, not only by jury members, but also by all event participants – direct, who are involved in the evaluation process through their own ideas and indirect, i.e. passive event participants. This is where a multidimensional significance of this phase emanates from, i.e. revision of the idea from the aspect of different fields. After each of the stated phases, every idea is evaluated by the jury and mentor (in the second phase) according to the criteria for assessment of successfulness of the idea listed in Table 1.

Table following on the next page

Table 1: Criteria for assessment of successfulness of the idea

SCORE CRITERIA	PITCH FACILITATION METHODOLOGY	SCORE RANGE
OBJECTIVES	Satisfying a need/necessity detected by the business and/or destination environment. What is the idea? What are the key challenges faced by the idea? What are the objectives and expected results?	0-5
INNOVATION	Innovation level/originality What is the innovative aspect of the idea?	0-5
SKILLS	Quality and skills of the team. Who are the team members? What skills and competences are ensured by the team? What external skills are needed?	0-5
TARGET	Social, environmental or cultural impact produced and/or expected with respect to the objectives defined. What are the targets? Which target needs are satisfied by the idea?	0-5
BUSINESS MODEL	Technical feasibility and economic sustainability. What is the competitive advantage and value proposition of the idea? What economic sources are needed?	0-5
PROGRAMME AREA	Scalability/replicability. What is the replicability of the idea in general and in the programme's area?	0-5

Source: Innovative ideas competition on tourism "Mash-up ATLAS rewards innovative ideas for cultural tourism" Regulation, 2019, Unioncamere Veneto

The importance of each Mash-up event phase is reflected in the process of idea evaluation which, in the composition of the evaluation structure, often represents a very complex procedure. Due to the nature of the idea itself, idea evaluation is most often conducted by means of determination of the value of the attributes with which the ideas are, more or less, successfully described, as well as by ranking of the ideas according to the overall attribute value. However, it is normally difficult to determine which attributes and when they need to be evaluated. Franke et al. (2009) propose evaluation of technological, strategic, market and consumer-oriented, organisational and product-oriented attributes. Miyashita et al. (2009) are fixed on evaluation through four attributes: feasibility, usefulness, innovation and efficiency. In Mounarath et al. (2011) we find a proposal for evaluation based on: innovations, creativities, user acceptance, market potential and technical feasibility, while in Kim et al. (2011) we come across evaluation of economic, ecological and experiential values. The process of idea evaluation for the purposes of product development represents an estimate of how good is the idea and how much it is within the domain of the overall set goal (innovation) or partial goals (development, production, marketing, finances, management, market, product) (Feyzioglu, Buyukozkan, 2005) according to certain criteria, both as a single idea and in relation to other ideas (Stevanović, 2012). According to Aagard (2012), ideas are examined, during which process the values of previously defined attributes for idea evaluation are assessed. From the idea evaluation process, it is expected that, in a maximally consistent way, provide idea ranking mechanisms, based on existing knowledge, experience and predictions of technological, market and social trends. The main goal of idea evaluation is rejection of low-potential ideas and creation of subgroups (clusters) from a certain group of ideas in which they are ranked (Stevanović, 2012). To make the evaluation process effective we should be aware of the context in which evaluations are taking place. By context we understand values, rules of the game, cultural impacts, social milieu etc. within which the process is taking place (Rebernik, Bradač, 2013). As can be seen from Table 1, six criteria are determined for assessment of how successful an idea is: objectives, innovation, skills, target, business model and programme area, which are handed out to assessors with additional explanations in pitch facilitation methodology.

Each criterion of successfulness is assessed using points between 0, which denotes a potentially unsuccessful idea and 5, which denotes a potentially successful idea. The maximum number of points that an assessed idea could possibly realise is 30. In accordance with the stated criteria, each idea is evaluated through three Mash-up event phases and, in the end, grades are added up and the two most successful ideas are identified. Motivation to apply for a Mash-up event is not reflected only in elaboration of the idea which represents a potential for further improvement, but also in the event reward itself, which includes mentorship support service: 10 hours of consulting services and technical support, carried out on the basis of an agreed time schedule, by a professional specialised in cultural tourism, aiming at developing the rewarded idea and to favour the access to opportunities and external contributions. Among mentorship support service the winners will be invited to the Mash-up event organised in Croatia in September 2019. All the subjects involved, in every phase of activity foreseen by Mash-up and also after its conclusion, will guarantee the confidentiality of the information related to the presented ideas.

3. RESULTS OF EMPIRICAL RESEARCH MASH-UP – INNOVATIVE MODEL OF EVALUATION AND DEVELOPMENT OF ENTREPRENEURIAL IDEAS IN TOURISM

The preparation for product development is a process which precedes the formal process of product development (Khurana, Rosenthal, 1998), i.e. in a wider sense, it is an integral part of the innovation process which is also made up of product development phases and product commercialisation. Creation, assessment and selection of ideas are the most important activities in the course of product development preparation. Following successfully conducted creation and collection of ideas, the question of quality and importance of collected ideas is posed. A large number of methods of evaluation of collected ideas are illustrated in literature (Rebernik, Bradač, 2012), where increased attention is paid to the application of methods of idea evaluation. Certain authors point to the possibilities of explicit determination of idea attributes and idea evaluation based on the values attached to attributes. Other authors determine idea values on the grounds of the estimated value of idea attributes and on idea ranking based on values which have been determined in this way. Different methods of ranking and multi-attribute decision making (Stevanović, 2012) are used in a larger or smaller measure, as is the example in the described Mash-up event. However, in practice, structured methods are often not used, and the selection of ideas is carried out in informal meetings, based on previous personal experience and intuition (Feroli et al., 2010) and often the estimation of the value of an idea is carried out ad-hoc, without pre-defined criteria. The fact is that companies reach new ideas not only from their own internal resources (staff, experience, knowledge). The ability of companies to, based on new ideas, develop new products points to their ability to interact with the surrounding environment: consumers, suppliers, developmental institutions and developmental centres, public organisations, etc. (Alves, Marques, 2005 and Howard, Culley, 2008). From the aforesaid, the need emanates for an innovative approach to networking, i.e. a Mash-up event for the purposes of providing support to the processes of estimation and evaluation of entrepreneurial ideas. 23 ideas in total were submitted to the Mash-up event and 20 entrepreneurial ideas in tourism were presented, structured according to 4 tourism topic areas: experience tourism, digital tourism, accessible tourism, communication and marketing.

Table 2: Number of ideas according to defined topics

	Experience tourism	Accessible tourism	Digital tourism	Communication and Marketing	Total
Frequency -N	13	2	5	0	20
%	65	10	25	0	100

Source: Authors' contribution

As can be seen in Table 2, the topic of experience tourism represents the most attractive topic for the development of ideas, i.e. as much as 65% of the total ideas were submitted under this topic. Experience tourism and interpretation today represent the basis for tourism destination sustainable development, as memorable experiences are exactly what people bring back from their travel and the process of creation of that experience and emotion in tourism are two important components in story creation. Modern tourist experiences have increasingly been intended for tourists who are looking for possibilities to, as much as possible, participate in direct delivery of experiences. The evaluation of ideas contained three phases of evaluation of the presented ideas. The first and third evaluation phases were conducted by the same experts in the field of tourism, entrepreneurship, technology, economics and tourism and management according to the same evaluation criteria. Evaluation is thus subject to statistical processing. By analysing the dominant value, i.e. the value of the variable which appears most frequently in the first and third phases of idea evaluation, as can be seen in Table 3, we can conclude that, in the first evaluation phase, most ideas were given grade 17 (Mo=17.67) and, in the third phase, most ideas were given grade 21 (Mo=21.57) out of the maximum number of points, 30.

Table 3: Comparison of grades in the first and third phases of evaluation

SCORE	1st EVALUATION	3rd EVALUATION
11	1	1
12	0	0
13	0	0
14	0	0
15	2	2
16	1	2
17	5	2
18	3	3
19	2	2
20	1	0
21	2	4
22	2	1
23	0	2
24	1	1

Source: Authors' contribution

By comparing the dominant values, an increase in the idea grade was noted (dominant values) in the third phase of evaluation, as opposed to the first evaluation phase. It is presumed that the ideas in the second phase under the influence of mentors and facilitators were reviewed, elaborated and redesigned for the purposes of further development. We therefore believe that it was reasonable to test the connection between the first and third evaluation phases using the differentiation test for two small dependent samples, by setting the hypotheses:

- H0: there is no difference in average grade in the first and third idea evaluation phases
- H1: there is a difference in average grade in the first and third idea evaluation phases

Table following on the next page

Table 4: Average grades for ideas in the first and third evaluation phases

N	1st EVALUATION score	3rd EVALUATION score	D
1	22.2	24.4	-2.2
2	24.4	22.6	1.8
3	20.5	21.4	-0.9
4	22.2	22.6	-0.4
5	17.5	20.7	-3.2
6	18.4	20.6	-2.2
7	16.7	15.9	0.8
8	20.4	18.3	2.1
9	17.0	17.1	-0.1
10	18.5	18.9	-0.4
11	20.5	21.9	-1.4
12	17.4	20.6	-3.2
13	19.2	18.1	1.1
14	18.4	15.4	3.0
15	16.0	17.7	-1.7
16	16.5	16.0	0.5
17	16.8	17.3	-0.5
18	15.2	14.9	0.3
19	15.4	19.0	-3.6
20	11.2	10.9	0.3
AVERAGE	18.22	18.715	-0.495
Sd			1.826551

Source: Authors' contribution

By inserting the data into the t-test equation the value of $t \approx -1.2119$ is obtained, which we compare with the critical value of Student's t-distribution, with $\alpha = 0.05$. Given that $t < t^*$ we conclude that H_0 is retained, while H_1 is rejected, i.e. there is no statistically significant difference in the average grade for ideas in the first and third idea evaluation phases. The stated result does not necessarily mean that the second idea evaluation phase, i.e. work with mentors and facilitators, has not importantly contributed to the results of the third evaluation as, when making conclusions, certain effects also need to be taken into consideration, such as the behaviour of other participants in the same team of a specific topic, possibility of insufficient communication with mentors due to insufficiently professional proficiency in the English language, the time mentors dedicated to a specific idea and the presumption that each idea does not represent potential for a successful innovation. The second idea evaluation phase by means of mentorship certainly remains, subject to further research on idea structure and modelling. The Mash-up event was open to both individual and team submission of ideas. On the presumption that the teamwork concept increases productivity by creating synergy as an added value to teamwork, the intention was to explore whether there is a connection between teamwork and the average final idea evaluation grade, i.e. whether “team” ideas scored higher grades than “individual” ideas.

Table following on the next page

Table 5: Team size and average final evaluation grades

	TEAM MEMBER	FINAL EVALUATION
1	1	25.5
2	3	23.3
3	1	22.9
4	1	22.6
5	1	22.0
6	1	20.3
7	3	20.2
8	4	19.9
9	4	19.7
10	1	19.1
11	2	18.8
12	1	18.3
13	5	18.2
14	2	18.2
15	2	17.9
16	2	17.1
17	5	16.0
18	4	14.2
19	1	13.4
20	1	13.0

Source: Authors' contribution

Using the correlation coefficient of the two variables, the negative and small correlation value of $r=-0.2198$ was obtained and we can conclude that there is no connection between the variables. Following the calculation of importance of correlation coefficient ($P=0.044$) in relation to the set limit in importance of $P<0.05$, we can state that the correlation coefficient is important and that it can be interpreted. We conclude, therefore, that there is no connection between the team size and the average final idea evaluation grade. Independently from the process of idea evaluation, a Mash-up event shows considerable qualitative advantages which are manifested in the networking of different business sectors, development of skills and competencies, multidisciplinary approach, larger qualified network, engaged online community, concrete results, new skills and new plans for the future. At the same time a Mash-up event helps participants review the idea, think about it and estimate whether the idea represents potential for a successful future innovation. Apart from the already stated advantages, a Mash-up event also represents an important event for the development of creativity and innovativeness, potential participants' skills and interlinking as a possibility to realise mutual business synergies in tourism. Business competency, as one of the key competencies of the European Competences Framework for Lifelong Education (European Commission, 2017), consists of specific and defined knowledge, skills and attitudes. Entrepreneurship is defined as the ability to transform ideas into action and thus emerges as the imperative of educational and economic systems. In the Republic of Croatia, Strategy for Entrepreneurial Learning 2010-2014 identifies non-correlation between educational programmes and labour market needs and proposes incorporation of entrepreneurial competency into all forms and all learning levels. Business simulations, as a form of active learning and training methods through teamwork can be used to develop entrepreneurial competencies. The Mash-up event potential is, therefore, important also from the educational aspect, due to the possibility of inclusion of educational institutions, linking with entrepreneurship and represents a basis for further research.

4. DISCUSSION AND CONCLUSION

Innovativeness is the key element of individual development, but also of overall economic development, and it is necessary to facilitate and encourage the creation of an innovative climate and provide support to entrepreneurs. Contributions to the innovative climate and to the potential for development of innovations is manifested in networking, i.e. Mash-up events, as “an environment which is abundant with creative people is an excellent place for the development of entrepreneurial ideas” (Pupavac, 2015). Mash-up events represent the crucial part of the integrated mechanism from creativity to innovation and of the development of entrepreneurship, i.e. a relevant component in the phase of preparation for product development, whose basis is networking and their goal is idea evaluation and development as a potential successful innovation. The methodology of the proposed Mash-up event reflects in three idea evaluation phases; of which each represents an extremely important step towards the development of ideas. Although by testing the statistical importance of the difference in idea average grades in the first and third evaluation phases the result was reached of nonexistence of the said difference and the presumption that the second evaluation phase, i.e. mentorship, did not contribute significantly to the results generated in the third phase (while other effects should be also taken into consideration), qualitative advantages were noted of each of the mentioned phases. The second idea evaluation phase certainly remains subject to further research and idea structure and modelling and work with mentors in smaller groups is proposed for the purposes of considerably more time needed for idea testing and development. The Mash-up event qualitative advantages are evident in networking of participants from different and same sectors for potential future cooperation, multidisciplinary approach, idea revision and estimate as future successful innovation, development of participants’ skills and competencies, new plans for the future or reflection on creation of new ideas which, after the event itself, participants confirmed. Accordingly, it is proposed that the qualitative importance of a Mash-up event be confirmed using the survey method, i.e. to establish which out of the listed advantages contributes most to the qualitative importance of the event. Finding a good idea is merely the first step in the creation of a successful entrepreneurial story. It rarely happens that a successful business is born only as a result of an excellent idea. What actually happens much more frequently is a series of trials and errors before we reach a product on which we can build a successful business (Delić et al., 2014). This very fact points to the need to organise a stimulating and creative environment for revision, evaluation and development of entrepreneurial ideas in tourism and other fields. Mash-up events can be an incentive for development to different target groups, from creative individuals alone, beginner entrepreneurs, to micro, small to medium-sized and large entrepreneurships, as well as to the academic community for the purposes of linking of theory and practice and a platform for further research. The Mash-up event which is described in this paper was primarily directed towards the tourism sector and development of entrepreneurship in tourism; however, depending on the defined topic areas, it can also cover various other interesting fields. According to research, big differences between “winners” and “losers” in the markets most often occur due to the difference in the quality of conduct of analyses during the preparation for product development (Stevanović, 2012). This is where the need for networking emerges, i.e. the need for quality testing of development of an idea into innovation. Publishing of the results of this, as well as other research work on idea development, has as its goal dissemination of knowledge about this, extremely important, field and, ultimately, development of entrepreneurship and entrepreneurial competencies, which represents one of the key competencies of the European Competences Framework for Lifelong Education.

ACKNOWLEDGEMENT: Presented ATLAS Mash Up 2019 is an initiative of ATLAS Adriatic Cultural Tourism Laboratories, project approved under the first call standard plus projects Interreg VA Italy - Croatia CBC Programme 2014-2020.

LITERATURE:

1. Aagaard, A. (2012). *Idea management in facilitation of pharmaceutical front end innovation*, Institute of leadership and strategy, University of Southern Denmark, International Journal of Technology Policy and Management 12 (4), p. 373-386.
2. Alves, J. et.al. (2005). *Building creative ideas for successful new product development*. In 9th European conference on creativity and innovation, Lodz, Polonia, pp. 363-383. Available at: https://www.researchgate.net/profile/Irina_Saur/publication/228732515_Building_creative_ideas_for_successful_new_product_development/links/5645140608ae451880a8b1c4/Building-creative-ideas-for-successful-new-product-development.pdf (2019-08-01)
3. Amine Chatti, M. et al. (2009). *SMashup Personal Learning Environments*, Proceedings of 2nd Workshop Mash-Up Personal Learning Environments (MUPPLE'09). Workshop in conjunction with 4th European Conference on Technology Enhanced Learning (EC-TEL 2009): Synergy of Disciplines Nice, France, pp. 6-14.
4. Bahtijarević-Siber, F., Sikavica, P., Pološki Vokić, N. (2008). *Suvremeni menadžment*. Zagreb: Školska knjiga
5. Delić, A. et al. (2014). *Osmislite i provjerite svoju poduzetničku ideju*. Vodič, Sveučilište J.J. Strossmayera u Osijeku, Ekonomski fakultet u Osijeku. Available at: https://www.hup.hr/EasyEdit/UserFiles/Osijek/Publikacija_Osmislite%20svoju%20ideju.pdf (2019-07-23)
6. European Commission (2017). *Developing key competences for all throughout life*. Available at: https://ec.europa.eu/education/sites/education/files/document-library-docs/factsheet-key-competences-lifelong-learning_en.pdf (2019-07-25)
7. Ferioli, M. et al. (2010). *Understanding the rapid evaluation of innovative ideas in the early stages of design*. In International Journal of Product Development. 12 (1), pp. 67-83.
8. Feyzioglu, O., Buyukozkan, G. (2005). *Evaluation of New Product Development Projects using Artificial Intelligence and Fuzzy Logic*, World Academy of Science, Engineering and Technology 11, pp. 363-369
9. Franke, S. et.al. (2009). *Managing early phases of innovation processes and the use of methods within empirical results from an industry survey*. In International conference on engineering design, ICED'09, the 17th International Conference on Engineering Design 1, Design Processes, Stanford University, Stanford, CA, USA, pp. 193-204. Available at: <https://www.designsociety.org/publication/28531/Managing+Early+Phases+of+Innovation+Processes+and+the+Use+of+Methods+within+Empirical+Results+From+an+Industry+Survey> (2019-08-06)
10. Glasser, W. (1997). *Teorija kontrole*. Zagreb: Alineja
11. Howard, T., Culley, S., Dekoninck, E. (2008). *Idea generation in conceptual design*. International Design Conference – Design 2008, Dubrovnik. Available at: <https://pdfs.semanticscholar.org/66cf/63c580291aa061dcfa7c44e5f0024946cbc2.pdf> (2019-07-30)
12. Jakovljević, M., Radman Peša, A., Čovo, P. (2012). *Integrirani organizacijski model kreativnosti i inovativnosti (OMKI): primjenjivost na mala i srednja poduzeća u Republici Hrvatskoj*, Ekonomska misao i praksa 1, 2012., str. 24.
13. Available at: <https://hrcak.srce.hr/file/124623> (2019-08-01)

14. Jarvis, M., T., Gauntlett, L., and Collins, H. (2011). *Are Mash-Ups the Future for Online Learning Platforms?* Psychology A-Level Students' Judgements about VLE and MUPPLE Interfaces, Bournemouth University Research Online. Available at: https://www.researchgate.net/publication/258050294_USING_MASHUP_TO_CREATE_A_NEW_PLATFORM_FOR_TEACHING_ENGLISH_IN_THE_E-LEARNING_ENVIRONMENT (2019-08-09)
15. Khurana, A., Rosenthal, S.R. (1998). *Towards holistic "front ends" in new product development*. Journal of product innovation management, 15 (1), pp. 57-74.
16. Kim, S.Y. et.al. (2011). *E3 value concept for a new design paradigm*. In International conference on engineering design, ICED11, Technical University of Denmark, Copenhagen, pp. 314-322. Available at:
17. <https://www.designsociety.org/publication/30482/E3+VALUE+CONCEPT+FOR+A+NEW+DESIGN+PARADIGM> (2019-08-06)
18. Matković, G. (2016). *Što je zaliha ideja veća, to je inovacija izglednija*“, Lider 2016., 11.2016. URL: <https://lider.media/znanja/sto-je-zaliha-ideja-veca-je-inovacija-izglednija/> (2019-08-02)
19. Ministarstvo gospodarstva, rada i poduzetništva, (2010) *Strategija učenja za poduzetništvo 2010.- 2014.*, Zagreb, 2010.
20. Available at: http://www.hzz.hr/UserDocsImages/Strategija_ucenja_za_poduzetnistvo_2010-2014.pdf (2019-08-01)
21. Miyashita, T., Satoh, D. (2009). *A improvement method of conceptual design ideas using data envelopment analysis*. In International conference on engineering design, ICED'09, the 17th International Conference on Engineering Design 1, Design Processes, Stanford University, Stanford, CA, USA, pp. 13-22. Available at: https://www.designsociety.org/download-publication/28721/a_direction_of_ideas_in_conceptual_design_using_data_envelopment_analysis (2019-08-02)
22. Mounarath, R., Lovallo, D., Dong, A. (2011). *Choosing innovation: How reasoning affects decision errors*. In International conference on engineering design, ICED11, Proceedings of the 18th International Conference on Engineering Design (ICED 11), Impacting Society through Engineering Design 7: Human Behaviour in Design, Lyngby/Copenhagen, Denmark, Technical University of Denmark, pp. 54-63. Available at: <https://www.designsociety.org/publication/30662/CHOOSING+INNOVATION%3A+HOW+REASONING+AFFECTS+DECISION+ERRORS> (2019-08-02)
23. Pupavac, D. (2015). *Kreativnost kao temelj poduzetništva*, Zbornik radova Međimurskog veleučilišta u Čakovcu 6(1), str. 68. Available at: <https://hrcak.srce.hr/140615> (2019-08-03)
24. Rouse, M. (2016). *Definition mash-up*. Available at: <https://whatis.techtarget.com/definition/mash-up> (2019-07-28)
25. Rebernik, M., Bradač, B. (2013). Module 4: *Idea evaluation methods and techniques*, EU project Creative Trainer, University of Maribor, Faculty of Economics and Business, Institute for Entrepreneurship and Small Business Management. Available at: http://coherencepisa.df.unipi.it/docs/lectures/Module_idea_evaluation_final%20LEISCHING.pdf (2019-08-03)
26. Soukhoroukova, A., Spann, M., Skiera, B. (2010). *Sourcing, filtering and evaluating new product ideas: An empirical exploration of the performance of idea markets*, Journal of product innovation management 29(1). Available at: https://www.ecm.bwl.uni-muenchen.de/publikationen/pdf/idea_markets.pdf (2019-08-04)
27. Srića, V. (2010). *Hrvatska 2020*. Zagreb: Profil
28. Stevanović, M. (2012). *Idea selection in product development*, PhD thesis, University of Zagreb, Faculty of mechanical engineering and naval architecture, Zagreb

29. Stevanović, M., Marjanović D., Štorga M. (2012). Decision support system for idea selection. U: *12th International Design Conference Design – Design 2012,3*, Dubrovnik, pp. 1951-1960. Available at: https://bib.irb.hr/datoteka/582075.Stevanovic_et_al_2012_-_Decision_Support_System_for_Idea_Selection.pdf (2019-07-31)
30. Unioncamere Veneto (2019). *Innovative ideas competition on tourism “Mash-up ATLAS” rewards innovative ideas for cultural tourism* Regulation
31. Wild, F., Mödritscher, F., Sigurdarson, S. (2008). *Designing for change: Mash-up Personal Learning Environments*. In: Magoulas, George D. ed. *E-Infrastructures and Technologies for Lifelong Learning: Next Generation Environments*. IGI Global, Idea Group Publishing, pp. 126–149.

ZERO WASTE CONCEPT IN TOURISM

Daniela Soldic Frleta

*Faculty of Tourism and Hospitality Management, University of Rijeka, Croatia
danielas@fthm.hr*

Dora Zupan

*Croatia
dora.zupan1@gmail.com*

ABSTRACT

Tourists, residents as well as the accommodation and catering facilities generate large amounts of waste and therefore have large impact on the environment. Given that high quality environment is very often main motive for tourists to visit certain destinations, waste handling in context of environment protection is of a major concern. In addition, it is in the interest of the destination management and particularly of the stakeholders providing tourism products and services to optimize the use of resources and to make their business as efficient and effective as possible. Therefore, concepts that seek to address current challenges of conserving resources and biodiversity, as well as preserving the quality of health and life in general, are increasingly in the focus of interest. In addition to analysing previous researches on this topic, pilot survey was conducted on the attitudes and habits of (potential) tourists related to waste management. Moreover, it was examined how well the respondents were familiar with the concepts of zero waste, sustainable development, waste management, recycling and the circular economy, and what is their perception on the possible impact of zero waste initiatives on the environment and personal tourism experience. Apart from the survey results, this paper provides insights on tourism businesses that are operating according to the zero waste concept and on how this concept impacts their business.

Keywords: *Circular economy, Sustainable development, Tourism, Waste management, Zero Waste*

1. INTRODUCTION

With the increased pressure of human activities on environmental capacities, the awareness of environment protection has emerged as well as increased tendency to harmonize industrial development with environmental capacity. The common understanding of waste as a substance at the very end of the consumer cycle has been recently increasingly questioned, and ways are being sought for how resources can be reused or converted before being thrown into landfills. Industry is the major producer of waste, and tourism is no exception to it (Dileep, 2007). Given that waste management is one of major concerns of many destinations, there is increasing number of new measures focusing on the handling waste effectively as well as concepts aiming for its minimisation. Zero waste initiatives are one of the examples given that this concept promotes waste mitigation by avoiding unnecessary packaging, and sees the waste (that is nevertheless produced) as a potentially valuable reusable resource. Tourism generates large amounts of waste, especially in tourism destinations facing high seasonality which makes its management more complicated. In that cases tourism waste varies seasonally, very often is generated in sensitive areas and putting pressure on waste management facilities during peak season and damaging high nature value resources. (Styles et al., 2017). Although the generation of waste in tourism and hospitality is inevitable, there are ways to reduce its amount and to manage it in an adequate manner, thereby reducing the negative effects of waste disposal on the environment. Waste from accommodation has similar characteristics to mixed household waste (diverse mix of materials, including organic and hazardous materials) that can give rise

to significant environmental impacts upon disposal (Styles et al., 2017). Zero waste initiatives encourage reusing (and repurposing) resources and thus contribute to a circular economy which is based on the circulation of resources, that is, their reuse and their utility maximization, as opposed to a linear process in which resources are quickly discarded. The positive effects of zero waste concept on hotel businesses have also been evident, since its implementation generate many positive results: less produced waste; more collected sorted waste; less water and energy consumption; higher hotel occupancy on an annual basis; higher business efficiency and higher guest satisfaction. Furthermore, in order to have a greater positive environmental impact, apart from the businesses, all the residents need to be involved and to participate in appropriate waste management. Hence, the environmental sustainability becomes a key consideration in policy-making, since more responsible consumption and utilization in daily life concern both health and quality of life (Oh and Lee, 2013). To ensure the successful waste management, not only the provision of infrastructures by local government is needed, but also understanding public concerns, knowledge and behaviour (Babaei et al., 2015). As Laor et al. (2018) underlined, the public participation on waste separation process strongly affects the success of household recycling programs. In that context it is necessary to investigate residents' attitudes as well as habits when it comes to the waste management at home as well as while travelling. Therefore, aiming to understand residents' knowledge, awareness and concerns towards waste management, a pilot survey was conducted. It was examined how well the respondents were familiar with the concepts of zero waste, sustainable development, waste management, recycling and the circular economy, their tendency for waste separation, energy and water savings, as well as what is their perception on the possible impact of zero waste initiatives on the environment and personal tourism experience.

2. LITERATURE BACKGROUND

In recent decades, achieving greater efficiencies in waste management is in the focus of academic discussion on climate change (Ezeah et al., 2015). Solid waste management is a critical, complex and multi-dimensional challenge for the world in general and for the accommodation sector in particular (Skordilis, 2004; Denafas et al., 2014). Tourism, on the one hand is highly dependent on the environment quality, and on the other, activities related to tourism sometimes generate just the opposite output - decrease the quality of the environment and consequently reduce its attractiveness to tourists (Piipo et al., 2014). Veleva et al. (2017) explain that "zero waste" tends to eliminate or reduce waste and is in a correlation with circular economy. Furthermore, they associate circular economy with designing products and services so they can be repurposed or recycled into new products and fostering collaborations to ensure high rates of source separation. Greyson (2007) promotes *precycling* as actions taken now in order to prepare the current resources to become future resources, rather than wastes accumulating in the biosphere. Tourism is of undeniable importance for the economy, but it also generates some negative effects, i.e. escalating amounts of waste. Therefore, further research is needed to address these issues properly. Literature review of the scientific papers published in journals indexed in the Web of Science and Scopus on this topic indicate that there is increasing interest for researching the effects of circular economy, efficient waste management and zero waste concept in the last decade. However, a closer look to the literature reveals that the research of these topics in relation to tourism has been assessed only to a limited extent and there is a need for more systematic and theoretical analyses of this insufficiently explored issue.

2.1. Circular economy

Circular economy is characterized as a regenerative economy, which aims to keep products, components and materials at their highest level of utility and value (Pamfilie et al., 2018).

Corona et al. (2019) perceive circular economy as a sustainable economic system where the economic growth is decoupled from the resources exploitation, through the reduction and recirculation of natural resources. Ellen MacArthur Foundation (2015) describes circular economy as an economic system that is restorative and which aims to maintain the utility of products, components and materials and therefore retain their value. The concept is based on the idea that human systems can mirror natural processes to restore natural capital to the biosphere and utilize materials in closed loops (Veleva et al., 2017). Hence, it includes, but is not limited to sustainable eco-design, energy and materials efficiency measures as well as strategies defined within so called 3R's waste hierarchy: reduce, reuse, recycle (European Environment Agency, 2016). When it comes to tourism context, Manniche et al. (2017) highlighted that there is lack of researches of the importance and role of circular economy in hospitality although its application to the hotel sector can bring the environmental and financial benefits (Florido et al., 2019). Elia et al. (2017) emphasize the need for standardized indicators for moving from linear to circular practices. Radwan et al. (2010) came to the conclusion that it is necessary for hoteliers to educate and train staff on how to reduce and recycle waste and also to involve customers in the hotel's waste recycling programme. Waste minimization through products' redesign as well as changing societal patterns through education and training, and purchasing with eco-intelligence is widely considered environmentally and economically efficient, as well as cost effective long term approach to manage waste during the life cycle of a product (Remolador, 2011).

2.2. Zero Waste

For the Zero Waste International Alliance (2018) term zero waste represents all resources conservation by implementing responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health. The findings of Ezeah et al. (2015) research indicate that a variety of locally-based measures need to be implemented to enhance sustainable development. Otherwise, improper management of waste can lead to undesired environmental, economic and social impacts, i.e. increases in greenhouse gas emission, land degradation, resource deprivation, surface and groundwater pollution, loss of biodiversity and the loss of aesthetic value of tourism locations (Ezeah et al. 2015). The management of solid waste tends to be particularly problematic when it comes to island tourism destinations due to their specific climatic conditions, land mass and topography, financial restraints, changing consumption patterns, transient population, (in some cases even poor planning) and seasonal variations in solid waste quantity and composition (Willmott and Graci, 2012). Krausz (2012) argues that strict "zero waste to landfill" policy with diversion from landfill as a primary goal, does not consider the total waste generated and does not address the issue of over-consumption so as a result, companies rely predominantly on recycling and waste-to-energy methods of disposal. Song et al. (2014) also found that waste reduction efforts have been focused mostly on recycling. Ghisellini et al. (2016) note that despite its numerous business benefits, developing a "zero waste" strategy is challenging, because it requires an engagement of different stakeholders across the supply chain. Moreover, tourism stakeholders are often facing barriers to reducing waste, mainly due to the lack of information and guidelines, time and space constraints and finance issues (United Nations Environment Programme, 2003). Pubule et al. (2015) sought for the best options for bio-waste management in the Baltic States and concluded that the optimal solution should be based on specific environmental, economic, technical, and social criteria identified for local conditions. Piippo et al. (2014) concluded that zero waste proposal might improve the image of Lapland as a sustainable destination. Rico et al. (2019) demonstrate that the average carbon footprint of a tourist in Barcelona is much higher than the value for a citizen of Barcelona.

Moreover, Pablo-Romero et al. (2017) confirmed an increasing positive relationship between the hospitality sector electricity consumption and overnight stays in Spanish provinces. Veleza et al. (2017) noticed that waste does not only endanger human health and the environment, but it also represents a double penalty for businesses – it demonstrates inefficient production processes and increases the costs for disposal. Florido et al. (2019) stated that tourism acts as a living laboratory, where tourists and company staff experience new habits and more sustainable forms of organization, which will have not only a great social impact but also impact in terms of greater profitability and competitiveness.

3. ZERO WASTE HOTEL – GOOD PRACTICE EXAMPLE

In order to find out the main effects of the zero waste concept implementation in tourism an in-depth interview was conducted with the representative of the Hotel Rifiuti Zero® (Eng. Zero Waste Hotel). The Hotel Rifiuti Zero® project started in 2012. Antonino Esposito, hotel consultant, reflecting on the large amount of waste produced by the tourism, decided to apply the Zero Waste strategy. He started with the Hotel Rifiuti Zero® protocol development. The idea behind the project Hotel Rifiuti Zero® is to combine hospitality and sustainability, respect and conservation. Majority of the Zero Waste Hotels network members are located in Italy. The strategy is geared towards facilities such as hotels, farmhouses, restaurants and bars in tourist resorts that are keen to ensure sustainability and, at the same time, increase the business volume thanks to the steady rise of so called "green travellers". Through staff training, adequate supplier selection and customer communication, these facilities are able to achieve an optimum management system minimizing the environmental impact through a 40% reduction in waste produced and an annual decrease of 15-20% of electricity and water consumption. Joining the Hotel Rifiuti Zero® project is funded by the participating institutions, which typically achieve return on investment after the first year of membership. Membership fee depends on the facility type (hotel, restaurant...), the size, average number of visitors, and the level of investments made (steam cleaning machines, ecological detergents, sanitized water dispensers, dispensers for elimination of single-dose, etc.). However, the annual average membership fee is between 2.000 and 5.000 euros. Hotel Rifiuti Zero is able to reduce waste production by implementing different activities:

- Installations of Zero Waste Dumpsters
- Reduction of residual waste
- Reduction in the production of plastic
- Elimination of unit-dose packaging (sugar, soap...) and disposable products
- Setting up a dry garden (an arid garden populated by cactus and other species with the minimum water requirement)
- Using water dispensers in the areas reserved for staff
- Preparation of a "Zero waste" menu with local products and ingredients (in accordance with the 0 miles policy)
- Implementation of the "Chef's Garden"
- Composting
- Collection of corks
- Purchase of cleaning products with low environmental impact
- A steam engine usage for final cleaning (less usage of the polluting detergents)
- Arrangements with suppliers resulting with packaging reduction
- Using the "returnable" boxes for fruits and vegetables
- Informing and enhancing guests' awareness and involvement.

The application of the Hotel Rifiuti Zero® strategy involves numerous advantages in terms of reduction of costs and waste and emissions production, reduction of the electricity, water fuels consumption, reduction of annual waste tax expense, increase separate waste collection, etc.). Namely, the key results achieved by the hotel that adopted Hotel Rifiuti Zero® strategy are:

- 90% of waste separated
- 40% decrease in generated waste
- 20% decrease in water consumption
- 15% decrease in electrical consumption
- 288 less of the waste transport to the waste collection centre (per year)
- 15% increase in the number of arrivals/visitors

The economic philosophy around which gravitates the basic idea of this concept is that of a circular economy that suggests that creating waste should be avoided and that all biological and technical components of a product can be redesigned and reused. Sustainability becomes an added value in the marketing process and thus an important factor in creating profit for these facilities. The implementation of the zero waste concept also allows cost savings to the participating institutions, increase in sales thanks to an influx of more tourists and local economic growth through the practice of the 0 miles. It is possible to drastically reduce the environmental impact and to reduce the costs while offering added value to the customer. The sustainability of a Zero Waste Hotel could be considered a luxury that has no additional financial costs, nor for the businesses, nor for customers. It requires dedication but provides a unique experience that generates a chain of advantages for everyone (facilities, guests, institutions and the community in general) providing an evidence of a good circular economy practice.

4. METHODOLOGY AND SURVEY RESULTS

In order to find out what are the habits and attitudes regarding waste management of residents who are, in certain periods, tourists as well, pilot on-line survey was conducted in Croatia from May to July 2019. In total, 125 respondents accessed the questionnaire, 72 of them fully completed it and therefore, only their answers were taken into account when analysing the results. Online questionnaire collected data on respondents' sociodemographic profile and their attitudes regarding waste management, recycling and zero waste initiatives in everyday life as well as while travelling. The collected data were analysed using the statistical package SPSS for Windows 25.0. Apart from descriptive statistics, data analysis includes paired sample t-tests and independent t-tests. The specific objectives of the survey were to investigate:

- how well the respondents are familiar with the concepts of sustainable development, recycling, waste management, zero waste and the circular economy;
- are there differences in respondents' tendency to rational energy and water consumption, as well as to waste separation at home and while travelling.

Table 1: Respondents' profile (N=72)

Characteristic		%	Characteristic		%
Gender	Female	66.7	Living standard	below average	7.9
	Male	33.3		average	81.0
Occupation	student	39.7		above average	11.1
	employed	50.8	Age generation	Baby boomer generation (born 1946 to 1964)	11.0
	unemployed	6.3		Generation X (born 1965 - 1976)	16.0
	retired	3.2		Generation Y / "Millennials" (born 1977-1995)	41.0
				Generation Z (born from 1996 onwards)	32.0

Source: Authors

As can be seen in the Table 1, females account for 66.7% of the sample, the majority of the respondents are employed (50.8%) and 81.0% of respondents stated that their living standard is average. The respondents are on average 33.7 years old. The first part of the questionnaire collected data regarding how familiar respondents are with the terms: sustainable development, waste management, recycling, zero waste and circular economy. Results showed that, on average, respondents are familiar with the sustainable development term (all of them heard about the term and 40.3% stated that the term is completely clear to them) (Table 2). Similar, the term waste management is also very well known among the respondents, for most of them (45.7%) the term is completely clear. Among all presented terms, respondents recognised term recycling the most, given that 78.6% stated that this term is completely clear to them (Table 2).

Table 2: Respondents' familiarity with selected terms

Term	<i>Sustainable development</i>	<i>Waste management</i>	<i>Recycling</i>	<i>Zero waste</i>	<i>Circular economy</i>
	%				
<i>I never heard of it</i>	0.0	0.0	0.0	16.2	14.5
<i>I heard about it but I don't know how to explain</i>	13.9	4.3	1.4	11.8	20.3
<i>I know something about it</i>	15.3	11.4	0.0	13.2	27.5
<i>I'm familiar with it, but the term isn't completely clear to me</i>	30.6	38.6	20.0	23.5	17.4
<i>The concept is completely clear to me</i>	40.3	45.7	78.6	35.3	20.3

Source: Authors

When zero waste term is considered, 16.2% of the respondents never heard of it and 23.5% of the respondents are familiar with the term, while for 35.3% of them, the term is completely clear. Among those respondents who have heard about the zero waste concept, the most common source of information about the concept are social networks (50.9%) and other internet sources (56.1%). Additionally, as they had possibility of multiple answers, 38% of respondents indicated friends as a source of information, 17% of them gained information on it in daily newspapers, 16% from family members, 16% from television, 12% from teachers, and 10% of them read about the zero waste concept in journals. Finally, 14.5% of the respondents never heard about the circular economy concept and only 20.3% of them stated that this term is completely clear to them (Table 2). After answering how familiar they are with these concepts, short descriptions and definitions regarding all the mentioned concepts were provided to the respondents.

Table 3: Respondents' attitudes on waste management

Statement	Mean	SD
<i>I'm well-informed about waste management.</i>	3.78	0.975
<i>I look for information about waste management on my own.</i>	3.26	1.265
<i>I use single-use plastic on a regular basis.</i>	3.15	1.209
<i>It is important to avoid unnecessary packaging.</i>	4.65	0.664
<i>Recycling is the best way to deal with the waste problem.</i>	3.87	1.158
<i>Educational system should pay more attention to waste management.</i>	4.63	0.516
<i>The citizens' education is necessary for the waste management system improvement.</i>	4.52	0.682
<i>I am willing to pay extra fee for the waste management improvement.</i>	3.37	1.265

Source: Authors

Previously presented results indicate that the respondents are the most familiar with the recycling term and the least with circular economy and zero waste concepts indicating the necessity of organising educational and internal marketing activities for all residents no matter

their age, occupation status or living standard. This was confirmed with the residents' attitudes presented in Table 3, where a five-point Likert scale was used to determine the degree of agreement of the respondents with offered statements (1 = strongly disagree; 5 = strongly agree). Respondents agreed the most that educational system should pay more attention to waste management ($M=4.63$) and that the citizens' education is necessary for the improvement of the waste management system ($M=4.52$). Results also showed that, on average, respondents recognise the importance of avoiding the unnecessary packaging ($M=4.5$) and they agree to a certain degree that recycling is the best way to deal with the waste problem ($M=3.87$). However, respondents (52.3%) are less willing to pay extra fee for the waste management improvement. 61.8% of the respondents consider themselves well-informed regarding waste management, 47.0% are looking for information on their own and 41.8% of them uses single-use plastic on a regular basis (Table 3).

Table 4: Respondents' attitudes on zero waste concept

Statement	Mean	SD
<i>As a tourist (when travelling) I make more waste than usual.</i>	2.87	1.315
<i>If the accommodation facility offers soaps in bulk dispensers (not in single-use packages), my satisfaction with the quality of the service decreases.</i>	2.01	1.228
<i>If honey and spreads are not served in single-use packages, my satisfaction with the quality of the service decreases.</i>	2.00	1.197
<i>I'm willing to pay more for the same quality of the service in the accommodation facility if it gets energy from the renewable resources.</i>	3.16	1.180
<i>I am willing to pay more for the same quality of the service in a hotel, restaurant or other, if their business is in accordance with the zero waste principles.</i>	3.21	1.238
<i>Zero waste initiatives are cost-effective.</i>	3.78	1.005
<i>Zero waste approach implies using healthy and high-quality ingredients and products.</i>	4.13	0.815
<i>Zero waste initiatives have positive impact on the environment.</i>	4.47	0.801
<i>Zero waste initiatives have positive impact on those who implement them.</i>	4.41	0.744

Source: Authors

Table 4 summarises the residents' attitudes regarding zero waste concept. Results show that respondents' satisfaction level with service quality doesn't decrease if the accommodation facility offers soaps in bulk dispensers as well as if honey and other spreads are not served in single-use packages which is in the line with their previous statements regarding the necessity of avoiding unnecessary packaging. Moreover, 36.8% of the respondents are willing to pay more for the same quality of the service in the accommodation facility if the facility gets energy from the renewable resources while 41.8% are willing to pay more for the same quality of the service in a hotel, restaurant or in other facilities, if their business is in accordance with the zero waste principles (Table 4). Respondents' on average disagree that they are making more waste when travelling ($M=2.87$), however it is necessary to point that 45.6% agrees with this statement. 53.0% of the respondents agree that zero waste initiatives are cost-effective, while much higher proportion (91.2%) agrees that they have positive impact on the environment and on those who implement them (92.4%). Additionally, 79.1% of them agree that zero waste approach implies using healthy and high-quality ingredients and products (Table 4). These findings are confirming that the respondents now recognize the positive impacts of zero waste concepts and that they are supporting their implementation. Further, paired sample t-tests were performed in order to find out whether there are any significant differences between the respondents' level of rational energy and water savings at home and while travelling (Table 5) and the T-test results proved the existence of statistically significant differences. Results analysis reveal that respondents tend to pay more attention to energy ($t=4.317$, $p=0.000$) and water ($t=4.168$, $p=0.000$) consumption at home than while travelling (Table 5).

Table 5: Respondents' tendency for energy and water consumption savings

<i>Tendency for</i>	<i>At home</i>		<i>While travelling</i>		<i>Gap score</i>	<i>t</i>	<i>Sig. (2-tailed)</i>
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>			
<i>Energy savings</i>	3.76	0.813	3.34	0.845	0.42	4.317	0.000
<i>Water consumption savings</i>	3.71	1.080	3.29	1.008	0.42	4.168	0.000

Note: 1 = I'm not paying attention to rational energy/water consumption at all; 5 = I am very careful about rational energy/water consumption; Gap score= mean score at home - respective mean score while travelling

Source: Authors

Additionally, the results of performed paired sample t-tests show significant differences between the respondents' tendency to separate waste at home and while travelling and staying in tourism destination. It was found that when it comes to all waste categories, respondents tend to separate them more at home in comparison to the situation when they are travelling and staying in tourism destinations (Table 6).

Table 6: Respondents' tendency to separate waste

<i>Tendency to separate</i>	<i>At home</i>		<i>While travelling</i>		<i>Gap score</i>	<i>t</i>	<i>Sig. (2-tailed)</i>
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>			
<i>PET plastic (bottles...)</i>	4.17	1.086	3.44	1.412	0.73	4.059	0.000
<i>other plastic</i>	3.68	1.216	2.95	1.337	0.73	4.266	0.000
<i>hazardous waste</i>	4.19	1.171	3.40	1.582	0.75	4.774	0.000
<i>paper</i>	3.94	1.076	2.94	1.424	1.00	5.069	0.000
<i>metal</i>	3.46	1.330	2.68	1.401	0.78	4.888	0.000
<i>glass</i>	3.98	1.184	3.13	1.486	0.85	5.024	0.000
<i>compost / organic waste</i>	3.32	1.468	2.63	1.311	0.69	3.200	0.002

Note: 1 = I never separate waste; 5 = I always separate waste; Gap score= mean score at home - respective mean score while travelling

Source: Authors

As seen in the Table 6, respondents at home and while travelling tend to separate the most PET plastic, while they separate the least organic (food) waste. 52% of respondents always separate PET plastic at home and only 3% never does it. In comparison, while staying in a destination and travelling, 29% of respondents always separate PET packaging and 16% never. Large number of the respondents (58.3%) stated that the main reason for not separating the waste lies in the fact that there are no appropriate containers available nearby. Research findings also indicated that none of the respondents visited or stayed at a zero waste hotel or other zero waste facility. Despite this, 54% of them heard about zero waste facilities/stores, out of which 21% sometimes make purchases at zero waste store in their city. Additionally, 49.2% of the respondents had participated on a project/seminar or a workshop related to sustainable development and for 88% of them that experience encouraged them for eco-friendlier choices in everyday life. On the other side, only 4.8% of the respondents participated in zero waste project or event. This is mostly due to the fact that majority of respondents never heard about this kind of project or event (63.3%), didn't have time (20.0%) and/or project/event was too far away (23.3%). More than 80% of the respondents expressed their willingness to participate in projects, seminars or workshops regarding sustainable development and/or zero waste initiatives if they get the opportunity. These findings indicate that respondents are aware of the importance of getting knowledge and being involved in all activities aiming to mitigate effects of everyday living (including travelling) on the environment. Given the fact that this was a pilot research, authors are aware of its limitations in terms of generalization of the results. This study has considered only the attitudes of a small number of Croatian residents hence, to validate the

findings, more research needs to be conducted across a greater range of cities worldwide. Additionally, it is recommended to extend the number of the questionnaire items in order to cover wider range of the residents' habits regarding waste management and perceptions of possible zero waste initiative impacts on the environment, businesses and personal tourism experiences.

5. CONCLUSION

This paper analyses the zero waste concept in relation to sustainable tourism development and the circular economy. In that context, in addition to analysing previous researches on this topic, pilot survey was conducted on the attitudes and habits of (potential) tourists related to waste management. The research results showed that the respondents are very familiar with the concepts of recycling, waste management and sustainable development, and to a lesser extent with the concepts of zero waste and circular economy. This might be explained by the fact that these latter are new concepts and need to be promoted more actively through different activities, i.e. educational system, workshops, seminars etc. The survey findings also showed that the respondents are more likely to separate waste in their home in comparison to the times they are travelling and staying in tourism destinations. In both cases, they usually separate hazardous waste and PET plastic, while they rarely separate the organic, biodegradable waste or food waste. Additionally, respondents are stating that they are caring less about water and energy consumption savings while travelling. Nevertheless, a high proportion of respondents believe that it is important to avoid unnecessary packaging and does not consider waste reduction initiatives to diminish satisfaction with the service quality. The respondents are supportive of zero waste concepts and environmentally responsible businesses, given the fact that they are willing to pay more for their services. However, still, they aren't conducting accordingly, particularly while travelling. This is an issue that needs to be addressed in order to make all participants in tourism activities to be more aware of consequences of their behaviour. This study results indicates that zero waste initiatives in tourism and hospitality can indeed contribute to the sustainable development. Tourism and hospitality are facing major challenges in terms of the need to reduce costs; ensure energy security; meet market and guest expectations, increase competitiveness, comply with changing regulations and legislation, seize financing opportunities, reduce environmental impact, meet the sustainability criteria, etc. As seen from the Hotel Rifiuti Zero® example, zero waste initiatives as well as implementation of the circular economy principles have proven to be a good way to mitigate the negative effects, as well as to achieve economic and social benefits in the context of sustainable tourism development.

ACKNOWLEDGEMENT: *The authors would like to express gratitude to Ms. Ilaria Mastromano, communication manager of the Hotel Rifiuti Zero® who provided us with valuable insights on zero waste strategy implementation in tourism.*

LITERATURE:

1. Babaei, A.A., Alavi, N., Goudarzi, G., Teymouri, P., Ahmadi, K., Rafiee, M. (2015). Household recycling knowledge, attitudes and practices towards solid waste management. *Resour Conser Recycl*, 102: (Suppl C), 94-100.
2. Corona, B., Shen, L., Reike, D., Rosales Carreón, J., Worrell, E. (2019). Towards sustainable development through the circular economy—A review and critical assessment on current circularity metrics. *Resources, Conservation and Recycling*, 151. doi:10.1016/j.resconrec.2019.104498
3. Denafas, G. et al. (2014). Seasonal Variation of Municipal Solid Waste Generation and Composition in Four East European Cities. *Resources, Conservation and Recycling*, 89, 22-30.

4. Dileep, R.P. (2007). Tourism and Waste Management: A Review of Implementation of “Zero Waste” at Kovalam. *Asia Pacific Journal of Tourism Research*, 12(4), 377-392. <https://doi.org/10.1080/10941660701823314>
5. Elia V., Grazia, M., Tornese, F. (2017). Measuring circular economy strategies through index methods: A critical analysis, *Journal of Cleaner Production*, 142, 2741-2751.
6. Ellen MacArthur Foundation (2015). *Circularity Indicators: An Approach to Measuring Circularity*. Retrieved 12.02.2020. from https://www.ellenmacarthurfoundation.org/assets/downloads/insight/Circularity-Indicators_Project-Overview_May2015.pdf
7. European Environment Agency (2016). *Circular economy in Europe: Developing the knowledge base*. Retrieved 13.02.2020. from <https://www.eea.europa.eu/publications/circular-economy-in-europe>
8. Ezeah, C., Fazakerley, J. and Byrne, T. (2015). Tourism Waste Management in the European Union: Lessons Learned from Four Popular EU Tourist Destinations. *American Journal of Climate Change*, 4, 431-445. <http://dx.doi.org/10.4236/ajcc.2015.45035>
9. Florido, C., Jacob, M. and Payeras, M. (2019). How to Carry out the Transition towards a More Circular Tourist Activity in the Hotel Sector. *The Role of Innovation. Administrative Sciences*, 9 (2), 47. <https://doi.org/10.3390/admsci9020047>
10. Ghisellini P., Cialani, C., and Ulgiati, S. (2016). A review on the circular economy: the expected transition to a balanced interplay of environmental and economic systems, *Journal of Cleaner Production*, 114, 11-32.
11. Greyson, J. (2007). An economic instrument for zero waste, economic growth and sustainability, *Journal of Cleaner Production*, 15, 1382-1390.
12. Krausz, R. (2012). All for naught? A critical study of zero waste to landfill initiatives (PhD thesis). Lincoln University, New Zealand: [R. Krausz]
13. Laor, P., Suma, Y., Keawdounlek, V., Hongtong, A., Apidechkul, T. and Pasukphun, N. (2018). Knowledge, attitude and practice of municipal solid waste management among highland residents in Northern Thailand. *Journal of Health Research*, 32(2), 123-131. <https://doi.org/10.1108/JHR-01-2018-013>.
14. Manniche, J., Topsø Larsen K., Brandt Broegaard R., and Holland, E. (2017). *Destination: A Circular Tourism Economy: A Handbook for Transitioning toward a Circular Economy within the Tourism and Hospitality Sectors in the South Baltic Region* (1st ed.). Denmark: Centre for Regional and Tourism Research. Retrieved 11.02.2020. from <http://urn.kb.se/resolve?urn=urn:nbn:se:lnu:diva-77708>
15. Oh, J., Lee, H. (2013). Exploring Residents' Attitudes in Multifamily Housing Toward Food Waste Zero-Emission System with Fermentation and Extinction Technology. *Journal of Korean Society of Environmental Engineers*, 35(5), 321-333.
16. Pablo-Romero, M., Pozo-Barajas, R. and Sánchez-Rivas, J. (2017). Relationships between tourism and hospitality sector electricity consumption in Spanish provinces (1999–2013). *Sustainability*, 9(4), 480. <https://doi.org/10.3390/su9040480>
17. Pamfilie, R., Firoiu, D., Croitoru, A.G. and Ionescu, G.H.I. (2018). Circular Economy –A New Direction for the Sustainability of the Hotel Industry in Romania? *Amfiteatru Economic*, 20(48), 388-404.
18. Piippo, S., Juntunen, A., Kurppa, S., Pongrácz, E. (2014). The use of bio-waste to revegetate eroded land areas in Ylläs, Northern Finland: Toward a zero waste perspective of tourism in the Finnish Lapland. *Resources, Conservation and Recycling*, 93, 9-22.
19. Pubule, J., Blumberga, A., Romagnoli, F., Blumberga, D. (2015). Finding an optimal solution for biowaste management in the Baltic States. *Journal of Cleaner Production*, 88, 214-223. <http://dx.doi.org/10.1016/j.jclepro.2014.04.053>
20. Radwan, H.R., Jones, E. and Minoli, D. (2010). Managing Solid Waste in Small Hotels. *Journal of Sustainable Tourism*, 18, 175-190.

21. Remolador, M.A. (2011). *Guide to Greening Hotels through Waste Management & Green Purchasing*. Retrieved 12.02.2020. from http://nerc.org/documents/green_hotels_guide.pdf
22. Rico, A. et al. (2019). Carbon footprint of tourism in Barcelona. *Tourism Management*, 70, 491–504.
23. Skordilis, A. (2004). Modelling of Integrated Solid Waste Management Systems in an Island. *Resources, Conservation and Recycling*, 41, 243-254.
24. Song, Q., Li, J. and Zeng, X. (2015). Minimizing the increasing solid waste through zero waste strategy, *Journal of Cleaner Production*, 104, 199-201.
25. Styles D., Schönberger H., Galvez Martos J. L. (2017). *Best Environmental Management Practice in the Tourism Sector*. Luxembourg: Publications Office of the European Union. Retrieved 23.01.2020. from <https://op.europa.eu/en/publication-detail/-/publication/731280a0-df78-11e5-8fea-01aa75ed71a1/language-en>
26. United Nations Environment Programme (2003). *A Manual for Water and Waste Management: What the Tourism Industry Can Do to Improve Its Performance*. Retrieved 25.01.2020. from <http://www.unep.fr/shared/publications/pdf/WEBx0015xPA-WaterWaste.pdf>
27. Veleva, V., Bodkin, G. and Todorova, S. (2017). The need for better measurement and employee engagement to advance a circular economy: Lessons from Biogen's "Zero Waste" journey, *Journal of Cleaner Production*, 154, 517-529. doi: 10.1016/j.jclepro.2017.03.177
28. Willmott, L. and Graci, S.R. (2012). Solid Waste Management in Small Island Destinations: A Case Study of Gili Trawangan, Indonesia. *TEOROS*, Special Issue, 71-76.
29. Zero Waste International Alliance (2018). Retrieved 11.02.2020. from <http://zwia.org/zero-waste-definition/>

PREDICTION OF FINANCIAL HEALTH OF BUSINESS ENTITIES OF SELECTED SECTOR USING IN05 AND VERIFICATION OF ITS PREDICTIVE ABILITY THROUGH ROC

Dusan Karpac

*Department of Economics, Univerzita 1, 010 26 Zilina, Slovakia
University of Zilina, The Faculty of Operation and Economics of Transport and
Communications*

Viera Bartosova

*Department of Economics, Univerzita 1, 010 26 Zilina, Slovakia
University of Zilina, The Faculty of Operation and Economics of Transport and
Communications*

Filip Rebetak

*Department of Economics, Univerzita 1, 010 26 Zilina, Slovakia
University of Zilina, The Faculty of Operation and Economics of Transport and
Communications*

ABSTRACT

Forecasting business failure is a worldwide known term, in a global notion, and there is a lot of prediction models constructed to compute financial health of a company and, by that, state whether a company inclines to financial boom or bankruptcy. A healthy financial management of a business entity is very important for the proper operation of the business, and it is therefore very important to know how to assess financial health and to anticipate possible problems that will be easier to eliminate in advance. Globalized prediction models compute financial health of companies, but the vast majority of models predicting business failure are constructed solely for the conditions of a particular country or even just for a specific sector of a national economy. Predictive models can indicate whether an entity tends to prosper or bankruptcy, and so we can assess the financial health of the business. This paper provides a description of the index IN05, discusses its application to a sample of 266 Slovak subjects and points to its prediction in the given field. The verification of the ability to forecast bankruptcy or financial stability has been evaluated through ROC analysis.

Keywords: *Specificity, Financial prediction, ROC curve*

1. INTRODUCTION

The term "enterprise financial health forecasting" is widely known in the world, but the intensity of how different countries are addressing this issue is uneven. Business entities in our country forecast their financial stability only in a minimalist way, mainly because the conditions for the Slovak market have so far not designed a general model of prediction that is fully applicable to any entity, regardless of the sector in which it operates. In view of this, it is necessary at least to verify which models are suitable for use in a particular sector, and that fact was the main reason for us to write this study. Since the Slovak and Czech economies are very similar to each other, we have chosen to use the IN05 model from Ivan and Inka Neumaier. Evaluation of efficiency is an integral part of rational behavior of units that aims to survive in a competitive environment in a long-term (Balcerzak et al, 2018; Zapletalova, 2017). Every corporation has an economic and moral responsibility to its stockholders to perform well financially (Janoskova and Krizanova, 2017). However, the number of bankruptcies in Slovakia has been growing for several years without an apparent macroeconomic cause. To prevent a rapid denigration and to prevent the outflow of foreign capital, various efforts are being

zealously implemented. Robust analysis using conventional bankruptcy predictive tools has shown that existing models are adaptable to local conditions, particularly local legislation (Kliestik et al, 2018; Ljungholm, 2017). Financial hardship is the financial state of an enterprise when an enterprise has serious payment problems that cannot be resolved otherwise than by radically changing its operating or financial activity (Vagner, 2016; Rowlands and Kabongi, 2017). Bankruptcy is a situation where an enterprise is unable to pay its debts and ultimately fails to meet its obligations. Bankruptcy is a condition that ends all business and economic activities, so it is also referred to as economic death (Moharrampour, Esfandiyari and Asgarzadeh, 2014). This study shows how IN05 indexes sample entities to bankrupt and prosperous businesses, and through the ROC analysis we verify the ability to properly redistribute these businesses.

2. LITERATURE REVIEW

In order to ensure the best financial health of an enterprise, we can predict it, i.e. to predict how the funds and the total assets of an enterprise should be treated in the short or long term for their most efficient use. In order to identify the level of financial health of the company, prediction models, also called early warning systems, are used. It assesses the health of the company on the basis of complex characteristics, both in terms of past and current developments, as well as in terms of the future development of the entity. Paul Joseph Fitzpatrick, in 1932, first published a study comparing the development of indicators in solvent and insolvent businesses. He pointed out that the development of selected business indicators - indicators long before the serious economic difficulties that usually result in insolvency - begin to differ in the endangered enterprises. Later, Merwin, Beaver and Altman dealt with this issue. These are considered to be the founders of forecasts and predictions of the financial health of business entities (Valaskova, Kliestik and Kovacova, 2018; Evans, 2018). In a more recent study, the interdependence of sovereign default risk and banking fragility in Russia was investigated, using credit default swaps as a proxy for default risk (Cygler and Sroka, 2017; Biker and Sedliacikova, 2018). Predictive models are constructed around the world by authors from different countries. In Slovakia, Chrastinova and Hurtosova are the most known authors (Kral and Janoskova, 2015; Kliestikova, Misankova and Kliestik, 2017). Also in Slovakia very important author in the area of predictions is Gundova (2014). In the neighboring Czech Republic, there are also several representatives of the area of financial crisis predictions. Absolutely best known are the spouses Inka and Ivan Neumaier or Kislingerova (Durica, Podhorska and Durana, 2019; Vagner, 2017). In the Czech Republic, there is also significant author, doing research and working in the prediction of bankruptcy area, Ruckova (2008).

3. METHODOLOGY

ROC analysis was developed as a standard methodology to quantify the ability of the signal receiver to correctly distinguish objects of interest from the background noise in the system. In the area of financial risk forecasting, ROC analyzes the correct distribution of subjects and compares two categorization algorithms, one of which is considered to be a comparative element. (Fawcett, 2006; Machek, 2014). The base reallocation we used is based on the Commercial Code and evaluates financial health under the following conditions: Equity / Liabilities <0.04; Current assets / short-term liabilities <1; Negative EAT. Business entities that met all three conditions simultaneously were included in the class of non-prosperous subjects and others were designated as prosperous businesses. The sample of entities we have selected consists of 266 businesses in the IT area. Data analysis reported 236 prosperous and 30 non-prosperous companies, and this was considered a standard benchmark in verifying prediction models.

Model index IN05 from Ivan and Inky Neumaier is the last among their indexes and was created as an update of the IN01 index in 2004. The shape of this index is as follows [21]:

$$\text{IN05} = 0,13X1 + 0,04X2 + 3,97X3 + 0,21X4 + 0,09X5 \quad (1)$$

Where:

$X1$ = total assets / external capital, $X2$ = EBIT / interest expense, $X3$ = EBIT / total assets, $X4$ = revenues / total assets, $X5$ = current assets / short-term external resources

The classification of the resulting values: $\text{IN05} > 1,6$ symbolizes a healthy financial situation of the company; $0,9 < \text{IN05} \leq 1,6$ neutral zone of unallocated results and if $\text{IN05} \leq 0,9$ unhealthy financial situation of the company. Since ROC analysis compares two sorting algorithms of subjects into two categories, we have modified the distribution of IN05 index as follows: if $\text{IN05} > 1,25$ symbolizes a healthy financial situation of the company; and if $\text{IN05} \leq 1,25$ unhealthy financial situation of the company. The class of enterprises, which according to IN05 should be labeled as average, has been redistributed exactly in half, which means that we have put its middle value in the scoring interval for businesses in the gray zone, and it has been used as the threshold for determining the prosperity of entities.

4. RESULTS

For the purpose of the paper we calculated the financial standing of each company through the selected model. The results were compared to the definition of the company in crisis according to the Slovak legislation and by the confusion matrix of the prediction model we got the parameters evaluating the predictability of the selected model. These data are presented in the following Table 1.

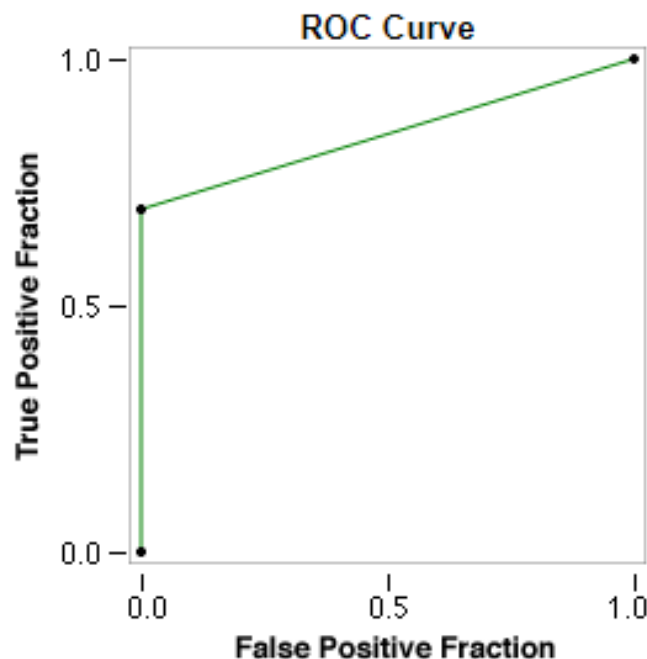
Table 1: Ranking success rate ratings for IN05

Type I error	0,00%
Type II error	30,51%
Sensitivity	69,49%
Specificity	100,00%
Accuracy	72,93%
AUC	84,7%

Source: processed by the authors

In Table 1 we can see that error of II. type, consisting of the false denomination of 72 enterprises for non-prospering, amounts to 30.51%. This is due to the fact that the 72 subjects that were mistakenly identified were in the section of 236 healthy business entities and therefore the number of incorrectly marked enterprises ultimately did not cause such a large percentage of error of second kind. The overall accuracy of the model has been reduced and evaluated to 72.93%, but despite the overall accuracy of the model, the standard element evaluating its classification capability is the AUC area.

Figure following on the next page

Figure 1: Representation of the area under the ROC curve for IN05

Source: processed by the authors

The AUC parameter reaches out 84,7% for the IN05 application, and thus it can be demonstrated that the selected prediction model has a good classification ability if we reflect to the classification rule resulting from the theoretical knowledge obtained from Klepac and Hampel (Klepac and Hampel, 2016).

5. CONCLUSION

In all companies, the importance of enterprise evaluation keeps growing within today's ever changing economic environment. Enterprise evaluation is the basic element for understanding the sources of company competition and, at the same time, it is a source for company strategy implementation support (Vochozka, 2010). Forecasting the financial health of business entities is very important. On the one hand, this is important for the businesses themselves because it makes it possible to recognize the adverse effects on development and also provides opportunities for their removal. On the other hand, it is important for investors, creditors and other entities in contact with the business that they want to know about their future development in order to protect their deposited resources. For this contribution, 266 entities from selected sector were redistributed to bankrupt and prosperous businesses under the terms of the Commercial Code. We then processed financial analysis and enterprise prediction through IN05. We compared the results of the classification of these two algorithmic methodologies and based on that comparison we worked with the first and second type error parameters, sensitivity and specificity. Subsequently, using the results of these variables, we processed the ROC curve analysis, from which the resulting AUC value under the curve, was a clear indication, and according to that, the chosen predictive model was able to clearly predict the financial health of the enterprise in the selected sector Slovakia. Verification analysis showed that the model has a good classification capability in the area, achieving 84.7% success.

ACKNOWLEDGEMENT: *This is paper is an outcome of project VEGA: 1/0544/19 Formation of the methodological platform to measure and assess the effectiveness and financial status of non-profit organizations in the Slovak Republic.*

LITERATURE:

1. Balcerzak P., Klietstik T., Streimikiene D., Smrcka L. (2018). *Non-Parametric Approach to Measuring the Efficiency of Banking Sectors in European Union Countries*, Acta Polytechnica Hungarica. 51-70.
2. Bikar M., Sedliacikova M. (2018). *The change of the trajectory towards growing economy: The evidence from Russia*. Ekonomicko-manazerske spektrum. 26-36.
3. Cygler J., Sroka W. (2017). *Competition Disadvantages: the Case of the High Tech Companies*. In: Inzinerine Ekonomika-Engineering Economics. 494-504.
4. Durica M., Podhorska I., Durana P. (2019). *Business failure prediction using cart-based model: A case of Slovak companies*. Ekonomicko-manazerske spektrum, 51-61.
5. Evans O. (2018). *Improved financial performance without improved operational efficiency: The case of Nigerian firms*. Forum Scientiae Oeconomia, 25-39.
6. Fawcett T. (2006). An introduction to ROC analysis. *Pattern Recognition Letters*. 861-874.
7. Gundova P. (2014). *Verification of the selected prediction methods in Slovak companies*. In: Acta Academica Karviniensia. 26-38.
8. Janoskova K., Krizanova A. (2017). *Comparison of selected internationally recognized brand valuation methods*, Oeconomia Copernicana. 99-110.
9. Klepac V., Hampel D. (2016). Prediction of bankruptcy with SVM classifiers among retail business companies in EU. *Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*. 627-634.
10. Klietstik T., Misankova M., Valaskova K., Svabova L. (2018). *Bankruptcy prevention: new effort to reflect on legal and social changes*, Science and Engineering Ethics. 791-803.
11. Klietstikova J., Misankova M., Klietstik T. (2017). *Bankruptcy in Slovakia: international comparison of the creditor's position*. Oeconomia Copernicana. 221-237.
12. Kral P., Janoskova K. (2015). Condition of acceptability of project risk in management of the project portfolio. In: *15th International Scientific Conference on Globalization and its Socio-Economic Consequences*, Rajecké Teplice. 345-352.
13. Ljungholm D. P. (2017). *The Social Ontology of Institutions: A Reassessment, Contemporary Readings in Law and Social Justice*. 132–138.
14. Machek O. (2014). Long-term predictive ability of bankruptcy models in the Czech Republic: evidence from 2007-2012. In: *Central European Business Review*. 14-17.
15. Moharrampour M., Esfandiyari S., Asgarzadeh A. (2014). Evaluating the Bankruptcy prediction models. In: *Applied mathematics in Engineering, Management and Technology*. 620 – 633.
16. Rowlands D., Kabongi D. K. (2017). *Military Expenditures, Alliance Membership, and Fiscal Restraint, Geopolitics, History, and International Relations*. 55–79
17. Ruckova P. (2008). *Financni analyza – metody, ukazatele, vyuziti v praxi*. 2. edition. Praha: GRADA Publishing, 120.
18. Vagner L. (2016). Controlling as a competitiveness tool in the global market. In: *16th International Scientific Conference on Globalization and its Socio-Economic Consequences*. 2260-2266.
19. Vagner L. (2017). Facility Management as a Partner of Cost Controlling at Costs Optimization in the Selected Enterprise. In: *17th Annual Conference on Finance and Accounting*. 621-629.
20. Valaskova K., Klietstik T., Kovacova M. (2018). *Management of financial risks in Slovak enterprises using regression analysis*. Oeconomia Copernicana, 105–121.
21. Vochozka M. (2010). Development of methods for comprehensive evaluation of business performance. *Politicka ekonomie*. 675-688.
22. Zapletalova S. (2017). *Competitive strategies of the SMEs: Empirical evidence from the Czech Republic*, Forum Scientiae Oeconomia. 9-26.

EARNINGS MANAGEMENT PHENOMENON

Susana Cristina Rodrigues Aldeia

Portucalense University, Portugal

susanaaldeia@sapo.pt

ABSTRACT

The main goal of this paper is to understand better the earnings management phenomenon, in particular, to perceive the process, it means, the concept, motivations and used techniques. For this purpose, it makes the issue's theoretical analysis. The results show that the concept is comprehensive. Several definitions lead to common conclusions, and it seeks to distort the company's accounts truth; it means, a deceptive practice. It happens due to the current accounting system's characteristics, in particular, to the standards' flexibility and discretionary that allows to financial information's preparers the selection between several criteria to record the companies' economic transactions. This arbitrariness leads to manipulations in the financial standards elements as in the incomes, expenses, assets and liabilities.

Keywords: *Earnings Management, Creative Accounting, Financial Information, Financial Fraude*

1. INTRODUCTION

Earnings management continues to be a topic with international relevance, due to the impact of it in the financials' information quality and as a consequence in the economic decisions of the users (Carp and Georgescu, 2019). The literature designates this phenomenon by various names, between them: "earnings management", "income smoothing", "accounting hocus-popus", "the numbers game", "aggressive accounting", "creative accounting", between others¹. The proof of this is the number of studies that continue to be published to study this phenomenon in the most varied aspects (Otomasa et al., 2020, Cai et al., 2020, Choi et al., 2019, Bo and Zhang, 2019, Mangala and Isha, 2019, Levine and Smith, 2019, Seunghan, 2019, Carp and Georgescu, 2019, Beyer et al., 2019). Over time, the public has become familiar with the various international financial scandals, such as Enron, Adelphia Communications, Global Crossing, WorldCom, Parmalat and other more recent cases. These successive cases cause incalculable damage to the credibility of the accounting profession, as well as undermine the confidence that must be present in the financial markets (Vallejo, 2008). In response to these accounting scandals and the 2008 financial scandal, the United States Congress passed the Sarbanes-Oxley Act and the Dodd-Frank Act. Those Acts require companies to introduce policies designed by clawbacks, to prevent this type of practice (Levine and Smith, 2019).

2. THE EARNINGS MANAGEMENT'S FRAMEWORK

2.1. Framework

The literature sees the earnings management phenomenon as a traditionally Anglo-Saxon phenomenon due to the standards' flexibility. Nevertheless, in the last decades, it presents a world dimension. Authors consider that if different accounting professionals prepare the financial statements of the same company, for the same period, each accountant will obtain different results, according to its accounting standards' interpretation (Larraz, 1997). In literature, it is possible to find many definitions of earnings management. They present differences as for its range, but all agree that it shows a distorted picture of company accounts.

¹ <https://eds.a.ebscohost.com/eds/detail/detail?vid=6&sid=995140d1-1b3a-4447-b29f-1235dd93a4e6%40sdc-v-sessmgr03&bdata=JkF1dGhUeXBIPWlwLGNvb2tpZSxzZGllLHVpZCZsYW5nPXBLXB0JnNpdGU9ZWZrZLWxpdmUmc2NvcGU9c2l0ZQ%3d%3d#AN=119214054&db=ers>

The different points of view provide different perceptions about the theme, allowing to conclude it is possible to study this issue in the most different optics. It also is possible to research in the different analysis approaches, such as academic, accounting, economic, financial, legally. The authors that study it agree that it shows a different image of the real, due to different interests. Because of it, it is possible to conclude it is a kind of fraud because it changes reality. It is a phenomenon generalized, it there is in all kind of company and country, and it is prevalent. On the other hand, it constitutes a misleading practice. It tends to induce the users to decisions based on false accounting information, it changes the accounting values, making a makeup that allows obtaining the desired and planned image of the entity's financial position and different of the right and real image. It can be understood as the intention to occult information, in all the times it is not given to users additional information. Some authors use the concept to describe the process whereby the experts use its knowledge about the accounting rules to manipulate the figures reflected in the company's accounts (Salas et al., 1996). The Spanish doctrine uses the term "contabilidad creativa" when talks about earnings management. To the (Dimitris Chorafas, 2007) this expression is inappropriate in a sense gives by Fra Luca Pacioli. The practice of exchanging values in the corporate records to hide losses or any other practice to make up the financial position is corrupt, and it can make to show abysmal results.

2.2. Motivations and techniques

According to Lequericandian (2001), the motivations to commit fraud or irregularities are varied, and it depends on the three factors: who deceives, of the means and techniques used to amend the annual accounts; and, who is deceiving with the accounting changes. The agency theory explains this behaviour, considering there is a set of factors derived from contractual relationships within the company and the economic regulation process. Those factors give motivation to the agent to adopt a certain attitude. There is an extensive empirical literature that highlights the factors that determine the agent's choice between different accounting alternatives. The agent tries to maximize its utility, and this search reflects the accounting criterion selection to apply. Researchers conclude that contracts existing and potential, explicit and implicit, between creditors and company, create incentives for management to change results. Morón (2009) considers the companies' main goals to resort to the earnings management: the desire to improve the corporate image; and on the other hand, the interest into evidence the company accounts' stability over the time, or instead, the show a financial position degraded image. Since the late seventies that the research relates to the motivations to realize practices, discretionary focuses primarily on the incentives created by management compensation contracts, debt contracts and the economic regulation's process. Nevertheless, recent literature invokes other motivations to this phenomenon, between them: negotiations with unions, to influence the shareholders' perceptions relative to the company's management, the necessity to obtains external financing, and the costs of preparing financial information. In the management compensation contracts, the determination of the managers' salary dependent on an incentive plan that increases when increase the results presented. Because of this, it is most probable that the administration with incentive plans chose accounting criteria that include in the published profit the future periods' benefits. The positive accounting theory defends the companies that have a direction to make economic decisions, have schemes of the retribution sustained in the disclosed result and, because of this direction use accounting methods which give rise to more significant benefit or anticipation thereof of the same. They need to establish a mechanism to motivate the acting who manages and not ignore the companies' interests (Blasco, 2002). Nevertheless, there are other forms of executive retribution, such as stock options, and that it increased, significantly, in the ninety decades. Those incentives generate plus stimulus to companies administrations to turn over more value to the stakeholders; consequently, it increases the accounting manipulation risk (Vallejo, 2008).

Another motivation to manipulate the financial statements is related to the use of the debt contracts, as an object to limit wealth transfers from the bondholders to shareholders. How more significant is the ratio of the companies' net debt, there is more probability that the administration select the accounting procedures that allows to input incomes of the future periods to the actual one (Blasco, 2002). Another motivation to manipulate the financial statements is related to the use of the debt contracts, as an object to limit wealth transfers from the bondholders to shareholders. How more significant is the ratio of the companies' net debt, there is more probability that the administration select the accounting procedures that allows to input incomes of the future periods to the actual one (Blasco, 2002). The debt contracts based on accounting often restrict the possibility of the company to pay dividends or to emit additional debt. The pacts that restrict the company to emit additional debt, frequently, require the sustainability of the minimum ratio of the asset or maximum debt. Thus, the actions on the accounting that increase the profit will increase/decrease those ratios, respectively. The debit contracts impose restrictions on investment decisions, financing, and dividends because they limit the agent's capacity to make decisions that can to increase the possibilities of the insolvency of the company (Lequericaonandia, 2001). Relatively to the cost derived from the politic process or the economic regulation, the research in this area assumes that the biggest companies are politically more sensitive than the smaller ones; and that they support the highest wealth transfers than the smaller companies (Blasco, 2002). On the economic regulation process, the governmental organisms regulate the economic activity of a lot of companies and activity sectors, transferring or pulling out resources, by setting tariffs, monitoring monopolistic conduct. Regulated companies are interested in presenting lower results, with the goal of to can obtain higher transfers of wealth in its favour, fewer taxes, higher subventions, and others (Lequericaonandia, 2001). The selection between the different accounting standards can be conditioned by the costs to obtain and prepare the information, in particular, the case the appliance of criteria with higher application costs. To Lequericaonandia (2001), this phenomenon occurs due to two reasons. First, there is a strong asymmetry of information between the company's internal and external; it makes difficult the detection, from abroad, the manipulation practices. Second, the accounting legal framework favours the appearance of those practices when it gives different possibilities to record the economic operations, and the financial information preparer will choose the one that best satisfies each moment its interests. The existence of accounting principles that allow the introduction of subjective criteria propitiates financial information manipulation. The discussion about earnings management has a particular focus on the impact that may have overstock investor decisions. Those procedures make relevant changes in the financial statements, may mislead decision-making. According to Salas et al. (1997), the most used techniques to make up financial data are the increase or decrease of the income and expenses, the variation on the assets and liabilities, and finally the reclassification of these accounting items. Those changes promote several financial consequences: a) variation on financial statements, it means the higher/lower profit or financial position; b) the manipulation of the financial information additional, the auditing report and management report, with the consequences of the changing of the financial ratios, between them liquidity, indebtedness, financial independence or profitability; c) and finally, as the consequence of the last the company's value variation (Salas et al., 1997). Salas et al. (1996) consider technics can adopt different forms: 1) the choice between different accounting methods; 2) some accounting movements implies a relevant estimations content; 3) it can be recorded artificial transactions to manipulate the financial position's values and to occult, the benefits between accounting periods and allowing the obtaining the desired corporate image; 4) in some cases, it can occur the change of accounting criteria from one period to the next.

2.3. Some solutions

A long time ago that the financial world questions the veracity and impartiality of the financial statements, and because of this regulatory authorities discuss alternatives in order to avoid the earnings management phenomenon (Naser, 1993). Madueño and Sánchez (2000) consider that the economic reality is unique, and the information's user does not change the reality's representation, the fact that accounting regulation allows multiple alternative criteria represents an imperfect state of legislation. Therefore, the same authors demand a precise definition of concepts and a consistent attitude of the legislator in the face of this uncertainty (Madueño and Sánchez, 2000). Morón (2009) defends that the conceptual framework should avoid such situations. Regulators of accounting standards and the accounting profession itself can combat earnings management effectively. Therefore Salas and Sobrevias (2004) and Blasco (2002) present mechanisms that they consider pertinent to combat this phenomenon.

Table 1: Mechanism to combat earnings management

1	When selecting accounting criteria, regulation should reduce the number of options, the accounting flexibility leave margin to directors to manipulate the business' accounts;
2	The good governance' codes must reinforce the auditing committee's role to watch over of truth of financial statements and avoid the manipulation attempt;
3	Auditors must adopt a clear and firm posture when there are signs of creativity. This attitude increases credibility of the financial statements and reduce the possibility to change the record information in the accounting;
4	The governance structure and the entity's internal control system have an important role to avoid a discretionary accounting actuation;
5	Publicize situations of abuse by entities, companies represented in the capital markets will consider the effects in its public image, and because of it will not be incentives to make aggressive accounting operations;
6	As consequence of the unreal transactions, the accounting regulation should favor the interpretation of the faithful image as substance in the form;
7	Regulatory bodies should not allow certain specific treatment by some companies outside the accounting standard;
8	Listed companies should be required to present their accounts corrected for auditors' non-conformities, as is the case in many countries;
9	Strengthening the ethics' codes of company directors and of accounting professionals, so as not to accept earnings management in the accounts.

Source: Salas and Sobrevias (2004) and Blasco (2002)

3. CONCLUSION

This research seeks to understand better the earnings management process, in particular, to know the concept, motivations and used technics. This phenomenon is characterized as present a distorted picture of the company's financial situation, taking into account the different interests of the managers. As it changes the accounts' reality and can induce the financial information users wrongly, it is a fraud at the financial dimension. There are several reasons to directors decide to manipulate financial statements, between them, the desire of the improvement the corporate image showing stability over time, incentives created by the administration compensation contract, negotiations with unions, to give a misleading perception to shareholders in order to influence its economic decisions, to limit the wealth's transfer to holders of debt contracts.

The mechanism used to manipulate the financial information boils down to, essentially, the increase or the decrease of incomes/expenses and assets/liabilities. The accounting regulation flexibility allows the financial accounts' preparers to choose between available accounting criteria, according to its interest.

LITERATURE:

1. BEYER, A., GUTTMAN, I. & MARINOVIC, I. 2019. Earnings Management and Earnings Quality: Theory and Evidence. *Accounting Review*, 94, 77-77-101.
2. BLASCO, M. A. V. 2002. Reflexiones en torno a la contabilidad creativa *Técnica contable*.
3. BO, L. & ZHANG, D. 2019. A Temporal Analysis of Expectation Management: Evidence from Public Management Earnings Forecasts. *Journal of Accounting & Finance* (2158-3625), 19, 102-102-124.
4. CAI, G., LI, W. & TANG, Z. 2020. Religion and the Method of Earnings Management: Evidence from China. *Journal of Business Ethics*, 161, 71-71-90.
5. CARP, M. & GEORGESCU, I. E. 2019. The Influence of Audit Opinion on the Degree of Real Earnings Management. The Case of Romanian Listed Companies. *Audit Financiar*, 17, 666-666-679.
6. CHOI, J. H., CHOI, S., MYERS, L. A. & ZIEBART, D. 2019. Financial Statement Comparability and the Informativeness of Stock Prices About Future Earnings. *Contemporary Accounting Research*, 36, 389-389-417.
7. DIMITRIS CHORAFAS 2007. La ética de los negocios le agrega valor a las revelaciones financieras IFRS, valor razonable y gobierno corporativo ECOE Ediciones.
8. LARRAZ, J. L. G. 1997. La falsedad contable en el código penal *Estudios de contabilidad y auditoría: En homenaje a Don Carlos Cubillo Valverde*.
9. LEQUERICAONANDIA, M. B. V. 2001. *Alteraciones y manipulaciones de la contabilidad*. Universidad de Valladolid. Facultad de Ciencias Económicas y Empresariales.
10. LEVINE, C. B. & SMITH, M. J., 2019. Clawbacks and Earnings Management. *Journal of Management Accounting Research*, 31, 129-129-151.
11. MADUEÑO, M. C. & SÁNCHEZ, H. M. 2000. Algunas reflexiones sobre la contabilidad creativa *Técnica contable*.
12. MANGALA, D. & ISHA 2019. Do Corporate Governance Characteristics Constrain Earnings Management? - The Role of Board, Audit Committee and Ownership Structure in Indian Corporate Sector. *IUP Journal of Accounting Research & Audit Practices*, 18, 7-7-32.
13. MORÓN, M. T. H. 2009. ¿Puede el marco conceptual contener el avance de la Contabilidad Creativa? *Técnica económica: administración y dirección de empresas*, 177, 22-32.
14. NASER, K. 1993. *Creative Financial Accounting: Its Nature and Use*, Londres, Prentice Hall
15. OTOMASA, S., SHIIBA, A. & SHUTO, A., 2020. Management Earnings Forecasts as a Performance Target in Executive Compensation Contracts. *Journal of Accounting, Auditing & Finance*, 35, 139-139-167.
16. SALAS, J. O. A., BLAKE, J. & GUTIÉRREZ, S. M. 1996. La contabilidad creativa en España y en el Reino Unido: un estudio comparativo VII *Encuentro de profesores universitarios de contabilidad : Barcelona, 5 a 8 de junio de 1996 / coord. por Departament de Comptabilitat, Vol. 1, 1996 (Ponencia y comunicaciones sobre contabilidad financiera)*. Barcelona.
17. SALAS, J. O. A., GUTIÉRREZ, S. M. & BLAKE, J. 1997. La Contabilidad Creativa *Partida doble*.

18. SALAS, J. O. A. & SOBREVIAS, E. O. 2004. Propuestas para combatir la contabilidad creativa. *Universia Business Review*.
19. SEUNGHAN, N. 2019. The Role of Accruals in the Prediction of Future Earnings. *Journal of Accounting & Finance* (2158-3625), 19, 164-164-188.
20. VALLEJO, G. J. R. 2008. Las normas internacionales de contabilidad y la contabilidad creativa. *Cuadernos de contabilidad*, 9, No 24, 251-301

FORMULATION OF MOTIVATION POLICY IN A GENERAL EDUCATION ORGANIZATION APPLYING PERSONNEL MARKETING TECHNOLOGIES

Elena V. Kolnik

*Novosibirsk State University of Economics and Management, NSUEM
Novosibirsk, Russia
KOLNIK_75@mail.ru*

Yuliya A. Masalova

*Novosibirsk State University of Economics and Management, NSUEM
Novosibirsk, Russia
y.a.masalova@edu.nsuem.ru*

ABSTRACT

Under present conditions, a well-built motivation policy of the organization becomes an important element of the personnel management system. The article describes the main stages of motivation policy formulation in the education institution using marketing technologies. Based on their priority interests, the segmentation of teaching staff was carried out. The motivation profile of teachers was build, and the degree of involvement and satisfaction was assessed. The level of general education teachers' motivation is identified. It is concluded that personnel marketing technologies help improve the motivation policy that contributes to the retention of qualified personnel and increase of their efficiency.

Keywords: *motivation policy, personnel marketing, job satisfaction, employee engagement, motivation*

1. INTRODUCTION

The system of market relations ensures that all services, including educational, must be provided to consumers taking into account their quality requirements. Considering the client's wishes becomes a key element of the marketing approach in management. Personnel management in educational organizations is no exception. In this kind of organizations an entrepreneurial marketing approach prevails in working with teaching staff, when working conditions, work itself, and jobs are regarded as products sold on the market. However, it is necessary to consider specific features of the educational institution that distinguish it from a commercial organization, and fundamentally affect the motivational work with the teaching staff. In our opinion, personnel marketing technologies based on market thinking in the formulation of motivation policy of a general education institution meets the requirements of the time, and will significantly increase its effectiveness.

2. THE ESSENCE OF MOTIVATION POLICY

Conducting scientific research primarily involves studying and understanding the theoretical and methodological foundations of the object of this research. In this regard, we considered the views of various scientists on work motivation, analyzed the concept of "policy", which has a very wide meaning and encompasses all the activities, a comparison of the definitions of HR policy, as, in the opinion of some researchers, the motivation policy is part of personnel policy. We studied different interpretations of the concept of motivation policy, which gave us the opportunity to formulate our own definition of motivation policy. Motivation policy on the one hand, is an objective activity of coordinating the interests of all parties of the motivation process, on the other, it is a purposeful process of formation and management of labour motivation, including a system of principles, norms and rules that define the main directions,

forms and methods of work, documented as to set the goals, objectives and action programme to increase the labour motivation of staff. Foreign research in the field of personnel marketing was conducted by G. Armstrong, I. Ansoff, P. Ahmed, L. Berry, B. M. Berman, S. L. Brue, C. Grönroos, G. Grunwald, Ph. Kotler, K. Crosier, I. Kruger, R. Marr, M. Mall, J. Newstrom, A. Parasuraman, M. Rafiq, H. Simon, J. Hentze, G. Schmidt, J. Evans, L. Iacocca. In these works, approaches to the organization of in-house marketing as a philosophy of particular employee's treatment were considered. In its turn, the application of personnel marketing in the process of formation and implementation of motivation policies not only contributes to long-term retention of qualified personnel, creation of more favourable working conditions for each employee, influencing the improvement of work efficiency, development of partnership relations to the organization [1, p. 115-118], and also contributes to the development of sustainable employee engagement as one of the effects of marketing activities [10]. The formulation of a motivation policy takes place in several stages.

3. STAGES OF FORMULATION OF MOTIVATION POLICY

3.1. Stage one

The first stage includes an assessment of the real situation with regard to teaching staff motivation. Taking into account the fact that the most important element of personnel marketing is its research and analytical capacity. Marketing research at the initial stage of forming the motivation policy will help to obtain complete information about the state of teaching staff job motivation, as well as information required for further adjustment of the motivation policy.

3.1.1. Market segmentation

One of the tools of marketing research is market segmentation, a method of developing a target market, in our case, segmentation of internal customers (employees already employed by the organization), by behavioural criteria, in order to identify motivational attitudes. It should be noted that the teaching staff of an educational institution is objectively divided into certain groups, each of which has its own range of interests, goals, and in addition, professional needs and, accordingly, its own motivation. At present, when the requirements for the professional level of the teacher have been increased, the range of professional duties is expanded, which go beyond only a good knowledge of their subject and the ability to convey this knowledge to students. To identify the content of the professional activity of general education teachers we studied effective contracts and Federal Higher Education Standards of Higher Education 44.03.01, and in addition to the main pedagogical activity, we singled out the areas of extra work: design, research, and cultural and educational [11]. Applying the typology of teaching staff depending on the priority interests in the work [4], and adjusting it to general education institutions, as a result of the survey, we identified four main groups of teaching staff: oriented only to the main types of pedagogical activity, such as education and training; oriented, in addition to pedagogical, to design and research activities; oriented to pedagogical and cultural and educational activities; having a balanced orientation to all types of activities (figure 1). In practice, combining all types of professional activities is definitely possible, but such teachers with an equilibrium orientation in general education institutions are extremely rare. In case of effective contracts, we suggest developing criteria for evaluating the quality of the work performed, taking into account the teacher's belonging to a certain group. And in the future, motivation work aimed at increasing the level of teacher's professional motivation, providing a balanced orientation to all types of professional activities should be planned.

Figure following on the next page

project and research activities	-	GROUP 2 Average level of professional motivation	GROUP 4 High level of professional motivation
	-	GROUP 1 Low level of professional motivation	GROUP 3 Average level of professional motivation
		-	+

cultural and educational activities

Figure 1: Typology of teaching staff in general education institutions depending on priority interests in the work

3.1.2. Motivation research

To identify the level of satisfaction, work involvement and the level of motivation and to identify motivation profile of the teacher, a study was conducted through interviewing teachers of two Novosibirsk secondary schools and online survey using Google forms software, in the period from February 2016 to March 2019, the survey was anonymous employing random sampling. The survey involved 231 teachers of schools, lyceums and gymnasiums in the Novosibirsk region, representing both urban and rural educational institutions, which made up 85% confidence level of the sample. To build the motivation profile of the teacher S. Ritchie and P. Martin test was used [8, p. 14]. The test is built around the comparison of the significance of 12 motivation factors, based on the needs that can be satisfied at work. It allowed to determine the individual combination of the most and least relevant (significant) for a particular person. In different people, these factors exist at different levels. The average value of the quantitative assessment of the importance of general education teachers needs in the Novosibirsk region is shown in figure 2.

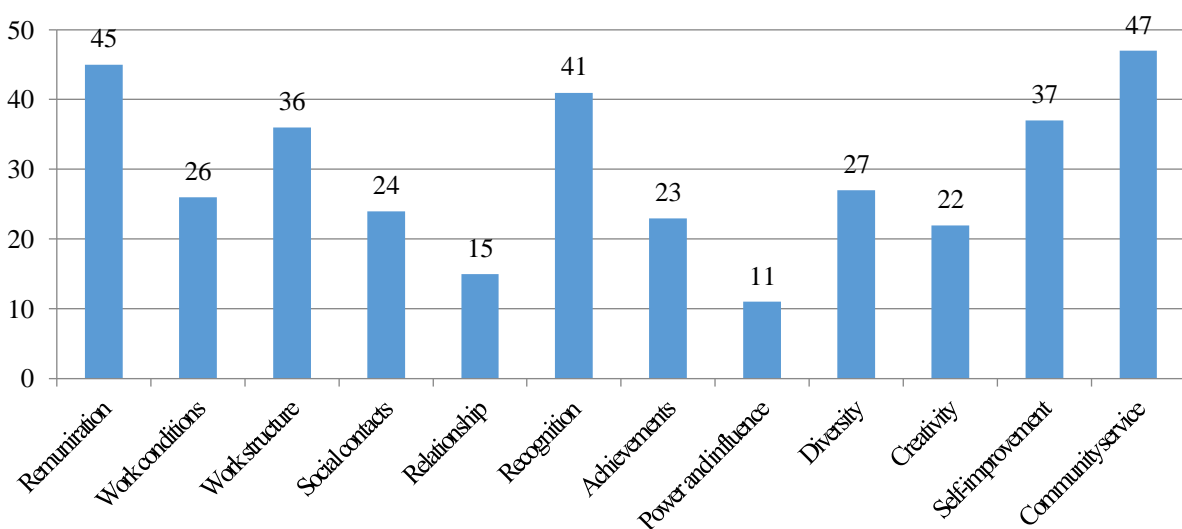


Figure 2: Motivation profile of general education teachers in the Novosibirsk region, %

Thus, teachers are predominately motivated by the factors of demand for interesting community service, high salary with a good set of perks and benefits, and recognition of merits, successes and achievements. Influence, power, leadership, and long-term stable relationships are the least significant factors of incentives. The important information that is to be obtained when formulating a motivation policy is the degree of employees satisfaction with their work, since satisfaction is what retains an employee, both in the organization [9, p. 10], and in the profession in general. The level of teacher's satisfaction was identified through the method of components of job satisfaction, using the working model of the structure of job satisfaction, Ivanova T. Yu [2, p. 2-15], and taking into account the peculiarities of pedagogical work in general education institutions. The questionnaire of job satisfaction components, containing 18 questions, allows to assess the degree of job satisfaction with regard to 6 components: satisfaction with the teaching profession, salary, working conditions and organization, team, management, work content and achievements. When analyzing the answers of respondents it may be noted that most pedagogical workers are dissatisfied with a relatively low prestige of the profession, size of reward, level of workload at work and a reward system, thus this factors can be defined as major issues. At the same time, the information about staff satisfaction is not sufficient for a complete analysis of the existing motivation policy of a general education organization. Since satisfaction shows only the strength of the staff attachment to the organization, while engagement is the desire to make personal efforts, to make a contribution as a member of the organization to achieve its goals [9, p. 11]. It should be emphasized that the degree to which employee's values (satisfaction structure) coincide with the organization's values is a measure of their involvement. According to L. I. Sokolova, a high level of involvement is characterized by the person's unconditional motivation to fully devote themselves to work or actions in the interests of the organization. To obtain the information on the prevailing level of pedagogical staff involvement, the method of sociological survey was used, applying L. Sokolova's involvement assessment method. The questionnaire developed by the author is basic and can be adjusted to certain conditions and groups of employees of a particular organization. Having previously corrected the questions proposed by the author, revised and supplemented them in accordance with the object of the study, taking into account the specific features of the general education organization, a questionnaire for teachers of general education organizations, containing twenty-five questions, was compiled. One part of the questions is aimed at calculating the indicator of staff general satisfaction, the other aimed at their involvement. The obtained data were processed using the method of statistical processing of the results of observations [9, p. 51]. A study conducted in March 2019 revealed a specific correlation between the ratio of satisfaction and engagement indicators. Thus, the data obtained indicate that the average teacher engagement rate of 74% is higher than the average teacher satisfaction rate of 72%. It is necessary to note the fact, stated in numerous studies, that most teachers work for the love of their work. Summing up the aforesaid, it can be argued that the teacher's awareness of the meaning and public utility of their activities, commitment to the teaching profession has a great influence on their involvement. Based on the data obtained, it is possible to conduct a quantitative and qualitative analysis (the result of which showed the zone of involvement (60-79%) – the zone of development [3]) and determine the guidelines for further work. Further, taking into account the fact that motivation is one of the tools for managing satisfaction and engagement, we will track the achieved level of motivation of general education teachers using the methodological tools for analyzing job motivation of L. G. Milyaeva [7, pp. 443-449]. We will estimate the individual levels in the context of the analyzed work motives using the formula:

$$L_I^{JM} = \frac{R_i^{perception}}{R_{ref}^{expectation}} = \frac{P_i^{perception}}{5,00}. \quad (1)$$

where L_i^{JM} is a level of labour motivation;

$R_i^{perception}$ - data on perception ratings;

$R_i^{expectation}$ - data on expectation ratings.

Analysis of the survey results revealed that the achieved level of job motivation of teachers is equal to 0.75 and is acceptable. Given that motivation is one of the important components of pedagogical activity, the acceptable level of labour motivation, which is below the average value, indicates certain motivation issues in general education. As a result of the study, it was concluded that the lowest levels of job motivation were revealed by the following parameters: decent financial reward meeting the basic needs of the teacher and their family members (0,63); fair level of financial reward corresponding to the teacher individual performance (0,62); the ability to obtain higher financial reward depending on the results of work (0,60); bonuses for teachers performance (0,66). This suggests that the decrease in the overall level of job motivation of teachers is influenced by labour motives related to teachers' remuneration issues. Thus, identifying and considering the individual characteristics of teachers, their professional preferences, level of satisfaction, involvement and motivation, when building motivational work, will affect the success of motivation policy in general.

3.2. Stage two

At the second stage of motivation policy formulation, the key directions, goals and tasks of motivational work are determined. First of all, taking into account the results of the study of motivation, teachers job satisfaction and marketing research of the team, we determine the goal of motivation policy, since the goal reveals its main directions. At this stage, the content of internal marketing is determined, which is designed to build the loyalty of internal customers, and which will help determine whom we are going to retain, what to expect from the personnel involvement and satisfaction. Let's assume that the goal is to retain highly qualified talented employees, therefore, a retention policy will be outlined, or the goal is to attract young professionals, employing a recruitment policy, or the goal is to increase the labour activity of older employees. In each case, different approaches, tools and methods of motivational influence will be applied. At the same time, it should be noted that different types of motivation policy can be applied together, since there may be several subgoals. In addition, each educational institution has its own priorities. An educational institution may specialise in the development of children's creativity (school drama studio, drawing, dancing classes, school newspaper, TV, etc.), another may specialise in scientific activities for both students and teachers (publication of articles, teaching materials and manuals, active participation in scientific conferences, development of innovative educational programmes, etc.), in the third, special attention is paid to physical development (different sports activities, school sport competitions, participation in city, regional competitions, etc.), etc. But in any case, the main purpose of motivation policy of the educational institution is to increase the level of teachers professional motivation. Thus, to achieve the fulfillment of both the main and additional goals of the motivation policy it is necessary to check for their compliance with the goals, needs and expectations of employees, considering the results of marketing research.

3.3. Stage three

Then, at the third stage of motivation policy formation, the main principles of motivation policy are determined. To achieve the greatest effect, we suggest sticking to the following principles:

- the principle of compliance implies the correlation of goals and objectives of the motivation policy with the organization strategic goals;

- the principle of targeting reveals the need for an individual approach that takes into account the personal characteristics of employees, their professional needs and preferences;
- the principle of flexibility and dynamism involves adjusting the motivation policy to the situation both outside and inside the organization, reacting and adapting to the changes;
- the principle of consistency shows the need for motivation management at all functional levels of the management system;
- the principle of openness is the availability of information about the organization's motivation policy;
- the principle of transparency implies the presence of feedback provided by the operational interaction of management with employees.

It should be emphasized that the use of marketing tools provides customer orientation, which means that an organization defines each employee as a customer. This allows an organization to take into account the individual needs of each employee, balancing them with the needs of the organization itself. In this case, the principle of targeting is applied. With orientation to the "internal consumer" – the staff – an organization not only increases the professional motivation of the teacher, but also can use it as a tool for managing the quality of professional activity.

3.4. Stage four

The fourth stage involves the development of plans and measures to increase the job motivation level. At this stage, the concept of partnership marketing is used, focused on building long-term customer loyalty (i.e. a benevolent attitude to the employer organization, maintaining long-term employment) [5, pp. 76-82], based on close interaction, while obtaining mutual benefits. This approach represents an employment relationship from the point of view of mutual satisfaction of the expectations of employees and the employer, where both parties participate in activities that include a constant desire to benefit each other. In other words, the programme of motivation policy is aimed at mutual beneficial satisfaction of the needs of all participants of the motivation process, using an individual approach in order to increase the strengths depending on the preferences of each. It should be noted that the teaching staff have a high level of loyalty, but this does not mean that the teacher will be involved. However, when the goals of an educational institution coincide with the goals of an employee, the teacher develops a sustainable involvement, expressed in a certain interest and attitude to the implementation of the goals of education as a whole. In this regard, it is necessary to study the values, needs, expectations and motivations of the teaching staff, because for each individual employee, even within the same profession, there is an individual set of motivating factors, with their own priorities and power. To identify the balance between the needs of an educational organization and professional needs of the teaching staff, namely, to determine the degree of consideration of individual needs of teachers in accruals of incentive payments, it is necessary to calculate a special rate of implementation of the motivational function of wages – the professional needs satisfaction quotient (S.Q.) according to the formula:

$$S.Q. = P_N / (T - T_{incompl.}), \quad (2)$$

where S.Q. is a professional needs satisfaction quotient;

P_N stands for the number of professional needs (in our case, defined by S. Ritchie and P. Martin [8, p. 14]);

T is the number of tasks specified in a contract, the performance of which contributes to the satisfaction of professional needs;

$T_{incompl.}$ is the number of tasks that are not performed by teachers for any reason.

In the course of processing the results of the survey and performing calculations, the professional needs satisfaction quotient of general education organizations teachers who participated in the study was calculated, which equals 2, this indicator corresponds to the average level. It should be emphasized that 25% of respondents have a satisfaction quotient of 6, which is the lowest level. Note that the high level corresponds to a quotient of one, and the low level (in this study) is equal to six.

3.5. Stage five

So, the development of the motivation policy of the educational institution is followed by the fifth stage of approval. We emphasize that one of the technological errors of the management process is that in most cases a motivation policy has been developed, but not been communicated to the staff. Meanwhile, interaction between the management of the educational institution and the personnel should promote mutual understanding and perception of the importance and significance of the work [6, pp. 44-52]. Establishing internal communications as a marketing tool will allow to identify the opinion of the teaching staff and, finally, to adjust the developed motivation policy with subsequent control of its implementation.

3.6. Stage six

Finally, at the sixth stage, employees are familiarized with the document that defines the motivation policy of the institution. However, this should not be a one-time event, but a systematic 'advertising' of the educational organization's motivation policy. In this case a marketing tool called 'Internet marketing' is implemented, when 'Motivation policy' is published on the organization's website; motivation policy branding (positioning), involves the creation, development and maintaining constant communication with internal customers (personnel), using high-quality motivational work and the level of satisfaction and involvement of teachers, enhancing professional motivation.

4. CONCLUSION

Against the background of educational reforms aimed at solving the strategic task of ensuring the quality of education at all levels of the educational system, it is possible to achieve high efficiency of an educational institution through the purposeful development of a motivation policy. Thus, the result of the use of methodical recommendations on development of secondary general education organization motivation policy using marketing technologies, will increase the involvement and commitment of a teacher, increase the productivity of the working process in general, and as a result improve the quality of professional activity.

LITERATURE:

1. Boldyreva I. V. (2012). Evolution of ideas about staff marketing. [Evolyuciya predstavlenij o marketinge personala.] *Vestnik VGU. Seriya: Ekonomika i upravlenie. (Bulletin of VSU. Series: Economics and management.)*, 2012 (No. 2.), pp. 115-118.
2. Ivanova T. Yu. (2012) Structure and diagnostics of job satisfaction: development and testing of the methodology. [Struktura i diagnostika udovletvorennosti trudom: razrabotka i aprobatsiya metodiki.] *Organizatsionnaya psikhologiya (Organizational psychology)*, 2012 (Vol. 2. No. 3.), pp. 2-15.
3. Kirillov, L. Personnel involvement as a success factor in crisis [Vovlechenost' personala kak faktor uspekha kompanii v usloviyakh krizisa] *Corporate management Internet project*. Retrived 16.05.2019 from https://www.cfin.ru/anticrisis/methodical_material/consultants/employee_engagement.shtml

4. Masalova Yu. A. (2006). Formation of motivation of the teaching staff of the University, focused on the quality of the educational process Dokt. Diss. [Formirovanie motivatsii professorsko-prepodavatel'skogo sostava vuza, orientirovannoi na kachestvo obrazovatel'nogo protsessa Doc. Diss.]. *Irkutsk*, 2006
5. Masalova Yu. A. (2016). Research on the involvement of the University's faculty. [Issledovanie vovlechnosti professorsko-prepodavatel'skogo sostava universiteta.] *University management: practice and analysis (Universitetskoe upravlenie: praktika i analiz)*, 2016 (No. 1 (101)), pp. 76-82.
6. Masalova Yu. A. (2017) Research of qualitative characteristics of the teaching staff of Russian universities [Issledovanie kachestvennykh kharakteristik professorsko-prepodavatel'skogo sostava rossiiskikh vuzov]. *University management: practice and analysis (Universitetskoe upravlenie: praktika i analiz)*, 2017 (No. 2 (108)), pp. 44-52.
7. Milyaeva L. G. (2016) New aspects of the study of labour motivation of the organization's personnel [Novye aspekty issledovaniya trudovoi motivatsii personala organizatsii]. *Modern research and development (Sovremennye nauchnye issledovaniya i razrabotki)*, 2016 (No. 7), pp. 443-449.
8. Richie S. (1999) Motivation Management. Gower Publishing Ltd. (Russ. ed.: Richie S. (2004) Upravlenie motivatsiei: Ucheb. posobie dlya vuzov. Seriya «Zarubezhnyi uchebnik». *Moscow: UNITY-DANA*
9. Sokolova L. I. (2009) Formation of a subsystem for measuring and analyzing staff satisfaction and involvement in the processes of the quality management system of an educational organization [Formirovanie podsistemy izmereniya i analiza udovletvorennosti i vovlechnosti personala v protsessy sistemy menedzhmenta kachestva obrazovatel'noi organizatsii] *Tambov, Tamb. state tech. university publishing house*.
10. Vanyan M. N. (2012) Formation and development of long-term mutually beneficial relationships with employees in corporate systems of personnel marketing Dokt. Diss. [Formirovanie i razvitie dolgosrochnykh vzaimovыgodnykh otnoshenii s rabotnikami v korporativnykh sistemakh marketinga personala] *Krasnodar*
11. *Website of Federal state educational standards of higher education*. Retrieved 12.04.2019 from <http://fgosvo.ru/fgosvo/92/91/4/94>

THE PARTNER LOANS' MULTIDISCIPLINARY ANALYSIS - PORTUGUESE'S CASE STUDY

Susana Cristina Rodrigues Aldeia

Portugalense University, Portugal

susanaaldeia@sapo.pt

ABSTRACT

This paper seeks to understand the framework of the loans from partners to the company in a multidisciplinary overview. In particular, it studies the accounting and taxation treatment of the loans from members to societies. For this purpose, it researches several data sources of Portugal: Portuguese Accounting Standards (Sistema de Normalização Contabilística - SNC), Value Added Tax (Imposto sobre o Valor Acrescentado - IVA), Corporate Income Tax (Imposto sobre o Rendimento das Pessoas Coletivas - IRC). The results show that, in the accounting domain, loans from business owners to entity meet the requirements to be considered financial liabilities. The financial position's statement presents it in the second element. Under the lending contract, the lender can receive interest or not. In the case of income receipt, it is subject to taxation in the beneficiary's sphere, and it constitutes a financial expense the borrower's realm. This operation is VAT exempt, according to article 9°. In the CIT, the interests are tax expense under some circumstances predicted in the tax law. The paper presents some limitations because it is restricted to Portugal jurisdiction; it could be interesting to analyse it in other countries.

Keywords: *Partner Loans, VAT, Corporate Income Tax, Accounting*

1. INTRODUCTION

According to Canas (2011), the "suprimento" is a mechanism that allows exceeding the lack of capital and the economic insufficiency of the companies, replacing capital entries (Pereira, 2018). This figure appears with the approval of Decree-Law no. 262/86 of 2 September, therefore, this is not a new mechanism and tends to have more relevance in times of financial difficulties. The Portuguese lawmaker, recently, introduces an essential option for commercial entities using this type of contracts. The Decree-law 79/2017, of 30 June allows Portuguese companies to increase the entities' social capital using this figure, in moments of financial distress to companies it can represent a good option for both sides. On the one hand, for the business that has to challenge to obtain the traditional credit; thus, it can be a solution for treasury problems. On the other hand, for a partner, it can be an opportunity to obtain financial income, the interest, if it is stipulated.

2. THE PARTNER LOANS' ON PORTUGUESE JURISDICTION

2.1. In Commercial Law

The Portuguese Commercial Law predicts the possibility of the business partners to loan money to the company. This prediction is present in article 243 until 245 of the Commercial Companies Code – Código das Sociedades Comerciais (CSC). In article 243, the Portuguese legislator calls this juridical figure as "Contrato de Suprimento" and defines as the contract that allows to partners lend money or other fungible things to the entity. The company have the requirement to return the same quantity of the same kind and quality. Pereira (2018) evidences the second modality as the one by which the partner agrees with the company the deferral of its credits on it. Cordeiro (2007) considers that this contract has the characteristics of the loan contract, according to article 1142 of Civil Law, although the differences in the contract's form.

According to typicality principle, the societies that have as the primary goal the trade acts must adopt one of the company's kinds foreseen in the Commercial Law¹, depending on the kind of partners liabilities responsibility (Carvalho and Moreira, 2013). The private and public limited companies are the most popular kind of commercial entities in Portugal. Concerning the private limited entities, the law predicts the partner's loans contract in Title III of Chapter IV of the Commercial Law. Nevertheless, the legal framework of public limited companies does not foresee those kinds of agreement between companies and partners, so, Portuguese doctrine discusses its admission (Abreu, 2003, Pinto, 2016, Ventura, 1989, Furtado, 2001, Domingues, 1998, Pereira, 2001, Meira, 2005). Legal dispositions predict two instruments to obligate the partners to make borrowing, and they are the social contract and members' deliberation. According to article 244.1, society's contract can obligate the partner to make the advance of the money² (Pita, 2018). This legal disposition remits to the article 209.1, due to this remission, legislator equates supplementary instalments to loans of partners; additionally, the social pact can impose that obligation for all or some associates. In the case of members' decision, the resolution binds the shareholder that signs the deliberation's minutes, according to the article 244.2 of the same law; it means that only the associates that voted the decision have the requirement to make loans for the company (Ramos, 2018, Meira, 2005). Thus, according to CSC's article 244.3, this situation can result directly, of the agreement between the society and the business associate, not depending on the members' deliberation.

Table 2: Legal obligation to lend to society by shareholders

Obligation to lend to society by shareholders		
Society's contract	Members' deliberation	Agreement between shareholders without deliberation
Article 209.1, 244.1, 287.1 of the CSC	Article 244.2 of the CSC	Article 244.3 of the CSC

Source: Author

The partner that celebrates a contract of this nature with the company became entity's creditor on the amount borrowed and, eventually, over the correspondent interest. The law does not prohibit the payment of interest to the lenders due to the loan; nevertheless, in the absence of a compensation agreement, Abreu (2015) considers that no interest is due. According to the Pereira (2018), this mechanism presents two essential characteristics that define it, and they are the quality of parties involved and the permanence character. In the first, it is necessary two crucial pieces that they are not substitutable, the company and the company's owners (Pereira, 2018). On the other hand, legislator decides to impose to this legal figure consistency and stability in order to assure the entity' interest and the general creditors that are not owners, Thus, the lawmaker determined a temporal limit of one year that allows the qualification of that instrument. Being the credit classified as "suprimento" is subject to the dispositions of the article 245 of the CSC, it means that, in case of insolvency, shareholders cannot collect the loaned money from the company, before general creditors receive all their company's credits.

¹ CSC's article 1.2.

² Article 244.1 of the CSC.

2.2. In Accounting Law

According to the Conceptual Framework of the Portuguese Accounting Law - Sistema de Normalização Contabilística (SNC) - financial statements represent financial effects of company's transactions, wherefore, the accounting rules aggregate these operations in classes, in accordance with its characteristics. The elements of financial statements represent these classes. The asset, liability and equity typify the financial position's elements; on the other hand, the incomes and expenses represent the income statement's elements. Paragraph 49 of the Conceptual Framework exhibit the legal concept of the balance sheet's elements, between them, the liability's definition. This concept has underlying the definition of IASB Conceptual Framework; thus, liability is a present obligation of the entity arising from a past event, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits. The partner's loan respects classification of liability, the society has a present engagement with the shareholder due to a past occurrence, that will imply a resource's exit. As it was, already explained, this kind of contract assumes different perspectives, taking into account its particularities, its specificities imply particular attention in accounting recognition. If the lending has a term less than one year, it is not a contract of "suprimento", so it will be a current liability on the financial statement, the company should pay it in the next twelve months. In the case of the term of payment occur in more than one year, it obeys the legal concept of "suprimento", so in the financial accounts, it assumes the non-current position. This mechanism predicts the possibility of pay interest to the lender. In the company's sphere, the partner's right can configure an expense or an asset. According to the Conceptual Framework, the expense is the decrease in future economic benefits during the accounting period. It occurs over the form of outflows, or assets depreciation, or occurrence of liabilities, that result in a decrease of equity and not being related with results distribution to capital owners. So, the payment of loan compensation most of the times congregates the characteristics of the expense, so, the income statement presents information about it. Nevertheless, the Portuguese Accounting and Financial Reporting Standard 10 - Norma Contabilística e de Relato Financeiro (NCRF), predicts that the entity must capitalize the borrowing costs when directly imputed to acquisition or construction of an asset that needs time to conclude for the use or selling. It means that, if the equity's owners loan money to a company to help the company to acquire or construct a thing that will be classified as an asset in the future, the interest paid will be recognized as an asset, also. In this case, this amount of interest, when capitalized, will be subject to the depreciation according to the imposed accounting rules to the main asset. Taking into consideration the Ordinance 218/2015 of July 23 that institutes the Portuguese Accounts Code - Código de Contas (CC) - the mechanism's occurrence implies an accounting record in the account 253 - Equity Participants. In the same time that the interest payment implies a registration on the class of financial expenses, in particular, 691 - Supported Interest. In the case that the borrow supports the acquisition or construction of assets that qualify in the future, it needs to transfer the amount, the value paid of interest will not be represented in the spending's account (691) but in the investments account. The ordinance 220/2015, of July 24 imposes a mandatory application of financial statements models to entities subjects to the Portuguese Accounting Law. The detail level of financial information required depends on the corporation's dimension. So, this legal disposition presents several models according to the company's kind. So, if equity owner loans money to the company, and it is expected to receive in the operational period or in a term less one year, the borrow's information will be held in the current liability - Passivo Corrente, in particular in obtained financing - Financiamentos Obtidos. By the other hand, if it is expected receive the money in more than one year, it means it is qualified as "suprimento", the lending's information will be held in the non-current liability - Passivo Não Corrente, in particular, in the item obtained financing - Financiamentos Obtidos.

Image 1: Statement's part of financial position

Passivo			
Passivo não corrente			
Provisões			
Financiamentos obtidos			
Responsabilidades por benefícios pós-emprego			
Passivos por impostos diferidos			
Outras dívidas a pagar			
Passivo corrente			
Fornecedores			
Adiantamentos de clientes			
Estado e outros entes públicos			
Financiamentos obtidos			
Outras dívidas a pagar			
Diferimentos			
Passivos financeiros detidos para negociação			
Outros passivos financeiros			
Passivos não correntes detidos para venda			
Total do passivo			
Total do capital próprio e do passivo			

Source: Attachment 1 of the Ordinance 220/2015, July 24

2.3. In Tax Law

In Value Add Tax sphere, the financial operations' benefits of an exemption predict on article 9 of the VAT Code. The Directive 2006/112/EC of the 28 November 2006 approved by the Council of the European Union (2006), imposes this exemption and legislator transposes to Portuguese Jurisdiction (Roriz et al., 2015). According to article 1.1.a) of Portuguese IVA Code, the onerous goods' transfer and the provision of the services are subject to tax when these operations happen in national territory and make by a IVA taxpayer. Article 4º of the same law clarifies that the one operation is services provision if it is not a transfer of goods, an intra-community acquisition or the importation of a good, it means that it has a residual framework. Despite the general principle about which the tax is settled over all onerous services' operations, the VAT Code's article 9.27 foresees the operations related to the banking activity are tax-free, it means that they are subject to tax but exempt (Palma, 2011b). Thus, the loan made by the partner to the company is VAT exempt due to this legal disposition (OCC, 2016). On the other hand, the payment of interest constitutes an inherent and resultant consequence of the main operation, the loan, so, it must be considered that the interest payment enjoys of the same exemption of the principal transaction (Palma, 2011a). In the Corporate Income Tax domain, the payment of interest represents a tax expense relevant for the determination of the corporate income tax's base. Nevertheless, it needs to have a document to support the transaction and the accounting record (APECA, 2018). Although in the accounting dimensions, there is no limit of the rate interest to pay to shareholders, in the tax domain is not happens the same. According to the article 23-A.1.m) of the CIT, is not accepted as fiscal expenses the amount of interest that exceed the limits imposed by law, in particular, the Ordinance 274/2014 (Ministério das Finanças, 2014). This legal document imposes two limits, one for large companies and another for small and medium-sized. In the first case, is subject to an interest rate of 2% added the Euribor rate, this means that if the company pay more than this limit, the difference that exceeds will not be accepted as tax expenditures. In the second case, the limit rate is 6% added to the Euribor rate. In the domain of Income Tax Natural Persons, the loans devolution at the nominal value not represents an operation with gain, so it is not subject to taxation.

However, the article 10.1.h) of the IRS Code forecasts the onerous cession of the partners' loans as a tax transaction in the part of the gain. The article 49 of the same law determines the acquisition value, for tax purposes, it means that it is the loan's nominal value. The positive difference between the nominal value of the loan and the cession value is subject to taxation according to the article 72.1.C) of the IRS Code, it means that it is taxed by an autonomous tax rate of 28%, although the beneficiary can opt for the inclusion with the other tax incomes. The law imposes withholding under the receipt of interest, and it means that entity when pays this kind of income needs to withhold an autonomous rate of 28%, second article 71.1.a) of the IRS Code.

3. CONCLUSION

According the Portuguese commercial law shareholders can lend money to the company, this operation can have the status of "suprimento" if the loan has a return term higher than one year. This mechanism renders the partner creditor of the company with particular specificity, because, if it collects the condition to be qualified as "suprimento" represents that in case of insolvency the members can not receive the money without the other creditors receive all theirs debts. In accounting domain, the loan is recognized as a liability, that according to the return term will be presented in the financial position statement as current or non-current liability, if it is less or more than one year, respectively. On the other hand, most of the times, the interest regarding the concept of expenditure; however, it can be considered as an asset if it observes the conditions of the NCRF 10. In the taxation realm, legislator determines some particularities about it. First, the VAT Code exempts the partner's loan, taking into consideration the European Union's Council Directive, second, the IRS Code does not determine any taxation to the return of the borrowing, if the return value is the same that the nominal amount. In the company's area, the interest paid is also a tax expense, when recorded in the accounting area as a spending.

LITERATURE:

1. ABREU, J. M. C. D. 2003. Suprimentos. *Estudos em Homenagem ao Prof. Doutor Raúl Ventura*. Coimbra: Coimbra Editora.
2. ABREU, J. M. C. D. 2015. *Curso de Direito Comercial*, Coimbra, Almedina.
3. APECA 2018. IRC/IRS - Juros de suprimentos T18060074 (CF47573) / 2018-06-04. https://www.apeca.pt/infordoc_ct_new/index.php?e=1: Associação Portuguesa de Empresas de Contabilidade e Administração.
4. CANAS, M. G. D. S. M. 2011. *O Contrato de Suprimento como (nova) forma de financiamento societário*. Master, Instituto Universitário de Lisboa.
5. CARVALHO, M. M. & MOREIRA, S. 2013. Direito das Sociedades Comerciais (Capítulo I). Sumários desenvolvidos das aulas de Direito para a Economia e Gestão. In: UNIVERSIDADE DO MINHO (ed.). Braga, Portugal.
6. CORDEIRO, A. M. 2007. *Manual de Direito das Sociedades - das Sociedades em especial*, Coimbra, Almedina.
7. COUNCIL OF THE EUROPEAN UNION 2006. Council Directive 2006/112/EC of the 28 November 2006 on the common system of value added tax. *Official Journal of the European Union* 11.12.2006, L 347.
8. DOMINGUES, P. T. 1998. *Do Capital Social, Noção, Princípios e Funções*, Coimbra, Coimbra Editora.
9. FURTADO, P. 2001. *Curso de direito da sociedades* Coimbra, Almedina.
10. MEIRA, D. A. 2005. O Contrato de Suprimento Enquanto Meio de Financiamento da Sociedade. *Revista de Ciências Empresariais e Jurídicas / Review of Business and Legal Sciences.*, 139- 166.

11. MINISTÉRIO DAS FINANÇAS 2014. Portaria n.º 279/2014. Diário da República n.º 251/2014, Série I de 2014-12-30.
12. OCC 2016. PT16044 - IVA - Isenções 01-01-2016. <https://www.occ.pt/pt/noticias/iva-isencoes/>: Ordem dos Contabilistas Certificados.
13. PALMA, C. C. 2011a. *Enquadramento das Operações Financeiras em Imposto sobre o Valor Acrescentado*, Coimbra, Almedina, Coleção Cadernos IDEFF.
14. PALMA, C. C. 2011b. *Introdução ao Imposto sobre o Valor Acrescentado*, Coimbra, Almedina.
15. PEREIRA, J. A. 2001. *O Contrato de Suprimento*, Coimbra, Coimbra Editora.
16. PEREIRA, R. V. 2018. *O aumento do Capital Social por incorporação de suprimentos*. Master Degree, Universidade Católica Portuguesa.
17. PINTO, A. M. 2016. Cessão de créditos de suprimentos, prestações acessórias pecuniárias e prestações suplementares. *E depois do Código das sociedades comerciais em comentário*. 1^a ed. Coimbra: Almedina.
18. PITA, M. A. 2018. *Curso Elementar de Direito Comercial*, Lisboa, Áreas Editora.
19. RAMOS, M. E. 2018. *Direito Comercial e das Sociedades entre as Empresas e o Mercado*, Coimbra, Almedina.
20. RORIZ, J., PEREIRA, L., ESTEVES, L. F. & BASTOS, R. 2015. *IVA (Revisão ao Código)*, OCC.
21. VENTURA, R. 1989. O contra de suprimento no Código das Sociedades Comerciais. *O Direito*, 121, Janeiro-Março.

FAIR TRADE: A CRITIC IN ETHICS

Essakhi Adam

University of Abdelmalek Essaadi, National School of Management

Tangier, Morocco

essakhiadam@gmail.com

ABSTRACT

The notion of FAIR TRADE is a concept that has been widely debated and criticized, not only for the many failed experiments but also for the very inconsistency of its ethical claims. If FAIR TRADE is the process by which the social and economic disparity between the rich and the extremely poor is readjusted via the process of introducing ethical standards in the trading between the two, then this very process has been proven to not only place a substantial financial stress on the poor farmers with the cost and time consuming process of earning the FAIR TRADE brand, it has also been shown that the revenue expected from this process doesn't necessarily end up in these farmers hands, while at the same time placing the normal farmers in a competitive disadvantage, all in the name of providing a false sense of moral relief for consumers. The ethical concern deepens as political agendas are often enforced on these farmers in the name of sustainable development policies that falls short in most cases by focusing on a bigger picture objective while neglecting the day to day lives and sacrifices of these farmers. The most apparent result of these problems is the money trail which seems to completely disappear after the initial trade, the fact is studies has shown that the farmers affiliated with the FAIR TRADE movement have not shown an increase of wealth or betterment of lifestyle, rather the associations in charge of the farmers are constantly seen a nest of corruption and financial scandals, as the mission of inspecting and auditing the trade and it's results is rarely seen to its end.

Keywords: *Ethical, FAIR TRADE, Farmers*

1. INTRODUCTION

This study analyses the claim that Fairtrade is ethical trading. It starts with a brief outline of Fairtrade and sets out the basic ethical criteria to be used. These are then expanded and extended as fuller details of the operation of Fairtrade are presented. Fairtrade is a commercial brand. Its owners, the Fairtrade Foundation, have been very successful in persuading customers of their genuine 'ethical trading', and that by buying Fairtrade goods they are giving producers a fair price, dealing fairly with them, and giving money to poor producers in the Third World. It has had considerable support, and has received gifts of time, money, marketing and preferential trading opportunities from private individuals, firms and public bodies. The retail turnover in the UK alone was close to 800 million pound in 2009. For a fee, the Fairtrade Foundation gives companies in the developed world – coffee processors and packers or supermarket chains for instance – a license to use the brand, 85% of the income of the UK Fairtrade Foundation can be traced to this single licensing operation, with the remaining 14% coming from donations and government grants (Fairtrade UK, 2009). At least 70% of this license income is spent in the UK, mainly on promoting the brand. The accounts are not clear on how or where the rest is spent, but it appears to be spent by the Fairtrade organization, some of it for administration and control of standards by The Fairtrade Labelling Organizations International, rather than being given to farmers in the Third World. The money intended for the Third World is an entirely separate income stream, which does not pass through the Fairtrade organization. The product must be produced by Fairtrade-certified suppliers in the Third World, nearly always members of a cooperative. These suppliers must meet a range of political standards to be certified. For coffee, the star product, there are typically several levels involved: the farmers themselves, the

primary cooperatives which do the assembly and processing, and the secondary or tertiary cooperatives which export on behalf of the primary cooperatives. The exporting cooperative is paid a price 10% higher than the world price for any coffee that, first, meets the Fairtrade standards and, second, is sold with the Fairtrade brand. The higher price is termed the 'social premium' and may be spent by the exporting cooperative on business expenses including the costs of meeting Fairtrade standards, or on social projects like health, education. Some cooperatives pass on cash to farmers, giving them a higher price. A significant aspect is the minimum price, which gives the exporting cooperatives a price above the world price when the world price collapses, as it does from time to time. These price commitments apply to the exporting cooperatives only, not to the primary cooperatives or to farmers, and they cover only goods sold under the Fairtrade brand, which may be a small part of the product meeting the standards, and a small part of the cooperative's turnover. This analysis covers the Fairtrade system as a whole, from farmer to consumer, including cooperatives, importers, packers, wholesalers, supermarkets and cafes. It covers the Fairtrade Foundation UK and the umbrella organization, the Fairtrade Labelling Organizations International. It also covers those advocates of Fairtrade who do not have any financial interest in it, but give money, time, effort, and preferential trading opportunities to it and who publicize it. These include firms, politicians, public servants.

2. ETHICAL CRITERIAS

The ethical approach used to analyse FAIRTRADE is the Utilitarian one of the greatest good for the greatest number, as is normal in dealing with public money. This uses the hedonic calculus, applying resources where they produce the greatest marginal utility. Two sets of ethical criteria are derived from the Utilitarian principles which will be used throughout the analysis. The first set derives from the concept of personalized impact, the same amount of money no matter how small will have a different impact on different socio-economic classes. The lower class as referred to by many, can be made 5 euro worse off as they may not be able to buy a mosquito net or buy enough food to keep the children alive in the season before the harvest. The middle class may suffer only a minor inconvenience for the same amount of 5 euros. And the rich and the high class, a loss of 5 euro would not be noticed at all more or less. This is standard economics. These criteria mean that it is not sufficient to prove that some farmers benefit from Fairtrade: any meaningful analysis must also cover other Fairtrade farmers, and non-Fairtrade farmers. These criteria are applied at two levels: it is asked whether the money should be given to Fairtrade at all, and it is asked whether, once the money has been given to Fairtrade, is it spent in such a way as to maximize its impact. The criteria may be applied by comparing the impact of Fairtrade with the impact of alternative ways of delivering aid or charity to the Third World, using as a standard either giving money directly to a Third World government or giving it to one of those charities which guarantees that all donations are spent in the Third World. The second set of criteria, Unfair Trading, includes two relevant principles that both centers around the truth: It is unethical to lie to a customer about a product and it is unethical to withhold or fail to give consumers important information about a product, information that is likely to cause the average consumer to make a different purchasing decision. Under the Utilitarian approach lying on the product may cause the allocation of money in a way that increases death and destitution, as in the first criterion – a derived wrong. Secondly, there is a cost when donors realize that their money has been used for purposes that they had not intended. Thirdly, the use of lies and suppression of evidence damages the efficiency of markets, and can collapse these markets entirely, causing widespread public harm. To the extent that this happens in the charitable sector, there is a risk that the public may stop giving money to all charities. And risk is an economic cost.

This is recognized by legislators: both lying and failing to give relevant information to customers would constitute the criminal offence of Unfair Trading throughout the EU under Directive 2005/29/EC on Unfair Commercial Practices (European Commission, 2005).

3. THE FINANCIAL TRAIL

With Fairtrade, customers pay a higher price in the belief that nearly all the extra will go to the intended beneficiaries. The Fairtrade Foundation's basic guarantee is, 'A fair and stable price to farmers for their products' (Fairtrade Foundation, 2011). A reasonable consumer might assume from this that 80% of the extra amount paid went in higher prices to the farmers, in such a way as to get the greatest good for the greatest number. This section examines what actually happens to the money. First it asks how much reaches the exporting cooperative, half way up the marketing chain. Then it asks what happens to this money: how much goes in added costs to the Fairtrade cooperatives; how much is spent on social projects; how much goes in extra money to Fairtrade farmers; and what harm is caused to non-Fairtrade farmers.

3.1. The exporting cooperatives

In practice, retailers, wholesalers and manufacturers are free to charge whatever they wish for Fairtrade products. Fairtrade does not monitor or control how much extra they charge. It is almost never possible for a customer to determine how much extra is charged, because retailers almost never sell identical Fairtrade and non-Fairtrade products side by side. There are differences in brand, quality, origin, etc. which make price comparisons impossible. Very occasionally it is possible to calculate how much extra is paid. For example, Valkila, Haaparanta and Niemi (2010, p. 266) were able to get information not normally available on coffee sales, and found that consumers in Finland paid considerably more for Fairtrade certified coffee than for alternatives, but that only 11.5% of the extra paid went to the exporting country. The amount reaching the farmer is not calculated. Kilian, Jones, Pratt and Villalobos (2006) talk of US Fairtrade coffee getting 5 dollars per pound extra at retail, of which the exporting cooperative would have received 10c, or 2%. Mendoza and Bastiaensen (2003, p. 38) calculated that in the UK only 1.6% to 18% of the extra charged for Fairtrade reached the producers for one product line. It appears that the cost of operating the Fairtrade organizations in the rich countries is of the order of 75% to 100% of the gross amount of extra money reaching the Third World. There are also some unavoidable costs to processors, wholesalers and retailers in handling Fairtrade. That is to say, the absolute maximum proportion of the donations reaching the Third World would be 50% to 60%, in an ideal world where nobody charged higher mark-ups. This is consistent with the fact that Fairtrade charges wholesalers a fee of 3%, and 1.53% of the retail price reaches exporters as extra payment. These proportions would be considered unacceptably low by many donors. That is to say much of the extra price paid, the donation, goes as extra profit in rich countries, which is unethical under the Death and Destitution criteria, and there is a failure to disclose this, which is unethical under the Unfair Trading criteria. The Fairtrade system requires importers to:

- Pay the minimum price set by Fairtrade,
- Pay a premium price
- Provide credit for pre-financing so that Fairtrade cooperatives can pay cash on delivery,
- Enter into long-term contracts.

However, Companies are in a position to say, 'We will buy your Fairtrade coffee but we will pay you less than the proper price. If you refuse, we will buy from another Fairtrade cooperative, and you will have to sell at an even lower price, the world commodity price. As you know, there is three times as much Fairtrade certified coffee available as the market will take.' It is difficult for the cooperative to refuse.

There is evidence that companies do this, sometimes paying the full Fairtrade price, but demanding a higher quality (Raynolds, 2009, p. 1089; Valkila, Haaparanta, & Niemi, 2010, p. 264; Valkila, 2009). There is also a failure to provide the credit. Importers may pay cash on delivery, or pay late, or just not honor their contracts if world prices move against them. (Utting, 2009, p. 139; Valkila, 2009, pp. 3022-3; Raynolds, 2009, p. 1089). The mainstream traders sometimes provide better credit to farmers at significantly lower interest rates (Valkila, 2009, pp. 3022-3). The Fairtrade requirements on long term contracts are not strictly enforced (Reed, 2009, pp. 12, 21). These evasions are mentioned by some of the most enthusiastic supporters of Fairtrade, but they do not give details or discuss them, and appear not to have investigated them to find out how common they are. This is surprising as the evasions could make the whole system unusable. The ethical problems raised are, first, the failure to control these problems effectively, second, the failure to admit to the problems, and, third, adopting a system where these problems arise – they do not arise with normal charity to the Third World.

3.2. Ethical implications

It has been shown that a small amount of the extra amount that consumers pay for Fairtrade gets even as far as the exporter. In a few cases it may be as much as half; in many cases it is much less. Much of the extra price paid, the donation, goes either in higher profit in rich countries, or in the Fairtrade organizations' administration costs and their cost of collecting donations. This is unethical under the Death and Destitution criteria. It is likely that Fairtrade sales would be much lower if this were known by consumers. However, the extra amount consumers pay for Fairtrade products is almost universally concealed by retailers and the costs of the Fairtrade organizations and the amount reaching the Third World has not been disclosed. This is Unfair Trading and unethical. The criterion that relevant information should not be concealed requires that a pack of Fairtrade coffee, should have the label 'This pack costs 5 euros more than an equivalent pack of non-Fairtrade coffee. A maximum of .34 of this reaches the Third World. Even those retailers who feel that they, and their supply chain, are beyond reproach, and that it is acceptable that only half the extra money paid reaches the Third World in their particular operation, are under an ethical obligation to give this information. If they were to disclose their figures, they would put pressure on others to do the same, so there would no longer be firms pocketing 90% to 99% of the extra price charged. Similarly, all charities have to publish their accounts. Many reputable ones publish them in great detail: they hope to drive out those charities that spend nearly all their revenue on collecting more revenue, that spend almost nothing on the intended beneficiaries, that are incompetent and dishonest. That is to say they are acting according to the Ethical Trading criteria. Fairtrade, on the other hand, has been set up in such a way that most of the money donated does not even enter their accounting system, and it is not possible to find out what it is spent on.

3.3. The farmer

Fairtrade monitors the price paid to exporters. It does not control what happens to the money, nor does it monitor how much reaches the farmer. There can be no evidence for the claim, 'Fairtrade guarantees a fair price for the producer'. Some of the extra money is spent on meeting the Fairtrade criteria for certification, sometimes a large proportion (Utting, 2009, p. 139; Valkila and Nygren, 2009; Valkila, 2009, pp. 3022-3; Berndt, 2007). The exporting cooperatives, the primary cooperatives and the farmers all have to reach these criteria. They have to meet the criteria for all they produce, whatever proportion they manage to sell as Fairtrade branded. Obviously, they would prefer to sell all they produce at the higher Fairtrade price, but the world market for the brand is about a third of the quantity produced, so two thirds is sold, unbranded, at the commodity price (Kilian, Jones, Pratt, & Villalobos, 2006). Some cooperatives struggle to sell 10% to 15% of their total production as Fairtrade, so their added

costs are higher than their added income. Nothing is left for social projects or for the farmers. Presumably they hope to sell more in future and make a profit. Others manage to sell most of their output as Fairtrade so the social premium is higher than the extra costs, but even here the cooperative management may say, 'It's not worth the trouble, Fairtrade'' (Berndt, 2007, p. 27). Fairtrade Labelling Organizations International figures do not show that any money goes to farmers. Workers on Fairtrade plantations may do no better: tea workers in Kenya and India may get a thermos flask every few years as their payoff from Fairtrade (Bahra, 2009a) (Bahra, 2009b). However, researchers suggest that some farmers have demanded to receive cash, rather than have the money put into underperforming social projects. Some Fairtrade employees claim that Fairtrade Labelling Organizations International is wrong. Martin Hill, Director of Commercial Relations, Fairtrade Foundation UK, spoke at the European Coffee Symposium (2009), and said that all the Fairtrade Premium was passed on to farmers at farm gate - not just to the cooperative exporter, nor spent on business and production expenses, or on social projects. Any extra money not spent on achieving certification and business expenses may be spent on social projects. Some of the social projects are building local schools, clinics, or baseball fields. Some of the projects are community (44% of expenditure on social projects), education (14%), environment (1%), health (10%), women's programs (5%) and others (25%) (Fairtrade Labelling Organizations International, 2010). It is acceptable within the Fairtrade ethos that all the extra money is spent in this way and that none is passed on to farmers. Fairtrade does not control what the cooperatives do with the money or measure its impact. There is almost no published information by researchers on what extra money individual cooperatives get, and how much money they spend on each activity. There have been very few attempts at measuring the impact but, even if one ignores the methodological problems with these, it is not possible to take a small number of case studies of selected successful cooperatives, nearly all producing coffee, and to generalize the results to 3000 producers supplying thousands of products. There is no reason to assume that projects organized by cooperatives will have a greater impact than ones delivered by those aid organizations or governments which have a strong professional skill base, backup, resources and experience. Most aid projects also have economies of scale as they aim to help all farmers in a district, province, or country, not just the few hundred Fairtrade farmers. Agricultural economics and marketing interventions at sector level, industry level or crop level, for instance, typically help millions of people, and can be low-cost: high-impact. The Fairtrade projects are not low-cost: high-impact. There is a worry that the benefits of social projects may accrue mainly to the families of committee members and managers of the exporting cooperative, less to the families of committee members and managers of primary cooperatives, and least to the farmers.

4. POLITICAL OBJECTIVES

The failures of Fairtrade arise from the fact that the headline objective advertised to customers, 'A fair and stable price to farmers for their products' (Fairtrade Foundation, 2011), is not the main objective of many of its founders and managers. The main objective was political and could not be achieved using tried and tested methods of getting charity from the donor to farmers. The adoption of market-based delivery of charity has meant that businesses in rich countries and cooperatives in poor countries could take most of the money donated. It has also made it impossible to monitor and control what happened to the donations. Because farmers are coerced into selling through cooperatives, they are tied to possibly inefficient buyers, and cannot sell to the buyers offering the best price package. This marketing system has also increased opportunities for corruption. Theft and corruption can make markets inefficient, so that less and less of the retail price reaches the farmer and price signals are obscured. Markets sometimes collapse as a result. For this reason, both governments and financial organizations try to set up marketing systems which minimize the opportunity and temptation to steal: they

nurse them into existence and then tend them carefully. Reducing the temptation and opportunity is more important than detecting and punishing theft, which both governments and financial organizations find difficult. The ethical aim is not just to protect individuals from theft, but to protect everyone using the market, directly or indirectly. The Fairtrade system provides more opportunities for theft than normal marketing systems. It uses the same retailers, wholesalers, packers, importers and commodity markets as the normal system. The big increase in the possibility of corruption arises because payments are not linked to observable product quality, but are a subsidy. If there is a subsidy of, say, 10% of the total price, then market intermediaries can steal anything up to 10% and still leave the intended recipients slightly better off and afraid to complain in case they lose the rest as well. For example, subsidized credit schemes often mean that farmers have to bribe the credit officer, bringing the true cost in line with the moneylenders' interest rate.

5. CONCLUSION

This paper set out several Utilitarian ethical criteria: that it is unethical to increase Death and Destitution, and that it is unethical to use Unfair Trading practices, both because it permits the increase of Death and Destitution, and because it could damage the credibility of charities. An alternative use of the donations would be to send it to the Third World, to help the very poor, those on the verge of starvation, in which case it would cut Death and Destitution. Instead, a minimum of 50% of the donation stays in rich countries and in some cases more than 99% does. Much of the money that does reach the Third World goes on the costs of Fairtrade conformity and certification. Most of the rest goes on social projects. There is no evidence from studies that these benefit the Third World. There is no evidence that Fairtrade gives what they promise, 'A fair and stable price to farmers for their products'. Fairtrade concentrates on the relatively rich, and there is reason to believe that it harms other farmers. It can be argued that this system is only possible because the Fairtrade industry makes false claims and suppresses significant information, which constitutes Unfair Trading. This has created the very effective marketing situation where consumers, supporters and volunteers are given the freedom to fantasize about what Fairtrade achieves.

LITERATURE:

1. ADB. (2010). Asian Development Bank and Vietnam: Fact Sheet. Retrieved June 14, 2010, from http://www.adb.org/Documents/Fact_Sheets/VIE.pdf
2. Aranda, J., & Morales, C.: 2002, Poverty Alleviation through Participation in Fair Trade Coffee: The Case of CEPCO, Oaxaca, Mexico. Retrieved from <http://www.colostate.edu/Depts/Sociology/FairTradeResearchGroup>
3. Audebrand, L., & Pauchant, T.: 2009, 'Can the Fair Trade Movement enrich Traditional Business Ethics? An Historical Study of its founders in Mexico', *Journal of Business Ethics*, 87, 343-353.
4. Bahra, P.: 2009a, 'Fairtrade is struggling to change practices on tea estates and tackle abuses. The Times January 2.
5. Bahra, P.: 2009b, 'Tea workers still waiting to reap Fairtrade benefits', The Times January 7.
6. Bassett, T.: 2009, 'Slim pickings: Fairtrade cotton in West Africa', *Geoforum*, 41, (1), 44-55.
7. Berndt, C. E.: 2007, Is Fair Trade in coffee production fair and useful? Evidence from Costa Rica and Guatemala and implications for policy. Washington DC.: Mercatus 65 Policy Series, Policy Comment 11, Mercatus Centre, George Mason University.

8. Boersma, F. V.: 2002, Poverty Alleviation through Participation in Fair Trade Coffee Networks: The Case of UCIRI, Oaxaca, Mexico. Retrieved from <http://www.colostate.edu/Depts/Sociology/FairTradeResearchGroup>
9. Boersma, F.: 2009, The urgency and necessity of a different type of market: the perspective of producers organized within the Fair Trade market. *Journal of Business Ethics*, 86, 51-61.
10. Bowbrick, P.: 1988, 'Are price reporting systems of any use?' *British Food Journal*, 90 (2) 65-69 March/April.
11. Bowbrick, P.: 1992, *The Economics of Quality, Grades and Brands*. London: Routledge.
12. Fairtrade Foundation.: 2008, 'Response to Adam Smith Institute Report', Fairtrade Foundation Press Release, Feb 23.
13. Fairtrade Foundation.: 2009, 'Press Statement in response to Times article, "Tea workers still waiting to reap Fairtrade benefits"', World News from One World UK, January 7.
14. Hill, M.: 2009, European Coffee Symposium, October 9. Retrieved from <http://www.griffithsspeaker.com/Fairtrade/Who%20is%20telling%20the%20truth%204.wmv>
15. Jacquiau, C. (2006). *Les Coulisees du Commerce Équitable*. Paris: Mille et Une Nuits.
16. Jacquiau, C. (2007). *Max Havelaar ou les ambiguïtés du commerce équitable: Pourquoi le Sud rue dans les brancards*. Monde Diplomatique September.
17. Johannesen, S.: 2008, *Producing and Consuming Narratives for Fairtrade*. Masters thesis Norwegian University.
18. Jones, S., & Bayley, B.: 2000, *Fair Trade: Overview, Impact, Challenges Study to Inform DFID's Support to Fair Trade*. Oxford: Oxford Policy Management,.
19. Kilian, B., Jones, C., Pratt, L., & Villalobos, A.: 2006, 'Is Sustainable Agriculture a Viable Strategy to Improve Farm Income in Central America? A Case Study on Coffee', *Journal of Business Research*, 59 (3), 322–330.
20. Lamb, H. S. (2006). Trade audits do detect sales of non-certified coffee [REPLY]. *Financial Times*, September 13.
21. Lamb, H.: 2008, 'Fairtrade is Fair *Reply to Peter Griffiths, Fairtrade isn't Fair, Prospect Aug 2008+'. *Prospect*, September.
22. Lamb, H.: 2008, *Fighting the Banana Wars and other Fairtrade battles*. London: Rider Books.
23. Luetchford, P.: 2006, 'Relations between Coffee Cooperatives and Alternative Trade Organizations—A View from Costa Rica'. In D. Lewis, & D. Mosse, *Development Brokers and Translators: the Ethnography of Aid and Agencies* Bloomfield, CT: Kumarian Press, pp. 127-148,.
24. Lyon, S.: 2009, 'What Good Will Two More Trees Do?' *The Political Economy of Sustainable Coffee Certification, Local Livelihoods and Identities*, *Landscape Research*, 34, No. 2, 223–240, April.

FORTHCOMING REFORM OF UNIVERSITY HOSPITAL FINANCING AND POSSIBILITIES FOR EFFICIENCY IMPROVEMENT IN LATVIA

Mara Petersone

*Riga Technical University, Latvia
Mara.Petersone@rtu.lv*

Karlis Ketners

*BA School of Business and Finance, Latvia
Karlis.Ketners@ba.lv*

Ingars Erins

*Riga Technical University, Latvia
Ingars.Erins@rtu.lv*

ABSTRACT

One of the main parts of the health sector is university hospitals, as providers of highly professional tertiary health care services as well as knowledge transfer system for any level of health service providers. Creation of a fair and effective system of financing of in-patient care is a significant part of health financing policy reform and the payment model has a direct impact on health services delivery. Starting in 2014 Latvia introduced equalized payments by diagnosis-related groups (DRGs) to pay a flat rate for average costs. This created cost shifting and other negative provider behaviours included misclassification of treatment without clinical justification. This leads to the necessity for the government to monitor and evaluate activity against baselines and regulate compliance to achieve the policy intent of the payment system. In terms of managing risk, there is a need to define national-level financing policy, to establish an effective overall cost-control mechanism. The purpose of this article is to identify the main determinants of the university hospital behaviour and based on international experience propose payment system model taking into consideration Latvian university 'tertiary' hospital needs. As the empirical basis for research statistical data of National Health Service and interviews. In the paper comparative analysis, empirical analysis, statistical data processing including the deductive and synthesis methods are used. Main challenges identified include insufficient data in health care institutions, interference from interest groups, the need to adjust payments to separate capital costs and depreciation and teaching tasks in university hospitals. Lessons for health care financing policy reforms include the continuation of specific financing model to facilitate access to knowledge and provider decision autonomy in university hospitals in Latvia.

Keywords: *Health financing reform, Health policy, Hospital financing, Latvian health care services*

1. INTRODUCTION

The main challenge of modern times for the Latvian health care system is the need to solve large-scale problems of reducing mortality and raising the salaries of medical staff as well as immediate investment in tertiary hospitals and regional hospitals. The cessation of economic growth and the prospect of slow economic development pose an imperative for health care to search for more efficient ways of organizing medical care and using available resource potential. Achievement of targets for increasing wages without increasing government funding for health means the need to raise funds to solve this problem by undertaking measures to save resources and develop different sources to pay for medical services. Hospital sector (in-patient health care provision) financing is one of the important issues for any health care financing

reform. In general, we can summarise that there are three main directions of the reform. First – strategic purchasing as health service purchaser reform, including assurance of public interest in population health and efficiency optimizing the cost-effective provision of healthcare services. In the scientific literature, outcomes of such reform are analysed by Klasa et al. (2018) and previously by Hurst (1991), Schieber (1995), Busse et al. (2017). Strategic purchasing can be defined as the process of allocating pooled funds to health care providers, whether within an NHS system with a purchaser-provider split (i.e. England), through contracts with insurance funds as in social insurance (i.e. Germany), and in more market-based systems (i.e. Netherlands) (Greer et al., 2016). Contracting of health service providers (a process that specifies what is purchased) is synonymous with purchasing and exclude situations in which individual patients do the purchasing of their own care (Figueras et al., 2005). Strategic purchasing, often called commissioning in the United Kingdom (UK), goes beyond mere purchasing, contracting on price and quantity, or reimbursement of providers (Klasa et al., 2018). Contracting in the Baltic States also was introduced and strategic purchasing implementation provides an opportunity to revise the selective contracting criteria so that they would better respond to changes in the health care delivery system and population needs, but also to further prioritize providers with a higher quality of care (Habicht et al., 2018). The second direction is – improvement of quality of care and establishing health pathways in a public health service (Holla et al., 2016). This also includes encouraging higher standards of quality of care by adopting pay-for-performance schemes for all levels of care. And the third direction is the implementation of the system of payments for in-patient care in combination with an increase of accountability and management organization. One of the management organization directions during the last two decades New Public Management (NPM) has been seen as one ‘solution’ to the many vicissitudes facing public hospitals in order to promote economic effectiveness. According to Mattei et al. (2013) New Public Management revolves around the creation of competition through privatization, quasi-markets and service contracts for achieving greater efficiency. One of the key elements in the NPM reform movement has been a call for decentralization of decision-making towards political and non-political institutions and actors. However decision making does not guarantee any direct effects for economic efficiency. Thus Pirozek et al. (2015) characterized corporate governance after the hospital reform, but demonstrated that the fact that the hospital's legal form had no influence on economic results. Successful management in the form of adjusted economic results is only associated with the private type of facility ownership, but the size of the hospital, the size of the supervisory board and the medical qualifications of the senior manager had no statistically verifiable influence on the efficiency of the hospital management, though we did record certain developments as a result of the transformation process. The economic results that were reported were significantly distorted by the operating subsidies from the founder. As for Latvian health care provision smaller hospitals and some bigger regional hospitals are usually owned by municipalities, while larger tertiary hospitals (university hospitals) and specialized (mono-profile) hospitals (e.g. psychiatric hospitals) are owned by the state. Hospitals became either non-profit-making state or municipal limited liability companies but were never fully privatized. Almost all dental practices, pharmacies and several sanatoria (spas) were privatized. In addition, there has been a small increase in the number of private hospitals since 1993, however, they usually have very few beds and provide mostly non-contracted care. Scientific literature accepts the general assumption that teaching hospitals (university clinical hospitals) tend to reveal a different structure of services providing less of basic and more of highly specialized care, management and organization of resources and therefore, the presence of teaching status has been acknowledged as a very important determinant of efficiency (Votápková et al., 2013). Since 1990s (Wiley, 1992) reforms in the financing of hospital services in European countries and other OECD countries reveals a commitment to a common

objective of relating resource use to hospital workload by means of a standardized case-mix framework in the pursuit of greater efficiency. The majority of countries reviewed favour a global budgeting approach to financing hospital services to the patient-based alternative. Over the past 20 years, most European countries have introduced DRGs or similar grouping systems as instruments for hospital reimbursement. There are different approaches used to determine prices for inpatient care within DRGs or similar grouping systems employed in EU member states (i.e. Denmark, France, Germany, Hungary, Italy, the Netherlands, Poland, Spain and England). In the scientific literature (Schreyögg et al, 2006) also the three steps necessary to set prices: definition of a data sample, use of trimming methods and definition of prices. Different studies It concludes with a discussion on the typical development path of DRG systems and the role of additional reimbursement components in this context. The Diagnosis Related Group (DRG) system constitutes an approach to measuring hospital case mix that entails the separation of hospitalized patients into unique groups based on their diagnoses and procedures. Since originally developed in the United States in the 1980s, a number of versions of DRGs have developed to reflect the evolution in potential applications, in addition to developments in expertise, information technology, and data systems (Wiley, 2014). Based on the literature analysis we can summarise main factors of the reform – organizational issues and trend in the available facilities and technologies; efficiency and quality in in-patient health care; payment and contracting system.

2. THE HOSPITAL FINANCING REFORM POLICY BACKGROUND

Latvia reorganized in-patient care sector various times during the last three decades. Since the reorganization of the hospital sector in 2008 - 2010 (European Observatory on Health Systems and Policies, 2019), hospitals are classified into three categories: (1) “care hospitals”, which provide long-term (medical) care after discharge from an acute hospital; (2) multi-specialty hospitals at local, regional and national level; and (3) specialized hospitals for psychiatry, trauma, maternity and narcology. “Care hospitals”, as well as local and regional multi-speciality hospitals, are generally owned by municipalities. National multi-specialty hospitals, i.e. the university hospitals in Riga, as well as all specialized hospitals are owned by the state (national government). Rehabilitation care is provided by dedicated rehabilitation institutions. Only a very small portion of the hospital sector is privately owned. Emergency care is provided by the State Emergency Medical Service (SEMS) with emergency medical assistance (EMA) teams, and by emergency departments of hospitals. As shown in scientific literature (Walczak et al., 2018), the share of hospital expenditures in Latvia decreased substantially since 2009, while the share of expenditures for ambulatory providers and medical goods increased in 2009 as the government substantially reduced spending on inpatient services, while prioritizing primary care and pharmaceuticals (Mitenbergs et al., 2012). As indicated in Table 1 recent figures on total public expenditures continuing this trend of public spending on hospitals.

Table 1: Expenditure for selected health care functions by health care financing schemes (Eurostat Database, 2019)

	2013	2014	2015	2016
Inpatient curative and rehabilitative care	23.81	21.48	21.02	19.23
Day curative and rehabilitative care	6.91	6.22	6.54	8.01
Outpatient curative and rehabilitative care	18.53	21.62	21.49	21.75
Home-based curative and rehabilitative care	0.28	0.26	0.21	0.54
Long-term care (health)	5.38	5.49	5.24	4.73
Ancillary services (non-specified by function)	12.08	11.27	10.94	9.49
Pharmaceuticals and other medical non-durable goods	26.28	26.97	27.65	28.29
Therapeutic appliances and other medical durable goods	3.6	3.14	2.89	3.62
Preventive care	0.73	1.98	2.03	2.4
Governance and health system and financing administration	2.39	1.58	2	1.95

However linked to financing structure reforms, the number of hospitals and hospital beds in Latvia declined from 88 hospitals in 2008 to 67 hospitals in 2010 and continued to decline, and the number of per 100000 population also decreased, below the EU average (See Table 2). Despite an increasing number of long-term care beds, the relative number of such beds in Latvia still clearly lags behind that of western European countries and also behind the other Baltic countries (European Observatory on Health Systems and Policies, 2019).

Table 2: Hospital beds by type of care per hundred thousand inhabitants (Eurostat Database, 2019)

	Available beds in hospitals	Curative care beds in hospitals (HP.1)	Rehabilitative care beds in hospitals (HP.1)	Long-term care beds in hospitals (HP.1)	Other beds in hospitals (HP.1)
2008	746,09	507,00	38,44	45,94	154,72
2009	640,14	427,53	32,20	46,12	134,29
2010	551,47	343,88	21,37	62,46	123,76
2011	588,43	358,03	34,25	67,05	129,09
2012	588,50	355,99	37,51	66,46	128,54
2013	579,98	350,43	40,10	64,05	125,41
2014	565,71	338,45	40,58	60,64	126,04
2015	569,45	338,81	40,10	64,32	126,22
2016	571,97	340,95	39,70	63,74	127,58

Hospital networks have become a popular organizational form promoted in public health systems (Dubas-Jakóbczyk et al., 2019; Bravi et al., 2013). Creation of hospital coordination network as a group of hospitals that cooperate with each other in order to coordinate and deliver health care services for a given population is recommended to improve accessibility and quality of care (Petersone et.al., 2019). In Europe, hospital care is financed from public sources and in 2016, the share of hospitals in the total current health expenditures ranged from 29% in Germany to 47% in Estonia (for Latvia it was 31.55%) (Eurostat Database, 2019). Tertiary health care in Latvia is financed on the same way as secondary health care - through “earmarked” health care programs, reimbursement for diagnosis-related groups (DRG), payments for emergency medical care and assistance, and bed-day charges. For inpatient care and secondary outpatient care since 2012 the regulations of Cabinet of Ministers listed hospitals and priority secondary outpatient providers (hospitals) that are to be contracted by the NHS. Hence, competition between inpatient and secondary outpatient providers for contracts is rather limited. Different ownership structures characterize health care provision in Latvia. Smaller hospitals and some bigger regional hospitals are usually owned by municipalities, while larger tertiary hospitals (university hospitals) and specialized (mono-profile) hospitals (e.g. psychiatric hospitals) are owned by the state. Mainly owned by public sector (state and municipalities) have limited competition with privately owned hospitals (Table 3).

Table 3: Hospital beds by hospital ownership (Eurostat Database, 2019)

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Public ownership	15853	13572	11154	11061	10912	10597	10170	10141	10089
For-profit private ownership	1054	862	766	1050	1060	1076	1109	1120	1119

Since 2005 almost all hospitals are paid by the NHS on the basis of contractual agreements. Contracts between the NHS and hospitals outline the types of services to be provided within a

year and specify the annual budget. The size of hospital budgets depends on the estimated unit cost of the service (including both running costs and depreciation of capital) and the estimated volume of services. The budgets are hard budgets that shift the entire risk for exceeding the budget onto the provider side. If the provider exceeds the estimated volume, the NHS does not reimburse the provider for the additional activity. In practice, university hospitals running into financial deficits, which have to be compensated for by the owners - the state, local governments.

Table 4: Main financial indicators for university hospitals (Cross-Sectoral Coordination Centre, 2019)

Hospital	Return on equity, (ROE), %	Return on assets (ROA), %	EBITDA, %	Share of own funds on balance sheet
Children's Clinical University Hospital	-0.03	0	6.06	0.13
Paul Stradins Clinical University Hospital	0.05	0.01	4.31	0.18
Riga East Clinical University Hospital	-	-2.66	4.7	-0.13
Riga psychiatry and Narcology Centre	0.08	0.03	3.95	0.39
Average	0.03	-0.66	4.76	0.14

Until 2010 Latvia used a mix of case-based payments and per diem payments (European Observatory on Health Systems and Policies, 2019). Case-based payments covered about 50% of inpatient admissions, for which hospitals received a flat rate tariff per case, depending on the primary diagnosis of patients and/or the medical interventions performed, with adjustments for the actual length of stay and the number and type of interventions performed. For the remaining 50% of patients, hospitals were reimbursed on a per diem basis, sometimes at a reduced rate if patients exceeded the average length of stay of similar patients in other hospitals. However, in order to improve budget control, a global budget system was introduced in 2010. Since then, the size of the annual global budget per hospital is calculated by multiplying the forecast number of patients (the number of patients treated in the previous year with certain adjustments) within each “health care programme” with a corresponding patient tariff and summing up the results. As it was mentioned above the hospitals bear the financial risk of running over budget if they have higher costs, even if they treat more patients or provide more services. The owners of hospitals, i.e. the state or municipalities, generally jump in to save hospitals when debts have reached a certain level. In practice, hospitals often provide more services that are covered by their budget. Emergency hospitals receive an additional budget for emergency room and admission services. The size of this budget depends on the number of available specialists on duty. One of the detected problems also is a between-hospital acute inpatient transfer is a patient who is admitted to one hospital for acute inpatient care and is then transferred to another hospital for the continuation of the same episode of care. There are risks of inappropriate transfers, especially when using per case payments. One type of inappropriate transfer would be when it is not necessary but is rather due to a clinical error. A second type is a transfer for financial reasons (the hospital might refer to a complicated and expensive patient in order to avoid financial pressure). At the initial stage it could be recommended to set neutral payment rates, defining transfer guidelines, defining referral rules and guidelines, and sample auditing on the basis of pattern analysis of routine inpatient data. Abovementioned raise necessity for reform of the hospital payment system is high up on the policy agenda.

3. PAYMENT SYSTEM REFORMATION DIRECTIONS

Across Europe there are a limited number of the provider payment methods in use: salary, per capita payment (capitation), the fee for service (FFS), per diem, line-item budget, global budget, case-based (DRG), pay for performance (P4P). The mode of payment creates powerful incentives affecting provider behaviour and the efficiency, equity and quality outcomes of health finance reforms. Cabinet Regulation No. 555 of 28 August 2018, Procedures for the Organising and Payment of Health Services (Latvijas Vēstnesis, 2018), prescribe health services, which are paid from State budget resources. At the same time, the National Health Service's home page also publishes a list of state chargeable manipulation, which details the content and service tariffs of the State-paid service basket. As regards the methodology for calculating tariffs, it is explained that the process of calculating national chargeable health services tariffs is continually improving. Health services tariffs are designed to cover the actual costs of service providers, including each element (pay, mandatory national social insurance contributions, medical products, expenses related to patient catering (hospital), overheads and indirect production costs (expenses related to patient maintenance for payment of services, risk payments, for the purchase of materials, energy resources, water and inventory), administrative expenditure and depreciation costs. The Service shall carry out an analysis annually, assessing whether the payments made to service providers cover the actual costs of service providers, including an element cut. DRG introduction allows agreeing with the hospital on the number of patients and the amounts of interventions and manipulations, as well as on the structure of diseases and medical technologies. The DRG system makes the hospital an active participant in the decision-making process, allows to plan targets and includes mechanisms for delegation of power to the institutional level and responsibility for determining the composition of medical assistance to a particular patient with a specific disease. Currently, medical treatment institutions are not bound to direct the payment received for depreciation for the purchase of new equipment, so in most cases, the medical treatment institution uses it to cover other items (including the provision of higher remuneration for medical practitioners). Based on interviews with policymakers and representatives of health care institutions it can be recommended to include in the per case payment includes all the hospital's costs – clinicians' salaries, equipment, drugs, building maintenance, insurance, but to exclude one important type of cost is excluded – the cost of capital. There could be separate budgets for capital assets (such as the hospital site, buildings, and large items of equipment. In parallel, work is being done to improve the accounting of services of DRG, so that the value of the group is closer to actual costs. As detected through the study, the NHS, in cooperation with clinical university hospitals, shall continue to work to make payments for DRG services at their cost in the future. At the same time, solutions will be sought, as will be examined and certified in advance by the cost accounts of the medical treatment institution, in order to assess whether the division of indirect costs is provided by the methodology developed by the NHS. Authors also recommends to continue improvement of financing of tertiary care taking into consideration the special status of university hospitals in relation to the complexity of the services to be provided and the special conditions for payment is specified in Section 54.1, Paragraph two of the Medical Treatment Law (Latvijas Vēstnesis, 1997): "The increased coefficient specified in the regulatory enactments shall be applied to the University Hospital from State budget funds for the paid health services". It has already provided additional funding of €2.8 million from the information report "On the implementation of the health reform measures for 2019" to the measure "To compensate the costs of Level V medical facilities by revising the daily bed rate" by gradually offsetting from 2019 the payments for hospital health services as part of the calculation of groups associated with diagnosis (DRG services). services) in order to be determined according to the costs of these hospitals, taking into account that the most complex and cost-intensive medical treatment in university hospitals are concentrated.

Under the current approach in Latvia, payment rates are partially based on estimated actual costs of care in a previous period, as reported by service providers. Improved methods of cost estimation should be introduced. Use of standard costs rather than actual average costs could be recommended for high-volume case types for which the best method of care has been specified using a care pathway model.

4. CONCLUSION

Main factors of the hospital reform in Latvia are organizational issues and trend in the available facilities and technologies; efficiency and quality in in-patient health care; payment and contracting system. Tertiary health care in Latvia is financed on the same way as secondary health care - through “earmarked” health care programs, reimbursement for diagnosis-related groups (DRG), payments for emergency medical care and assistance, and bed-day charges. Main challenges identified include insufficient data in health care institutions, interference from interest groups, the need to adjust payments to reflect capital costs and depreciation and teaching tasks in hospitals. After the development of clinical guidelines and pathways, the main priority would be more complete implementation of the DRG system of hospital payments. Authors also recommend continuing improvement of financing of tertiary care taking into consideration the special status of university hospitals in relation to the complexity of the services to be provided and the special conditions for payment. Through the coefficient system also the transfer of knowledge to young practitioners and medical students should be considered. It can be recommended to include in the per case payment includes all the hospital's costs – clinicians' salaries, equipment, drugs, building maintenance, insurance, but to exclude one important type of cost is excluded – the cost of capital. There could be separate budgets for capital assets (such as the hospital site, buildings, and large items of equipment. The main feature of initial payment system reform could be changing the financing principles for a pre-defined scope of services. However, it will be important to closely monitor its effects, adjust the payment model when needed and to embed it into a more comprehensive strategy for the future development of the hospital sector in Latvia.

ACKNOWLEDGEMENT: *This work has been supported by the European Regional Development Fund within the Activity 1.1.1.2 “Post-doctoral Research Aid” of the Specific Aid Objective 1.1.1 “To increase the research and innovative capacity of scientific institutions of Latvia and the ability to attract external financing, investing in human resources and infrastructure” of the Operational Programme “Growth and Employment” (No.1.1.1.2/VIAA/2/18/330).*

LITERATURE:

1. Bravi, F., Gibertoni, D., Marcon, A., Sicotte, C., Minvielle, E., Rucci, P., Angelastro, A., Carradori, T. and Fantini, M.P. 2013. “Hospital network performance: A survey of hospital stakeholders' perspectives”. *Health policy*, 109 (2), 150-157.
2. Busse, R., Figueras, J., Robinson, R. and Jakubowski, E. 2007. “Strategic purchasing to improve health system performance: key issues and international trends”. *HealthCare papers*, 8, 62-76.
3. Cross-Sectoral Coordination Centre 2019. Databases and Annual Reports. Profitability and financial stability indicators. Available at: www.valstskapitals.gov.lv/en/databases-and-annual-reports/profitability-and-financial-stability-indicators/ (Accessed 19 June 2019).
4. Dubas-Jakóbczyk, K., Kowalska-Bobko, I. and Sowada, C. 2019. “The 2017 reform of the hospital sector in Poland—the challenge of consistent design”. *Health Policy*, 123 (6), 538-543.

5. European Observatory on Health Systems and Policies. 2019. *Online HiT for Latvia – HSPM*. Available at: <https://www.hspm.org/countries/latvia08052014> (Accessed 19 June 2019).
6. Eurostat Database. 2019. Available at: <https://ec.europa.eu/eurostat/data/database> (Accessed 19 May 2019).
7. Figueras, J., Robinson, R. and Jakubowski, E. 2005. *Purchasing to improve health systems performance*. McGraw-Hill Education (UK).
8. Greer, L.S.; Wismar, M. and Figueras, J. 2016. *Strengthening health system governance: better policies, stronger performance*. McGraw Hill Education/Open University Press.
9. Habicht, T., Habicht, J. and Van Ginneken, E. (2015) “Strategic purchasing reform in Estonia: Reducing inequalities in access while improving care concentration and quality”. *Health Policy*, 119 (8), 1011-1016.
10. Holla, A., Rabie, T. S. and Sales, L. 2016. *Prospects for Health Sector Reform in Latvia*. World Bank. Available at: <http://www.vmnvd.gov.lv/uploads/files/585933cb1d0d4.pdf> (Accessed 19 June 2019).
11. Hurst, J. W. 1991. “Reforming health care in seven European nations”. *Health Affairs*, 10 (3), 7-21.
12. Klasa, K., Greer, S. L. and Van Ginneken, E. 2018. “Strategic purchasing in practice: comparing ten European countries”. *Health Policy*, 122 (5), 457-472.
13. Latvijas Vēstnesis. 1997. Medical Treatment Law. Latvijas Vēstnesis, 167/168 (882/883), 01.07.1997. Available at: <https://likumi.lv/ta/id/44108> (Accessed 19 June 2019).
14. Latvijas Vestnesis. 2018. Cabinet Regulation No. 555 of 28 August 2018, Procedures for the Organisation and Payment of Health Services. Latvijas Vēstnesis, Nr.176 (6262), 05.09.2018. Available at: <https://likumi.lv/ta/id/301399> (Accessed 19 June 2019).
15. Mattei, P., Mitra, M., Vrangbæk, K., Neby, S. and Byrkjeflot, H. 2013. “Reshaping public accountability: Hospital reforms in Germany, Norway and Denmark”, *International Review of Administrative Sciences*, 79 (2), 249-270.
16. Mitenbergs, U., Taube, M., Misins, J., Mikitis, E., Martinsons, A., Rurane, A. and Quentin, W. 2012. “Health Systems in Transition. Latvia”. *Health*, 14 (8).
17. Pētersone, M., Ketners, K., Krieviņš, D., Kreicberga, I. and Eriņš, I. 2019. “Developing A Comprehensive Model for Forthcoming Reforms of University Hospitals”. *Management Theory and Studies for Rural Business and Infrastructure Development*, 41 (2), 197-212.
18. Pirozek, P., Komarkova, L., Leseticky, O. and Hajdikova, T. 2015. “Corporate governance in Czech hospitals after the transformation”. *Health Policy*, 119 (8), 1086-1095.
19. Schieber, G. J. (1995) “Preconditions for health reform: experiences from the OECD countries”. *Health Policy*, 32 (1-3), 279-293.
20. Schreyögg, J., Stargardt, T., Tiemann, O. and Busse, R. 2006. “Methods to determine reimbursement rates for diagnosis related groups (DRG): a comparison of nine European countries”. *Health care management science*, 9 (3), 215–223.
21. Votápková, J. and Šťastná, L. 2013. “Efficiency of hospitals in the Czech Republic”. *Prague Economic Papers*, 4, 524-541.
22. Walczak, R., Piekut, M. and Kludacz-Alessandri, M. 2018. “Health Care Spending Structures in Poland, Latvia, Lithuania and Estonia over the Years as Compared to other EU Countries”. *Foundations of Management*, 10, DOI:10.2478/fman-2018-0005
23. Wiley, M. M. 2014. “Diagnosis related groups (DRGs): Measuring hospital case mix”. *Wiley StatsRef: Statistics Reference Online*, 2014.
24. Wiley, M.M. 1992. “Hospital financing reform and case-mix measurement: an international review”. *Health care financing review*, 13 (4), 119-33.

THE ROLE OF TNCs AS INNOVATIVE LEADERS IN THE GLOBAL ECONOMY

Kovtun Olga

*Novosibirsk State University of Economics and Management, Russia
kovtuolga@yandex.ru*

Lihovitskaya Darya

*Novosibirsk State University of Economics and Management, Russia
lihovickaya@inbox.ru*

ABSTRACT

In the modern world there are continuous processes of globalization, technological development, the political situation is changing; international economic relations are in constant modification and development. The activities of the strong transnational corporations (TNCs), whose economic power exceeds the potential of many states, are qualitatively changing the very system of the world economy managing. By the beginning of the 21st century, a kind of “trio rule” turned out: in addition to national governments, TNC super firms and international economic organizations, which determine the rules of the game on the world stage, influence world economic relations. At the same time, TNCs, having a large number of diverse resources and capabilities, are successfully implementing innovative strategies, thereby enhancing their impact on the social and economic development of the countries of the world and not only on the host country, but also on the recipient countries. This kind of influence is based on the successful implementation of innovative technologies and the degree of presence in international value chains; as a result, an increasing number of goods and services are becoming international. In such a situation, it is TNCs that need to maximize the use of scientific and technological achievements to ensure their competitiveness in the world market, which in the future will have an impact on the future of the global economy. As a result of the study, the innovative activity of Russian multinational companies was analyzed using the example of Gazprom, Lukoil, Rosneft companies. And a qualitative and quantitative assessment of the large business innovative component was given.

Keywords: *transnational company, innovative activity, technological development*

1. INTRODUCTION

Currently, a large number of business entities are located in the Russian Federation, among which transnational companies occupy an important place. They, with their integrated structure and high concentration of capital, play an important role in the development of the country's economy: budget revenues increase, additional jobs are organized, new technologies and management styles are introduced. Multinational corporations (TNCs) possessing a large number of resources (material, human, financial, informational) and opportunities successfully implement innovative strategies, thereby enhancing their impact on the social and economic development of the countries of the world, not only on the home country, but also on the countries recipients. This kind of influence is based on innovation and the degree of presence in international value chains, so an increasing number of goods and services are becoming international. In the modern world there are continuous processes of globalization, technological development, the political situation is changing, the world economy itself is in constant motion and development, which in turn directly affects the development and prospects of transnational companies.

2. APPROACHES TO THE NATURE OF MODERN TNCs AND THEIR ROLE IN THE SYSTEM OF ESTABLISHMENT INNOVATIONS IN THE GLOBAL ECONOMY

In the current trends of business internationalization, transnationalization of production and capital, the leading position in the economy is held by multinational companies, international not only in scope, but also in the composition of capital, the so-called transnational corporations (TNCs). In scientific communities, there is no single approach to the definition of a transnational corporation, however, all authors highlight the international character of their activities as the main feature.

Table 1: the Essence of approaches to the determination of TNCs

Scientists	Approach to the determination of TNCs
G. M. Velyaminov	TNCs - a set of independent organizations with a common economic goal, based in different countries, but managed from a single center.
M. M. Boguslavsky	TNC takes legal plurality, which serves the interests of their owners.
V. G. Ermolaeva	A multinational corporation is a combination of centralized leadership with a certain degree of independence of legal entities and structural divisions (branches, representative offices, subsidiaries) located in it and located in different countries
E. V. Lensky and V. A. Tsvetkov	TNCs are enterprises (financial and industrial associations) that own or control production or service complexes located outside the country in which these corporations are based, having an extensive network of branches and departments and occupying a leading position in the production and sale of a particular product [8].
J. Galbraith	The main purpose of opening branches abroad is to service products, increase sales through related services and active promotion of products.
S. Khymer, C. Kindleberger	In the conditions of monopolization of product markets, the company seeks to use a new form of competition, highlighting the manufactured product in a special group (due to its special positioning). Due to this, the general laws of competition will not apply to this product.

It is worth noting that, firstly, the studied approaches pay attention to various features of TNCs, which is caused by the complexity and multi-aspect of the studied concept. Secondly, representatives of various areas are united by the idea of the monopolistic nature of the activities of such companies, as well as the competitive advantages obtained by virtue of transnationalization. Thirdly, TNCs, being subjects of the world economy, have a significant impact on the organization of the world economy. It is they who largely shape the structure and dynamics of the global economy, control most of the research and development, influence labor migration and facilitate the exchange of experience between different countries. Thus, transnational corporations are characterized, on the one hand, by establishing an international production system based on the spraying of production units across many countries, and on the other hand, their penetration into advanced manufacturing sectors, the rapid development of which requires large investments and the attraction of highly qualified personnel.

TNCs are the locomotive for the implementation of innovative processes in the national economy of the home country and the world economic system. They, as a form of large-scale business organization, most adequately correspond to the modern nature of the international division of labor, making it possible to ensure high economic efficiency of the integrated corporation, on the one hand, on the other hand, to constantly use the huge potential of adaptability to new conditions and susceptibility to innovation. The share of TNCs in the global market innovations in the early 2 000s approached to 50%. [11] Today TNCs control more than 4/5 of all the patents, licenses and know-how existing in the world. [13] In recent decades they are in the Top 100 companies applying for patents. It is noticed, that members of this rating are TNCs who mainly represent the electrical equipment and transport industries, information and computer technologies. Despite significant volumes investments in research and development in the Top 100 companies applying for patents there are no TNCs representing such innovative sectors as pharmaceuticals and biotechnology [11]. It is customary to distinguish three main stages in the development of transnational corporations [11]. At the first stage, at the beginning of the twentieth century, TNCs invested primarily in the raw materials industries of economically underdeveloped foreign countries, and also created purchasing and marketing divisions there. To establish high-tech industrial production abroad was then unprofitable. The second stage of the evolution of TNCs, from the middle of the twentieth century, is associated with the increasing role of foreign production units, not only in developing, but also in developed countries. Foreign production branches began to specialize mainly in the producing of the same products that had previously been produced in the "native" country for TNCs. Gradually, branches of TNCs are increasingly reorienting to serving local demand and local markets. During this period, national firms appear large enough to pursue an independent foreign economic strategy, such as Toyota Motor Corporation with a huge network of foreign branches. At the present stage, from the end of the 20th century, the main feature of the development of TNCs is the creation of production networks and global implementation. Statistics show that the increase in the number of foreign branches of TNCs is much faster than the increase in the number of TNCs themselves [15]. In the modern world, the role of TNCs is very large, because having access to the comparative advantages of countries in world economy; they form and distribute key flows of world income. At the same time, a high concentration of resources allows us to occupy a leading position in the field of developing and implementation of innovations. In this regard, it is necessary to understand the prospects for the development of TNCs in order to predict and prevent possible negative factors. TNCs, as a large business form of organization, most adequately correspond to the modern nature of the international division of labor, make it possible to ensure high economic efficiency of the integrated corporation, on the one hand, and on the other hand, it allows to constantly use the huge potential of adaptability to new conditions and susceptibility to innovation. In addition, another important component is the analysis of "power" characteristics (the scale of influence that TNCs can exert on the state and international organizations) of TNCs or criteria by which this strength and significance could be measured. One of these characteristics is the level of capitalization of the entire corporation as a whole, and its assets in the countries of presence. The general level of capitalization is an indicator of strength for pressure on state institutions where TNCs and international organizations are located, and the level of capitalization in the countries of presence is on their state structures. In this regard, when analyzing the activities of TNCs, one should pay attention to the transnationalization index. There are two types of transnationalization index, depending on the impact:

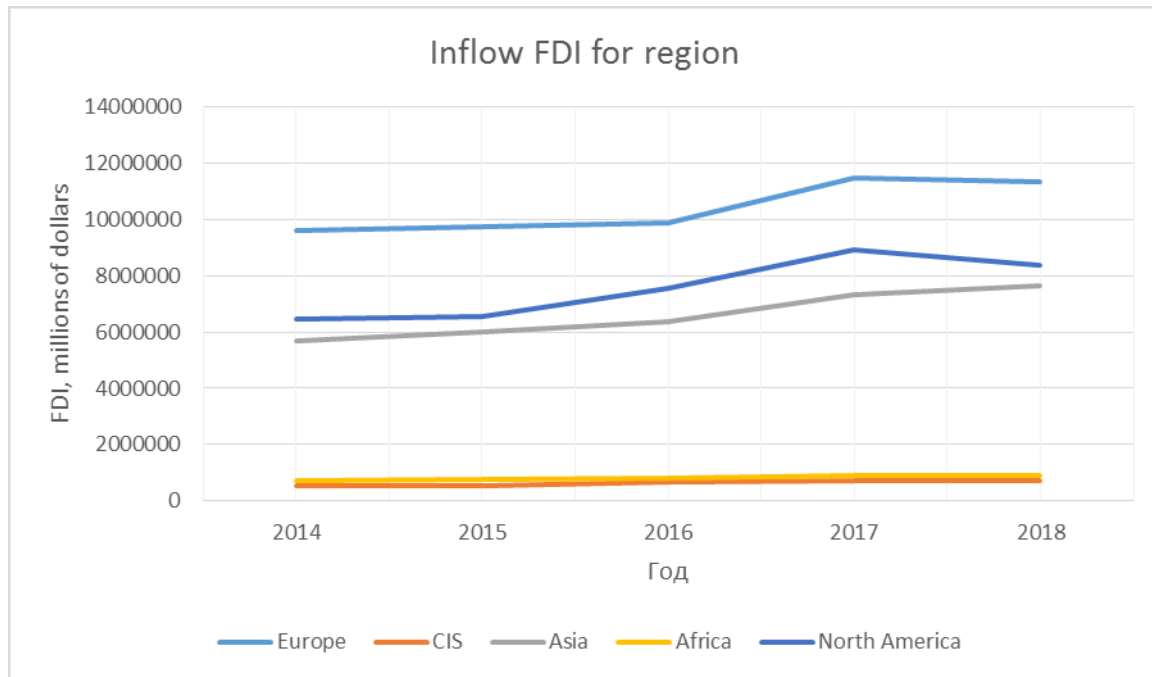
- the index of transnationalization for companies reflects the degree of involvement of a particular TNC in the goods and services producing abroad. It is calculated as the average of the following three indicators: the ratio of foreign assets to total assets, foreign sales to total sales and the number of employees abroad to the total number of corporations

employed: the share of assets abroad in the total assets of TNCs; the share of sales abroad in the total sales of this TNC; the share of personnel abroad in the total number of staff in this corporation.

- the transnationalization index for countries estimates the importance of foreign multinationals for a particular country. It is calculated as the sum of four values: the share of foreign direct investment in all capital investments within the country; the ratio of foreign direct investment in the country to the country's GDP; the share of branches of foreign corporations in the country's GDP; the share of employees in these branches in the total number of employees in the country [15].

If we compare American TNCs with European ones, we can see a pattern: due to the size of the US market, the degree of transnationalization of their multinationals will be much lower than that of European TNCs, whose market in their native country is very limited. [14] In addition, the tax system of the United States and Europe is important. For European TNCs, for example, German, it is much more cost-effective to export production to developing Asian countries. In order to encourage TNCs to start operations in the country, governments offer them some benefits, for example, tax, government subsidies, weak labor or environmental laws. An example is the American company General Electric, which has moved its full-cycle factories to Mexico, Singapore and South Korea, thereby reducing its manufacturing costs. It is worth noting an important role of TNCs in the process of direct foreign investment (FDI). Foreign direct investment, as defined by the IMF, is an investment whose purpose is to obtain continued interest from a legal entity - a resident of one economic system in a company resident in another economic system. Long-term interest implies the existence of a long-term relationship between a direct investor and a foreign company and a significant degree of investor's influence on the organization's management. So a TNC investment cycle is as a determined period from an investment idea initiation to investment product implementation resulting in an economic, social, ecological development level of a new quality or modernization of technology and management system [12]. Interest in FDI in this scientific research is due to the fact that they are most directly associated with TNCs as their structures. The objectives of such investments are far from unambiguous, they are not only, and sometimes not so much in receiving super-profits by obtaining cheap labor, raw materials and sales markets, as in order to fully or partially monopolize any market or country as a whole and increase political arguments pressure on the state. Nevertheless, at the moment, it is TNCs that act as the locomotive of the movement of world FDI. Despite some negative impact of the global crisis, the scale of FDI inflows remains significant (Figure 1) [2].

Figure following on the next page



Picture 1: FDI by region of the world for 2014-2018

It is worth noting that the influx of FDI into Russia after 2014 outlined a downward trend, which was caused by the imposed economic sanctions on the country, and only in 2017 their growth was again outlined. As for the gas industry, which is studied below, during the period under review, there was an increase in the share of FDI, the only decrease occurred in 2017, which was caused by the withdrawal of American capital and the isolation policy of the US President Donald Trump (Table 2) [2].

Table 2: Foreign Direct Investments in Russia 2014-2018

Year	Receipt FDI in Russia, millions of dollars	Share of the oil and gas industry in FDI, %
2014	146 370,22	10,82
2015	133 948, 76	11,83
2016	137 762,74	22,02
2017	150 433,21	16,90
2018	140 078,77	20,18

TNCs combined world trade with international production. They operate through their subsidiaries and affiliates in many countries around the world according to a unified scientific-production and financial strategy, formed in their “brain trusts”, possess enormous scientific-production and market potential, ensuring high dynamism of economic development. In a digital economy, the competitive advantage of countries contributing to attracting foreign investment is changing: companies rely less on such factors like cheap labor are more oriented to availability skilled personnel and cheap energy [4, P. 411]. The state can also influence the activities of transnational corporations - either in every possible way to encourage, or vice versa interfere. Firstly, the government of the country makes every possible contribution to the development of national companies' activities by concluding various trade and intergovernmental agreements, thereby opening up new markets for companies to sell their products. Secondly, tariff and fiscal policies prevents foreign competitors from entering the domestic market. For example, in the 1960s of the 20th century, some countries of Europe set a high tariff on imported American goods, but this problem was resolved.

American TNCs simply built their finished goods factories in the EU. A similar situation developed at the same time between Japan and the United States, the so-called "car wars". All attempts to block the entry into the American market with the help of customs duties on Japanese cars only contributed to the construction of Japanese plants in the United States. It is quite important to mention that the first Japanese automobile company to go this way was Honda [1]. Thus, the presence of TNCs makes national companies pay more attention to the technological process of production, production relations, product quality, and finance the advanced training of their employees [9]. For example, Russian TNCs' corporate social policy makes an important contribution to economic development in by providing high-quality educational, medical and other services to its employees and by implementing programs, the business creates high educational and social patterns and consumption standards that are transmitted through employees and members of their families to society.[10, P. 242] All this contributes to the new types of products and technologies development, the introduction of new management styles. Most importantly, as a result of the TNCs' activities, institutions are imported (both formal and informal) - those "game's rules" (labor and antitrust laws, tax principles, contracting practices, etc.) that have been formed in developed countries [7]. TNCs objectively strengthen the influence of countries exporting capital on countries importing it. As an example, we can cite the situation that developed in the Czech Republic in the 90s of the last century. German companies actually established control over the Czech economy, make it "stronger" compared to even the time of the fascist Germany capturing in 1938-1944 [6]. Since transnationalization increases both the average profit and the reliability of its receipt, holders of TNC shares can count on high and stable incomes. Highly skilled workers serving at TNK enterprises benefit from the formation of the global labor market by moving from country to country and not being afraid to remain without work. Transnationalization reduces economic risks for corporations, but increases them for host countries. The fact is that transnational corporations can quite easily transfer their capital between countries, leaving a country experiencing economic difficulties and leaving for more prosperous ones. Naturally, under these conditions, the situation in the country from which TNCs abruptly withdraw their capital becomes even more difficult, since disinvestment (mass withdrawal of capital) leads to unemployment and other negative phenomena for the national economy. Host countries are inclined to believe that profits earned by multinationals are excessively large. Receiving taxes from TNCs, they are convinced that they could receive much more if transnational corporations did not declare their profits in countries with low taxation. The same opinion about TNCs as "negligent taxpayers" is often shared by the tax authorities of the "parent countries". The fact is that a significant share of international trade (about 30%) consists of intra-company flows of TNCs, and the goods and services sale of one TNC unit to another is often carried out not at world prices but at conditional intra-company transfer ones. These prices can be deliberately understated or overstated in order, for example, to divert profits from countries with high taxes and transfer them to countries with liberal taxation. In addition to tax losses, countries exporting capital, with the development of transnational corporations, lose control over the activities of big business. TNCs often put their interests above the interests of their country, and in crisis situations, TNCs easily "change their face".

3. INNOVATIVE DEVELOPMENT ON THE EXAMPLE OF THE RUSSIAN PJSC GAZPROM

Currently, more and more Russian companies are approaching the concept of "transnational corporations." Of course, they are not so large-scale in their structure and large in degree of influence, and also do not have a large spread by types of industries, unlike their foreign "colleagues". According to the version of Fortune Global 500, only four Russian corporations occupying 49, 63, 115 and 205 places in the list formed by them.

They are: PJSC Gazprom (almost 112 billion dollars), PJSC NK Lukoil (93 billion dollars), PJSC Rosneft (72 billion dollars) and PJSC Sberbank (49 billion dollars), respectively. [5] Russian TNCs are characterized by one sector of the economy in which they occupy leading positions, while many domestic corporations belong to the primary industries. One of such TNCs can rightfully be considered PJSC Gazprom. Let us analyze the innovative activity of the company over the past five years. To do this, we collect and systematize information from the financial statements of the company. Based on the information collected, we calculate the indicators of enterprise innovative activity of the (Table 3). These indicators are characterized by a high degree of accuracy and a minimum number of influencing subjective factors, since they are calculated on the basis of official and constantly updated data of the financial statements of the enterprise. Due to the fact that indicators are calculated by year for the period under consideration, it is also necessary to calculate the average value of each indicator for the analyzed period.

Table 3: Indicators of innovative activity of PJSC Gazprom 2014 - 2018

Year	The new technologies' level development	The new products' degree development	The share of material resources for research and development	The degree of company's provision with intellectual property	The share of investment in innovative projects
2014	0,01	0,01	0,05	0,17	0,23
2015	0,01	0,09	0,17	0,65	0,36
2016	0,01	- 0,09	0,03	0,97	0,17
2017	0,01	0,10	0,04	0,72	0,27
2018	0,01	0,20	0,04	0,77	0,22
Среднее	0,01	0,06	0,07	0,66	0,25

For the direct calculation of the integral indicator of company's innovative development it is necessary to assign weighting factors in accordance with the importance and influence of indicators on the final indicator. The sum of the weighting factors of all indicators should not exceed one. To assign weighting factors when calculating the integral indicator of innovative development of PJSC Gazprom, an expert method was chosen (Table 4).

Table 4: Weighting factors for calculating the integral indicator

Indicators	Weight Ratio
The new technologies' level development	0,2125
The new products' degree development	0,125
The share of material resources for research and development	0,1
The degree of company's provision with intellectual property	0,1875
The share of investment in innovative projects	0,375
Total	1

We calculate the integral indicator of the company's innovative development, using the average values of indicators for the period under review and the assigned weight coefficients.

The integral indicator of innovative development of PJSC Gazprom, calculated over five years, amounted to 0.232. This value indicates that the company spends a very small amount on innovation and investment projects, which in turn leads to a low level of development of technology and products. To determine the threshold values of the integral indicator of innovative development, a check was carried out using mathematical modeling by the Monte Carlo method. As a result, the intervals were obtained (Table 5), allowing to evaluate the innovative development of the enterprise, to attribute it to one of three groups.

Table 5: Assessment of the level of innovative development of the enterprise by the value of the integral indicator

Group	Data Base	Main Features	Recommendations
1	$\Pi_{id} < 0,3$	The company has a low level of innovative development: 1) a moderate proportion of employees employed in IIP; 2) the average level of development of new technology; 3) a low rate of development of new products; 4) a low proportion of material resources allocated to innovation and investment projects; 5) low level of security of intellectual property; 6) a very low level of financing of innovation and investment projects.	The search for ways to develop innovative activities: 1) rationalization of the resource base; 2) improving the efficiency of the use of personnel and information potential; 3) improving the quality level of the technological base of production; 4) improving the quality level of research and development base; 5) improvement of previously mastered products and technologies; 6) the creation, development and use of new products and processes; 7) the acquisition of intellectual property; 8) investment in innovative investment projects.
2	$0,3 \leq \Pi_{id} < 1$	Company with an average level of innovative development: 1) a moderate proportion of employees involved in IIP; 2) the average level of development of new technology; 3) a low rate of development of new products; 4) a low proportion of material resources allocated to IIP; 5) secured by intellectual property; 6) moderate amounts of financing IIP.	Capacity building through: 1) rationalization of the resource base; 2) improving the efficiency of the use of personnel and information potential; 3) improving the quality level of the technological base of production; 4) development of production capacities and implementation of IIP, creation, development and use of new products and processes; 5) the acquisition of intellectual property; 6) improving the organization and management of innovation
3	$\Pi_{id} \geq 1$	Company with a stable high level of innovative development: 1) a moderate proportion of employees involved in IIP; 2) a high level of development of new technology; 3) a moderate rate of development of new products; 4) a moderate share of material resources allocated to IIP; 5) a high level of security of intellectual property (sale of patents and licenses to other organizations); 6) a high share of investments in IIP	Retention of positions due to: 1) increasing the efficiency of the use of personnel and information potential; 2) improvement of previously mastered products and technologies; 3) the creation, development and use of new products and processes; 4) achieving competitive advantages of an innovative product over similar products in the domestic and foreign markets; 5) ensuring the environmental safety of innovation.

Based on the presented group, the calculated value of the integral indicator allows us to attribute the company to the first group.

4. CONCLUSION

It is worth noting that TNCs, being an active participant in the global economy, contribute to the regulation of international economic relations, are leading in terms of investment, research and patents, and also have great potential for influence on government and international structures due to the large transnationalization and amount of resources. However, Russian companies, in particular, PJSC Gazprom, prefer to use foreign equipment and technologies, rather than create their own. It is also worth noting the lack of effectiveness of the current Russian legislation governing company's innovation activity; the high cost of introducing and mastering innovations; long-term innovation investments; lack of a modern technological base for the introducing of developments; lack of qualified personnel capable to manage effectively the innovation process at the company level; the need for the company to have an appropriate organizational structure for managing promising technological development necessary for the effective coordination of innovation; difficulties with an innovative product making marketing research in an unstable domestic economic situation. Along with these measures, it is necessary to strengthen antitrust control of TNCs [3].

LITERATURE:

1. Bodyienkova V.S., Desyatnichenko D.Y., Kondyukova E.S. The influence of transnational corporations on the world economy. *Economic relations*. - 2017. – Vol. 7. - No. 3. - P. 269-278.
2. Central Bank of Russia, official website [Electronic document] URL: https://www.cbr.ru/statistics/macro_itm/svs/
3. Chirikhin S.N., Sysoeva L.I. Behavioral approach to the analysis of the state of competition in commodity markets. *Bulletin of NSUEM*. - 2017. - No. 3. - P. 311-328.
4. Efremov V.S., Vladimirova I.G. International companies: the scope, structure and development trends. *Economics: yesterday, today, tomorrow*. 2018. Vol. 8. No. 10 A. - P. 400-412.
5. Fortune Global 500 Official Website [Electronic Document] URL: <https://fortune.com/global500/>
6. Kalugina N.N., Mikhailov A.B., Ilyina E.V. The place of TNCs in the world economy and the need for state regulation of their activities. *Russian Journal of Entrepreneurship*. - 2010. – Vol. 11. - No. 3. - P. 17-23.
7. Kovtun O.I., Angelskaya E.A. Institutional approach in world trade: the role and importance of informal institutions. *Center for Innovative Technologies and Social Expertise* -2019. - No. 4 (1). -P. 355-368.
8. Lensky E. V., Tsvetkov V. A. Transnational financial-industrial groups and interstate economic integration: reality and prospects. M.: AFP Weekly "Economics and Life", 1998. - P. 266.
9. Maximov I.O., Filatov S.A., Kovtun O.I. The interaction of domestic TNCs and socio-economic systems of Russian society: an aspect of a social contract. *Management Issues*. 2017. No5 (48). - P. 67-76.
10. Maximov I., Kotun O., Ivanenko M. The role of corporations' social contracts in the Russian society development. *Economic and Social development: 49th International Scientific Conference on Economic and Social development*. - "Building Resilient Society" / Book of Proceedings. - Zagreb, December 13-14, 2019. - P. 236-243.
11. Mykhailyshyn L.I., Svirskiy V.S. Current trends of transnationalization of economic activity: innovative aspect. *Marketing and management of innovations*. – Vol. 2. – 2017. – P. 204-210.

12. Nawan A., Intarahumnerd P. Interaction between host countries' innovative systems and investment strategies of transnational corporations: a case-study of US-based conglomerate. *Institutions and Economics*. No 5(2) – P. 131-154.
13. UNCTAD, Official Website [Electronic Document] URL:
<https://unctad.org/en/Pages/Home.aspx>
14. Ulyanov A.O. Influence of transnational corporations on the development of innovations in the global economy. *Baikal Research Journal*. 2013. No5. - P. 19-26.
15. World Investment Report 2015. Transnational Corporations and the Internationalization of R&D / United Nations. New York; Geneva, 2015. - P. 1-6.
16. Yashin S.N., Schekoturova S.D. Application of the methodology for assessing the effectiveness of innovative development of an enterprise using the example of PJSC Ruspolimet. *Finance and Credit*. 2016. No47 (719). - P. 27-46

THE APPLICATION GIS AND REMOTE SENSING DATA TO THE DEVELOPMENT OF A MULTISCALE SOIL INFORMATION SYSTEM

Anna Pavlova

Novosibirsk State University of Economics and Management, Russia

Siberian Federal Scientific Center for Agrobiotechnology, Russia

annstab@mail.ru

ABSTRACT

Today an ever more active development of technologies to obtain, store, process and provide information about soil resources using geographic information systems and remote sensing data. Time series of remote sensing data can be created to monitor changes in landscapes at local to regional scales. Land-cover change detection techniques are based on the comparison of sequential land cover maps derived from remote sensing data or other sources for the same area. For every sampling unit of the maps, the land cover categories at the two dates are compared. Application areas of remote sensing are very wide in the Earth environmental monitoring and process studies of the Earth systems into atmosphere, ocean, soils, land use. The best known are SOTER, EUROPEAN SOIL DATABASE, Canadian SOIL INFORMATION SERVICE (CANSIS). The Soil Geographic Database of Russia contains the Geographic Database and Specialized Attributive Database. Than system was realized on two levels (coverages) (the Soil Map of the RSFSR on a scale of 1: 2.5 M; COVERAGE 2 is the digital map of the administrative division of Russia at a scale of 1: 1 M). On these soil maps the contours are strongly generalized. Regional soil information system need to be developed. In article we offered the multiscale soil geographic information system developed on the example of the Novosibirsk region. This system contains a geodatabase and a soil attributive database, using a variety of sources: cartographic maps and literature, field data, as well as remote sensing data - Sentinel 2, Landsat 8, aerial images from unmanned aerial vehicle. Geodatabase developed with GIS ArcGIS 10.6.

Keywords: *soil database, remote sensing data, geodatabase, land assessment, geographic information systems*

1. INTRODUCTION

Global and national soil-geographic information systems for soil resource assessment and management, agroecological zoning and sustainable land management are being actively developed. World Food and Agriculture Organization of the United Nations [1-3]. The joint work of FAO and UNESCO resulted in the development of the first global soil database, which was used to monitor climate change, address food challenges and study soil degradation. At the same time this card had the small scale 1:5000000 (1:5 million scale), contained the description on 4931 soil to contours and combinations of various types of soils (4331 mapping units consisting of soil associations, with are mixtures of different soil types). However, the small scale of such a map does not allow it to be used for management decisions of agricultural enterprises (but low resolution of this map is not sustainable for land management decisions at field). This map has been used for expert assessment of the degree of soil degradation, later referred to as the GLASOD Map. The GLASOD Map also had a fine scale (1:10 million scale). The modern version of the digital soil map of the world GlobalSoilMap .net is presented as a GRID model, has a higher spatial resolution of 90 m (a grid resolution of 90 by 90 m). This map is used for digital soil mapping and for modelling and predicting changes in soil properties [4]. A number of countries have established new types of national soil information networks. A distinctive feature of such systems is the integration of various data sources obtained from remote sensors, field measurements, Internet resources, cartographic sources, etc.

The best known soil-geographic information systems are SOTER [5], European Soil Database, Canadian Soil Information System (CANSIS) [6], American US General Soap Map [7], Australian - ARSIS (Australian Soil Resource Information) [8] and others. In Russia, a national soil-geographical database is being developed, representing two components of a specialized attribution and geography database. The system is realized at two territorial levels with use of scales of a cartographic basis 1:5000000 (1:5 million scale) and 1:1000000 (1 million scale) [9-10]. Small-scale soil maps are not useful for the detailed assessment of land use (farm) and the development of agricultural management solutions. The aim of the research was to develop the structure of a multi-scale soil information system using the example of the Novosibirsk region of Russia. Research materials and methods. The length of the Novosibirsk region from west to east is more than 600 km, from north to south to 400 km, and the area is 177.8 thousand km². The main materials of research in the work were soil map of Novosibirsk region and large-scale soil maps of individual farms (M 1:25000), results of field icing, as well as data of remote sensing of the Earth. Remote sensing of the Earth are represented by space images of Sentinel-2, Landsat-8, ALOS DSM, as well as digital images obtained in the process of aerophotography from unmanned aerial vehicle (UAV). Sentinel-2 is a family of satellites developed by the European Space Agency in the framework of the scientific project Copernicus for global environmental monitoring on the management of land, vegetation, forest and water resources, atmospheric assessment, etc. Images of Sentinel-2 covering parts of the Earth and water surface up to 290 km are characterized by high spatial and spectral resolution with 13 spectral channels in the range of electromagnetic wavelengths from 443 to 2190 nm (including three channels intended for atmospheric correction), in the panchromatic wavelength range - 10 nm, and thermal - 60 nm [11]. Space images of Landsat-8 and Sentinel-2 were used for preliminary thematic mapping of fields and working areas, reconnaissance of terrain. The work uses the global ALOS DSM (The Advanced Land Observing Satellite Digital Surface Model, Japan), which is characterized by spatial resolution of 30 m. Space images of ALOS DSM are characterized by spatial resolution of the raster model of 30 m [12-13].

2. RESULTS

The developed structure of the soil information system contains the following data sets in digital models in quantitative and qualitative forms, as well as in the form of vector and raster models. The vector representation is contained in one-dimensional and two-dimensional models. The one-dimensional model is used to describe and coordinate soil sections, vertical structure of soil profile. When describing the soil profile structure, symbolic data types are used, and quantitative indicators are used to characterize the profile and coordinate the profile. The two-dimensional data model serves for soil contours on the digital map, the study of spatial patterns of soil distribution, and the estimation of contrast and heterogeneity of the soil cover. Such a two-dimensional model contains character, numerical data types and is resonated in vector and raster GIS models. The three-dimensional model in essence is represented volume three-dimensional model for digital mapping of agrolandscapes, digital expected soil mapping of characteristics of soils in space. Soil-information system contains specialized attribution base and soil-geographical base with spatial classes of objects. The logical model of the soil information system is based on the principle of an object-oriented approach. The developed agricultural land database is essentially a physical repository of geographic information in terms of the DBMS used and the file system adopted. This allows you to access and operate, that is, access and edit data with a physical instance of datasets directly in the ArcGIS environment or in a database management system using the MS SQL Server DBMS. The BGD software logic provides general application logic used throughout the ArcGIS to access and work with all geographic data in various files and formats, including support for working with the BGD itself, working with neck files, GRID, TINs, images, and many other GIS data sources.

The BGD supports a transaction model for managing information flows. In general the designing process of the database included the main stages: design of conceptual model, datalogical, logical and physical design. At the initial stage of database design, the design of the conceptual model involved the selection of a data organization model. The content of the database is determined by the object and subject of the studies and the tasks for which it is intended: systematization and visualization of information about the territory; Classification of agricultural land; Research related to the use of agricultural land information. Conceptual design enables you to choose the structure of your information organization by combining your information requirements. Implementation design (logical design) identifies two components: database design and program design. The result of the first part is the logical structure of the database. The second part results in functional descriptions of software modules and sets of queries to the database. The developed conceptual model of the database includes as the main information object - type (subtype) of soils, to which "binding" of database entities is carried out. The structure of the soil database defines the entities, content of soil types (subtypes) and soil criteria (morphological, chemical and physicochemical, agrochemical, agrophysical, degradation signs (Figure 1) [14-15].

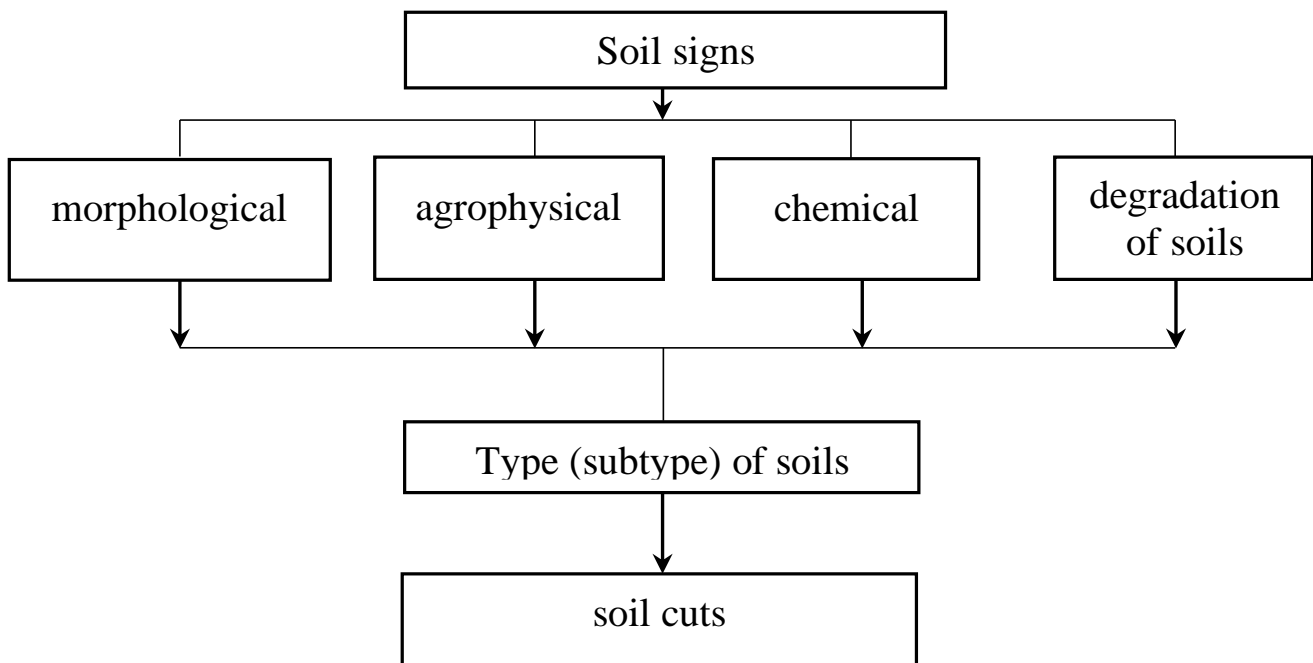


Figure 1: Soil Database Conceptual Model

Tables describing soil types and subtypes of Novosibirsk region, 15 tables describing soil criteria, table describing soil sections have been created in the logical model of the database. The relationship between the tables is carried out on a many-to-many basis by means of a soil type (subtype) number (ID_tip). This allowed to structure information on soil indicators in the form of code, gradation of soil characteristic and general description. The logical model defines tables of the soil database: morphological characteristics (power of humus, transition, illuvial horizons, groundwater level); Chemical and physicochemical (content of humus in soil, content of humus and basic oxides in the sludge (colloidal) fraction of soils, acidity of soils, degree of salinization, degree of salinity); Agrochemical (mobile phosphorus, mobile potassium); Agrophysical (granulometric composition, productive moisture, equilibrium density, structure, water strength of aggregates); Signs of degradation (erosion, deflation).

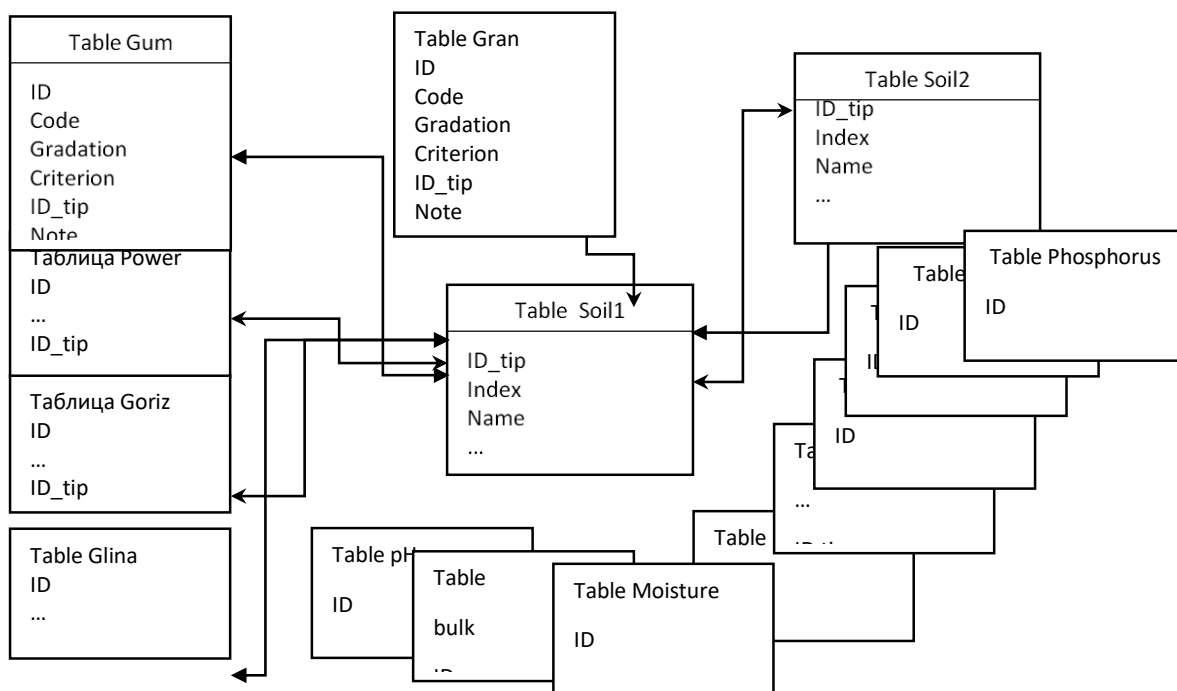


Figure 2: Logical Database Model

ID	Code	Gradation	Criterion	ID_tip	Note1
1	1	Очень м...	Менее 2...	13-40,57...	Таблица...
2	2	Мало...	25-40 ...	13-40,57...	Таблица...
3	3	Средне...	40-80 ...	13-40,57...	Таблица...
4	4	Мощные...	больше ...	13-40,57...	Таблица...
5	1	Мало...	менее 2...	1-12,61...	Таблица...
6	2	Средне...	20-40 ...	1-12,61...	Таблица...
7	3	Мощные...	больше ...	1-12,61...	Таблица...
8	1	Мелкие...	менее 1...	51-52 ...	Таблица...
9	2	Средне...	10-20 ...	51-53 ...	Таблица...
10	3	Глубоки...	больше ...	51-54 ...	Таблица...

Figure 3: Soil Criteria Tables in a Specialized Soil Database

The soil-geographical database will burn sets of spatial classes of objects: soils of the region, soils of the farm, soil sections, field observations (content of mobile elements of phosphorus, potassium and reserves of productive moisture).

Figure following on the next page

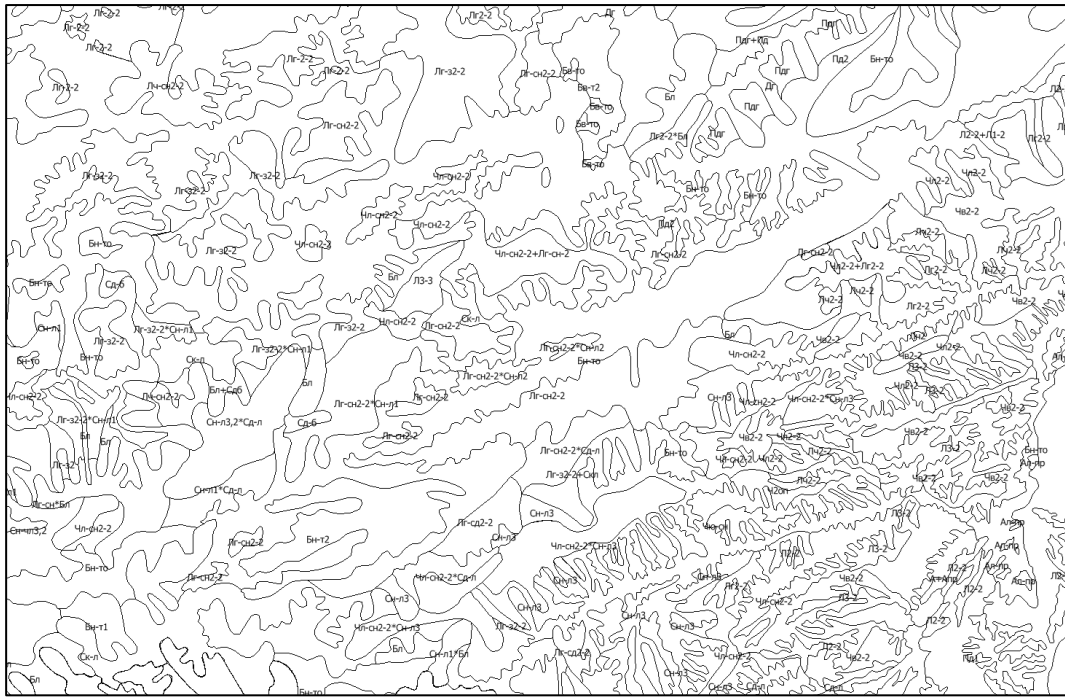


Figure 4: Soil map of Novosibirsk region

Modern global digital relief models contain a large number of artifacts (distortions), or topographic depressions associated with downturns or pits. This causes the screen cells to have no output value (ground point heights). At the same time, digital models of relief of higher spatial resolution show more irregularities (roughness) of the surface and, as a result, more local downgrades than digital models of lower spatial resolution [16]. In the work the digital model of relief built on the basis of space images ALOS DSM was corrected. This made it possible to obtain morphometric maps of relief at angles of inclination, elevation of slopes, depth of meth bases of erosion, etc. The geoinformation analysis of morphometric maps has shown that in order to obtain more detailed information on the elementary areas of the agrolandscape, the forms of the micro-relief, it is necessary to use digital models of higher spatial resolution using unmanned technologies. Aerial photography used a strikless camera with Sony A6000 replaceable optics, having an Exmor APS HD CMOS data recording matrix, a fast hybrid autofocus, a Bionz X processor, a 24 MP APS-C matrix (megapixels), and an electronic video searcher. Sony camera has different modes of focusing on objects: automatic, manual, frame-by-frame, continuous and semi-automatic (directmanual focusing). The Bionz X processor allows you to improve your image and reduce noise for high-quality snapshots. During the survey of the area with the aid of the UAV, certain weather requirements were revealed: wind speed, clouds, precipitation, humidity. With low clouds, there is a weak radio signal capacity between the UAV satellite receiver and the terrestrial satellite station, or there is no radio signal. Field satellite measurements using the TRIUMPH-LS satellite geodetic receiver were carried out for the purpose of construction of the M 1:1000 rhophotoplane. Based on the results of measurement processing, planned and high-altitude coordinates of reference points were obtained taking into account the location of two base earth stations of the satellite network of the Novosibirsk region - Kochenevo (KOCH) and Novosibirsk (NSKW). As a result of the digital processing of aerial photography, large-scale orthophotoplanes of the survey territory (M 1:1000) and the digital relief model (CMR) with a section height of 0.5 m have been created. The figure shows contours showing meso- and micro-relief elements. On the territory there are weak slopes with a slope of less than 3 degrees towards the Sharich River. Beds of drain and hollow also stand out. Absolute heights vary from 120 to 172 m.

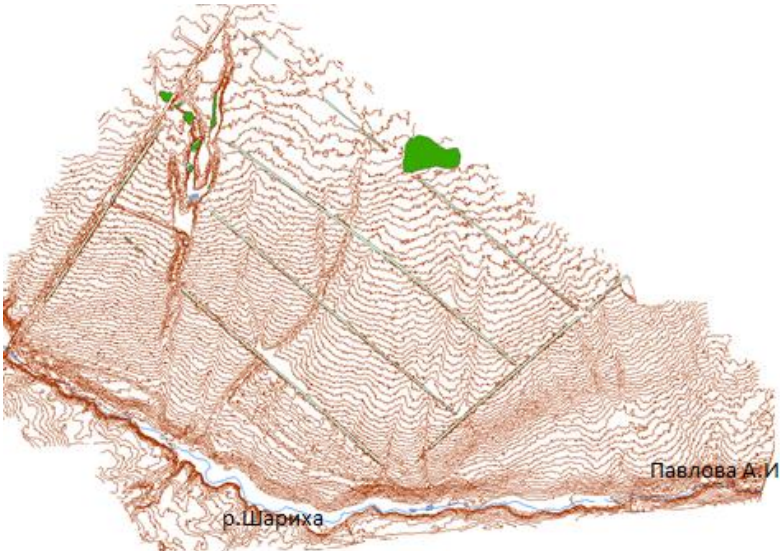


Figure 5: Digital model of a relief on the territory of the key site of Mirnyi of Kochenevsky district of the Novosibirsk region

In soil mapping and land assessment, soil maps remain the main source of information on spatial distribution of soils. In most cases, farms do not have up-to-date field soil survey materials or have significant deformities. According to the analysis, the available soil maps to the territory of Mirny do not meet the basic requirements for the compilation of digital maps - relevance, reliability of information, accuracy of the position of objects on the map. Soil maps have significant displacements caused by deformations of mapping material. At the same time displacement of contours on the map reaches 250-300 m. This leads to errors in position of soil contours on the digital soil map and accordingly to errors in calculation of soil area. The lack of material from the soil survey explanatory notes makes it difficult to work, and as a result, field work on the soil of the Territory has been carried out. As a result, the existing soil map was adjusted based on the results of space image decryption, orthophotoplane and morphometric terrain analysis. Figures 6-7 show fragments of a soil map of two key sites.

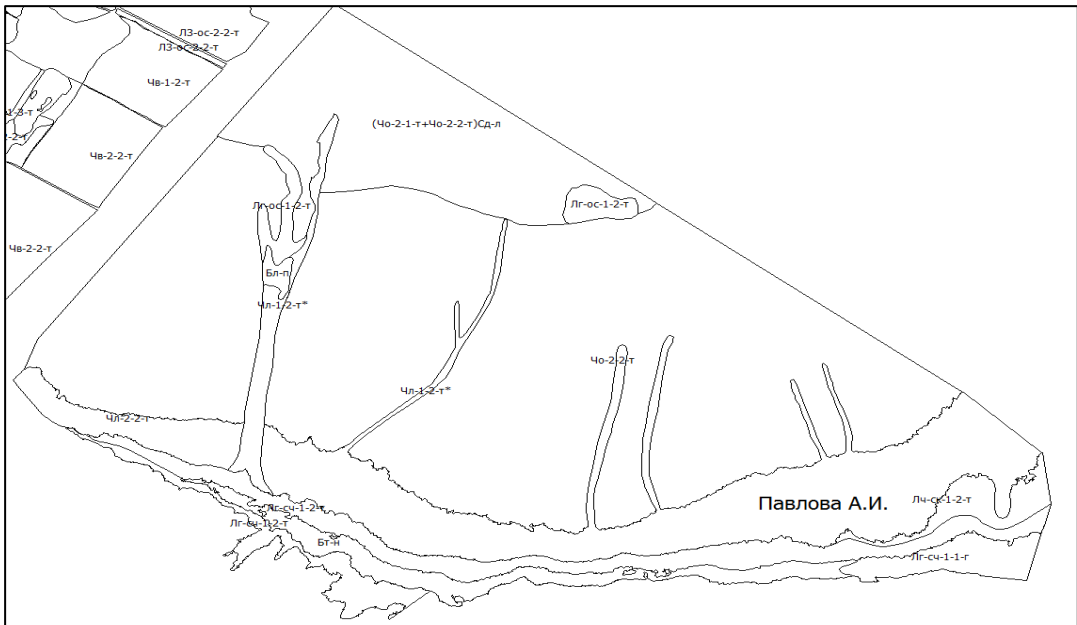


Figure 6: Adjusted soil map of the first key area

8. Soil and Landscape Grid of Australia
//<https://www.clw.csiro.au/aclep/soilandlandscapegrid/ProductDetails-SoilAttributes.html>
9. Soil-geographical database of Russia (2010) V.A. Rozhkov, I.O. Alyabina, V.M. Kolesnikov, etc.//Soil science. № 1. - S. 3-6.
10. Technologies and Standards of Information System of Soil and Geographical Database of Russia (2015) // O.M. Golozubov, V.A. Rozhkov, I.O. Alyabina, etc.//Soil Science. № 1. - S. 3-13.
11. Sentinel-2. The operational Copernicus optical high resolution land mission. (2015) URL: http://esamultimedia.esa.int/docs/s2-data_sheet.pdf (date of appeal 25.01.2020)
12. Precise Global DEM Generation By ALOS PRISM / T. Tadono, H. Ishida, F. Oda, S. Naito, K. Minakawa, H. Iwamoto // ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences. Vol. II-4. P.71-76.
13. Validation of AW3D Global DSM Generated from ALOS PRISM (2016) / J. Takaku, T. Tadono, K. Tsutsui K., M. Ichikawa // ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences / Vol.III-4. P.25-31
14. Pavlova A.I., Kalichkin V.K. Databases for Agroecological Land Assessment (2018)//Siberian Journal of Agricultural Science. № 1. - T.48. - P 80-88.
15. Creation of geodata bases for land assessment and grouping (2018) / VK.. Kalichkin, A.I. Pavlova, V.N. Shoba, A.V. Kalichkin //State and prospects of scientific support of the agricultural complex of Siberia: a collection of scientific articles dedicated to the 190th anniversary of the experimental business in Siberia, the 100th anniversary of agricultural science in Omsk Priirtyshand the 85 anniversary of EDUCATION. FSBNU "Omsky ANC" - Omsk: Ed. IP Maksheva E.A.. - P 122-125.
16. Pavlova A.I., Pavlov A.V. (2018) Analysis of methods of correction of digital models of relief built according to satellite data // Autometry. T.54. No. 5. Page 25 – 32.

WILL FRESH GRADUATES EXPERIENCE DIFFERENT STYLES OF MENTORING WHEN THEY ENTER LABOUR MARKET

Gabriela Kalinova

*Slovak University of Technology in Bratislava
Vazovova 5, 811 07 Bratislava, Slovak Republic
gabriela.kalinova@stuba.sk*

ABSTRACT

People are different regarding their work engagement, inner motivation, professional performance results. On other hand they behave very similar within specific roles regardless of the type of organization they work for. Based on this phenomenon our paper is focused on research of University and Industry interface, sustainable employability of engineering graduates. A hypothesis was determined for this purpose: Both parties, University teachers and corporate managers are using the same competences, communication patterns and kinds of behaviour at the time they perform the role of mentor. Comparison came from two key premises (1) Undergraduate engineering education is focused on student-centred learning and teaching style, (2) Corporate development programs are consistent with Mentorship Pipeline strategy. The research was carried out on one side at University of Technology in Bratislava and on other side at international producer of clay blocks, facing bricks and clay roof tiles located in Czech and Slovak Republic. Comparison analysis was realized inside the University was through questionnaire survey. As a methodological basis was used European Mentoring & Coaching Council competence categories further elaborated into list of Core Mentor's Competences appropriate to student-centred teaching environment. Survey was carried out in cooperation with teachers from seven University's faculties. Corporate philosophy regarding the status of managers as mentors represents four core values, Competence Model and the HR program "The Roadmap for Future Corporate Leaders". To be able to confirm our hypothesis the correlation with adapted EMCC mentors' competences was accomplished. The intention was to structure recommendation into three areas. (a) For University – systemic changes toward teachers' duties and responsibilities, measures of teaching performance, didactical method, flexible schedule. (b) For company – proposal for redesign assessment criteria regarding needed competences for future mentors. (c) For a common alignment University and company – proposal for joint activities focused on target group of future mentors.

Keywords: *Best-Place-to-Work, Mentorship, Student-Centred Learning, University-Industry Alignment*

1. INTRODUCTION

University and corporate interface, strong, lasting relationship based on mutual benefits and collaboration focused on synergy of values for both organisations significantly determine sustainable work employability of engineering graduates, how successful they enter the labour market. The be able to analyse the level of mentorship-oriented interface between these both organizations it was necessary to find out the compliances and diversities of characteristics. The Table 1 bellow shows the results of a comparison of these characteristics:

- HR principles and rules
- Key competences
- Processes and programs
- Main focus/ strategy and tactics
- Formal versus informal approach
- Types of key initiatives/ events

- Parties involved
- Time frame.

University Environment (Teacher/ doctorand in the role as mentor)	Corporate Environment (Manager/ employee in the role of mentor)
Reputation	Sustainable competitiveness
Quality of curricula	Corporate knowledge transfer
Educational process	Product/ services and sales process
Focus on knowledge	Focused on experience
Focus on personal life/ growth	Focused on career path
Informal mentoring approach	Formal mentoring approach
On voluntary basis	On corporate rules basis
Time formal: study period	Time frame: employment's contract

Table 1: Characteristics of mentorship – oriented interface

People are different regarding their activities engagement, inner motivation, professional performance results. On other hand they behave very similar within specific roles regardless of the type of organisation they work for. Based on this phenomenon mentor's core competences were selected as characteristic for further research. Finally, a hypothesis was determined for our paper: Both parties, university teachers and corporate managers are using the same competences, communication patterns and kinds of behaviour at time they perform the role of mentor. Our research come from these two key premises: (1) undergraduate engineering education is focused on student-centred learning and teaching styles, level of didactical competences of teacher are in accordance with this requirement, (2) corporate culture and values, managers development programs and successor planning procedures are consistent with Best-Place-to-Work and Mentorship Pipeline long-term competitive ability strategy. The intention was to structure recommendations into three areas: a) for university systemic changes towards student-centred learning regarding relationship between teachers and students and to strengthen the use of collaborative educational methods, b) for company to adapt some principles or rules into current development scheme to provide employees and managers with opportunity to assume authority and responsibility for their role of mentor and support individual efforts for self-insight, b)c) for university and company collaboration – to choose a theoretically verified concept for designing joint development program focused on mentoring skills which will support, elevate and protect the interests of both organisation.

2. THEORETICAL AND INSTITUTIONAL PLATFORM FOR THE RESEARCH PLAN

Over the years several studies have shown the importance of mentorship. Ehrich et al. (2004) conducted a meta-review analysis of more than 300 research – based articles on mentoring in (mainly) education. Mentorship is a “developmental process of open dialogue that aims to achieve both individual and organisational change thought shared understanding and suspending judgement within a relationship of mutual learning in which differences that exist are perceived as integral to learning, growth and development” (Clutterbuck, et al. 2017). The relationship based on mutual trust is critical precondition. Conversations between mentor and mentee are more than transactional. They may operate at all seven levels of dialogue, as described elsewhere by one of the editors (Megginson and Clutterbuck, 2005) – social, technical, tactical, strategic, for self-insight, for behaviour change and integrative (work and life). The stated research hypothesis has been tested on one side in Slovak University of Technology (University teacher as mentor) and on other side in multinational producer of clay blocks, facing bricks and clay roof tiles located in Czech and Slovak republic (manager as

mentor). The reason for selecting these two organisations was the fact that this university is preparing students directly for job positions of this company. Company consists of 10 manufactories, HR department and Share Service Centre and is a part of an international supplier of innovative building materials and infrastructure solutions. Corporate philosophy of this company represents four core values: Customer, Challenge, Collaboration, and People. Regarding engineering graduates as potential future employees, the most relevant statements are:

- We approach our work with a positive attitude and focus, while putting our best efforts to accomplish our goals, we proactively search for tasks that need to be done.
- We actively support and participate in collaborative work to ensure tangible performance results.
- We provide people with opportunity to assume authority and responsibility for their work.
- We recognize that every employee's capability is important to our organisation, and support individual efforts for personal development.

This corporate's core value guarantees continuous professional development for engineering graduates which will be capable of addressing complex working task in a sustainable way. Employee's development program and successor's planning procedures are embedded in an official company's document "The Roadmap for future corporate leaders". This document is divided into four so called development phases starting from Local Talent Management ("Warm-up") phase, then International Talent Management ("Run-way") phase followed by Successors ("Take-off" phase), and finally Mentors ("Launch-control Mode") phase. Employees involved in first phase are specialists or managers at operational level of management. While succession planning is obviously important, company's belief is that talent management must encompass a far broader range of employees. Selection procedure is designed foremost in relation to business objectives, additionally includes six complementary components: (1) Learning Agility, (2) Personal Attitudes, (3) Inner Drivers /Self-motivation, (4) Positive Attitudes to the Values of Company, (5) Multilanguage's Agility, and (6) Change Agility. Participants involved into second phase are managers at different levels of management, which demonstrated potential for further professional growth in accordance with business long-term objectives within the succession planning. Participants involved into third phase of management development are employees working in the positions of specialists and / or managers at different levels of management which are included into succession plans for higher position (current or completely new). Participants involved into fourth phase are employees on the key position as specialists or managers at higher management level. Slovak University of Technology (STU) in Bratislava is a modern educational and scientific institution [4]. Since its foundation in the year 1937 more than 159.000 students have graduated. In average, 12.000 students' study at the STU every year. At present, the STU consists of seven faculties based in Bratislava and Trnava. All the faculties provide a study in accredited study programmes within the complex system of a bachelor, master and PhD. study. Faculties realize credit system compatible with the European credit transfer system enabling mutual mobility of students within European Union member countries and a larger European space. In the area of scientific and research activities the STU successfully joints European Union programmes. In February 2017 The Scientific Board of STU established the need to reform existing education programs, and practices to better prepare engineering students for confronting sustainable issues. Students need not only intellectual development but also learner-centred environment and active methods integrated into engineering curricula (STU, 2019).

3. RESEARCH AND METHODOLOGY

Quantitative method of collection data was used and research was guided by different approaches for university environment and company environment.

- University environment:
Step 1. Based on European Mentoring and Coaching Council (EMCC) competence frame/categories the task was to specify adequate mentor's competences according student-centred learning environment and to design questionnaire. Step 2. To conduct a questionnaire survey on a sample of university teacher (Assoc. Prof.) and doctorands (Ph.D.). Step 3. To assess following null and alternative hypothesis: H_0 : There is no statistically significant link between a teacher category Assoc. Prof. and category doctorand Ph.D. regarding mentor competences. H_1 : There is a statistically significant relationship between teacher category Assoc. Prof. and category doctorand Ph.D. regarding mentor competences. Step 4. To formulate the results of the target research hypothesis and to discuss possibilities and conditions for alignment of mentoring styles between STU and selected analysed company.
- Company environment:
Step 1. To find out company's corporate philosophy in relation to mentoring (source: Corporate four core values). Step. 2. To assess goals and structure of development scheme for employees and managers as future mentors (source: HR document "The Road for future corporate leaders"). Step 3. To propose extension or supplement of current version of this document by training and coaching programs focused to mentorship topics. Step 4. To formulate the results of the target research hypothesis and to discuss possibilities and conditions for alignment of mentoring styles between selected analysed company and STU.

Comparison analysis inside STU was realized by use of questionnaire survey. As a methodological basis was used European Mentoring and Coaching Council (EMCC, 2015) competence framework. The purpose of the competence framework is to provide a description of a mentor/coach at four distinct levels of development in order to help mentors/coaches understand their level of development. The competence indicators are examples of behaviours or principles of the coaching profession that meet the eight competence categories. Clutterbuck (2017) describes these 8 competences: 1. Understanding self, 2. Commitment to self-development, 3. Managing the Contract, 4. Building the Relationship, 5. Enabling Insight and Learning, 6. Outcome and Action Orientation, 7. Use of Models and Techniques, 8. Evaluation. As a part of early stages of our research (Step 1. University environment) these competence framework/ indicators were further elaborated into list of Seven Core Mentor's Competences appropriate to student-centred teaching environment to evaluate behaviours of mentor of university teacher (Assoc. Prof. and Ph.D. categories): 1. Consistency/Personal Integrity (Demonstrating Confidence and Energy, Demonstrating Credibility, Demonstrating Conviction, and Taking Ownership for Leading the Dialogue), 2. Relating (Building Trust, Rapport and Mutual Values, Using Acknowledgement, Showing Empathy and Respect, Establishing Common Rules and Communication Process and Structure), 3. Insight (Developing Multiple Channels of Information, Using Principle of Networking and Linking, Considering the Various Implications and Scenarios, Assessing the Integrity of Legitimacy, Credibility, Relationship, Needed Resources and Personal Commitment), 4. Probing/Drawing Out (Using Hierarchy of Open Questions, Avoiding Multi-Tasking, Using Appropriate Phrasing, Encouraging the Speaker to explore and clarify his/her Thinking, 5. Listening (Paraphrasing, Suspending Judgement, Physical Attending, Using adequate Pace, Silence, Patience, Pauses, Attuning to Feelings, Expressing Empathy, Reducing Physical and Mental Distractions, Using verbal and non-verbal Acknowledgement, and Summarizing, 6. Aligning (Requesting Clarification, Reflecting Feelings, Keeping Dialogue Interactive, Appealing to

Both Rational and Emotional Mind, Monitoring Level of Attentiveness and Engagements, Describing and Checking Common Understanding, Linking the Differences of Views, Demonstrating Positive Attitude, and Checking for Feedback, 7. Tracking (Verifying Personal Readiness, Concerns about Loss of Control, Exploring the Decision-making Process, Need for Support, Agreement on Time-schedule, Milestones, Summarizing the Very Next Steps, Events, Sharing and Aligning Responsibilities for Follow-up). The survey sample of participants was composed of two categories of teacher – 36 in the category of Assoc. Prof. and 16 in the category Ph.D. participated in the survey. Each survey participant had the opportunity to evaluate themselves on a five-level scale (less than 20%, 21-40%, 41-60%, 61-80%, more than 81%). The main focus (step 2 University environment) was to analyse the outputs from a questionnaire survey on a sample of two categories of university teachers. The result is numerically in the Table 2 and Table 3.

Core Competence	20%	40%	60%	80%	100%
Consistency/Personal Integrity	0	0	7	29	0
Relating	0	1	11	24	0
Insight	0	7	14	15	0
Probing/Drawing Out	0	3	10	23	0
Listening	0	0	6	30	0
Aligning	0	5	12	19	0
Tracking	0	14	15	7	0

Table 2: Core Competences of Assoc. Prof.

Core Competence	20%	40%	60%	80%	100%
Consistency/Personal Integrity	0	4	5	7	0
Relating	0	2	9	5	0
Insight	0	0	16	0	0
Probing/Drawing Out	0	4	3	9	0
Listening	0	0	6	10	0
Aligning	0	6	4	6	0
Tracking	0	3	8	5	0

Table 3: Core Competences of Ph.D.

Subsequently, the graphical representation Figure 1, and Figure 2 provided clearly the starting points for more in-depth analysis.

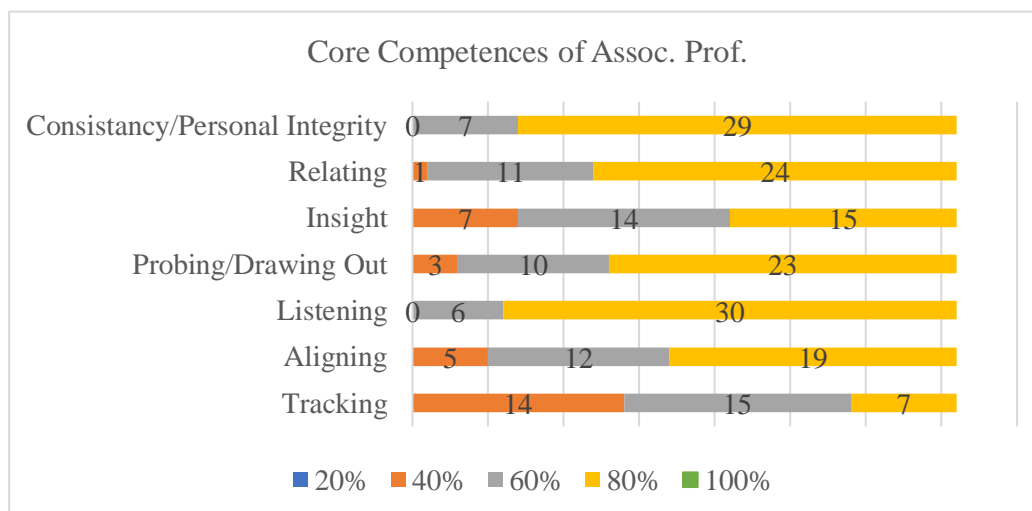


Figure 1: Core Competences of Assoc. Prof.

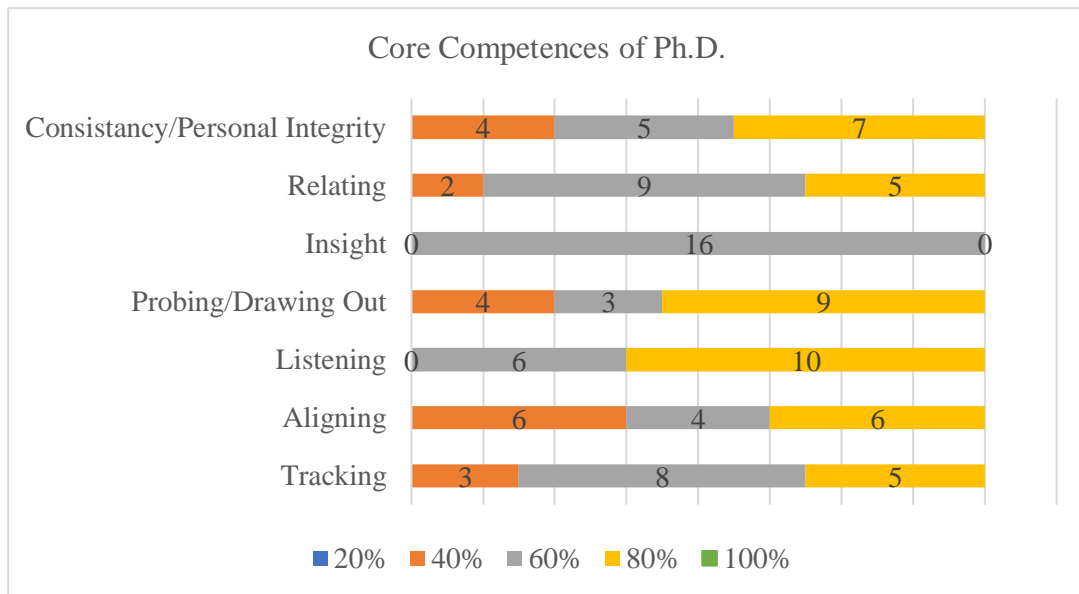


Figure 2: Core Competences of Ph.D.

The university teacher category Assoc. Prof. proves to be as very strong in the competences Consistency/Personal Integrity and Listening. On other hand, competence Tracking is clearly underdeveloped and also the competences Insight and partly Aligning needs to be supported. The university teacher's category Ph.D. is characterized by a relatively even distribution of frequencies among the scales. This phenomenon is due to very individual development level based on age and length of working relationship with at the University. The competence Listening proves to be as very strong, competences Relating and Tracking are characterized by a normal distribution of frequencies. The need for support shows up in competence Insight and also on an individual basis for Probing/ Drawing out and Aligning. As a highest priority for further development must be seen the competence Consistency/ Personal Integrity. For both target groups are identically competences Listening (very strong) and Insight (medium weak). As very different between category Assoc. Prof. and category Ph.D. are competences Consistency/Personal Integrity (very strong versus very individual), Aligning (weak versus very individual) and Tracking (very weak versus normal distribution). This part of the analysis can be concluded by summarizing the development needs:

- For both university teacher categories Assoc. Prof. and Ph.D.: competence Insight,
- For university teacher category Assoc. Prof.: competence Tracking and competence Aligning (by the use of sub-group training methods and team-coaching),
- For university teacher category Ph. D.: competence Consistency/Personal Integrity and Aligning (by the use of individual training methods and coaching).

Core Competence	Assoc. Prof.	Ph.D.
Consistency/Personal Integrity	76%	64%
Relating	73%	64%
Insight	64%	60%
Probing/Drawing Out	71%	66%
Listening	77%	73%
Aligning	68%	60%
Tracking	56%	63%
Average	69%	64%

Table 4: Core competences of teacher (both categories)

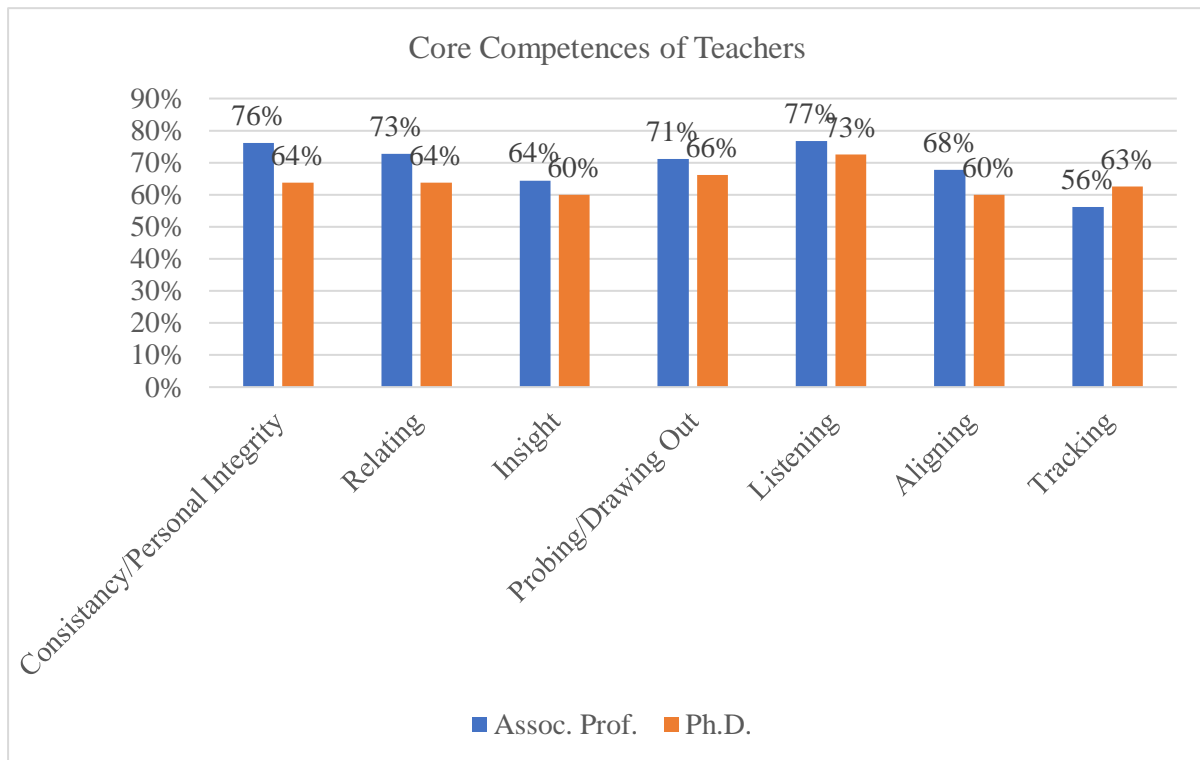


Figure 3: Core competences of teachers (both category)

Step 3 was focused on assessment of null and alternative hypothesis. For statistical testing of the null hypothesis the Pearson chi-square test (χ^2) was used. We followed these steps (Turner, 2014):

- Compilation of a contingency table for observed frequencies (O) and subsequently for expected frequencies I according to the formula $E_i = r_i \times c_i / I$, while r_i – sum of rows, c_i – sum of columns, i – the sum of all elements
- The choice of the level of alpha signatures to be tested is 5% ($p = 0.05$)
- Determining the number of degrees of freedom dF, formula $dF = (r-1) \times (c-1)$ (for dF = 1, the tabular value is 3.84)
- Calculation of the Chi-square cut-off value at the selected significance level.
- Calculation of Chi square $\chi^2 = \sum i (O_i - E_i)^2 / E_i$
- Comparison of the calculated Chi-square value with the Chi-square table value at the selected significance level.

Contingency table for observed frequencies (O) on the question of the relationship between the teacher and his / her mentoring competences:

Observed frequencies	Yes	Non	Total
Teachers (Ph.D.)	16	4	20
Teachers (Assoc. Prof.)	36	19	55
Total	52	23	75

Table 5: Contingency table for observed (O) frequencies

Specification of a dependent and independent variable: Independent variable: job position (teacher with Ph.D., Associate Professor). Dependent variable: mentor competence. Formulation of hypothesis: H_0 : There is no statistically significant link between a teacher Ph.D./Assoc. Prof. and mentor competences. H_1 : There is a statistically significant relationship between the teacher Ph.D./Assoc. Prof. and mentor competences.

Observed frequencies	Yes	Non	Total
Teachers (Ph.D.)	13,87	6,13	20
Teachers (Assoc. Prof.)	38,13	16,87	55
Total	52	23	75

Table 6: Contingency table for expected (E) frequencies

Determination of the number of degrees of freedom dF by relation: $dF = (2 - 1) \times (2 - 1)$

$$dF = 1$$

To determine the table value for the corresponding Chi-square at the number of degrees of freedom: Tabulated Chi-square (0.05) = 3.84. Decision: Since the tabulated Chi-square value (3.84) is higher than the calculated value (1,387), we can conclude that we do not have sufficient evidence to reject the hypothesis H_0 . So, we say that in the research sample there is no relationship between variables, job position and mentor competence. The research inside the company was intended to find out company's readiness to employ Slovak University of Technology (especially Faculty of Civil Engineering) engineering graduates and during their adaptive phase and subsequent continuous development to apply the mentoring style they experienced during their university studies. The analytical part of the research was based on survey of corporate values and HR document called "The Roadmap for future corporate leaders" with the focus to competence development programs for the role of mentor. A series of workshops was organized in each plant and at all departments in the headquarter. After then a round table took place with representatives from all sections, i.e. production, marketing, sales, share services centre, controlling and finance, HR, and top management. As additional sources for research were internal company's rules and guidelines, processes and procedures regarding HR issues, mainly towards Competence models, Talent Management, Succession Planning. Also, concepts Personal and Employer Branding, People Pipeline created a link for our thoughts and suggestions. As the result of step 2 (company environment) it was found, that there is a need to invoke desired emotional responds, new quality of personal responsibility and consciously work to reduce the impact of biases, especially saliency bias, negativity bias, and confirmation bias. Among other identified support needs was fears of loss control and understanding perspectives and align on the solution.

4. RESULTS AND DISCUSSION

To strengthen the justness of research hypothesis the proposal is to adapt and extent company's HR development program "The roadmap for future corporate leaders" and allow managers to develop their competences in following areas:

- In the first phase – Local Talent Management (Self-determination and personal growth): Effective mentorship is based on the practicality how the mentor is able to advice alignment with mentee toward a shared vision. The most problematic misalignments are from fear and assumptions. The aim is to strengthen the confidence, courage and skill to effectively engage in mentorship and overcome regret aversion.
- In the second phase – International Talent Management (Socio-communication Aspect of Mentorship): The single biggest problem in communication is the illusion that it has taken place. Peoples' brain cause communication breakdowns – they are subject to listening filters and biases. The aim is to consolidate the cognitive ability, harmonize the factual, social and emotional contexts regarding mentor's role and rising awareness toward own biases.
- In the third phase – Successors (Brief Mentoring Dialogue): To the key characteristics of mentoring dialogue belongs making the communication partner/mentee feel "heard", adding values with good questions, tailoring a common solution and positioning yourself

as an ally. The aim is to help the mentor to inspire mentee to “aspire” for what he/she truly wants. To experience dialogue based on subsequence of the steps (Objectives/Needs – Current Situation – Level of Satisfaction – Future Needs – Personal Readiness - Tracking Path).

In relation to research results at the Slovak University of Technology a development program has been designed as follow:

- For both categories Assoc. Prof. and Ph.D. (The Power of Insight): The power of the mentor competence Insight is the foundation upon which the power of all other core competences are built. Without information – a lot of good, reliable information regarding mentees – the mentors cannot develop this kind of competence. Insight is the power to see into a mentees’ situation – beyond the obvious. Indicators can be prior information provided by a mentee or by other individuals inside university environment or also from his/her personal zone, private life. It is also important to assess the integrity of the information obtained.
- For the category Assoc. Prof. (Maintaining Relationship and Tracking): Asserting mentors’ perspective to guide or reframe mentees’ thinking can be mentoring relationship mentees’ motivational traits. These has a decisive importance for development of mentor’s competence Tracking which provides a roadmap to uncover and address mentee’s misalignment needed to reach to reach agreement on the right course of action.
- For the category Ph.D. (Mentor Personal Integrity): To strengthen the competence Consistency/Personal Integrity is needed to reframe junior mentors’ seeing their current situation from a different perspective. Showing a contrast can help them to be aware of their own thinking to make new cognitive connections and gain new perspective. Thinking about people’s thinking means to become passionate about improving mentor’s competence to pay attention not pay attention thinking about, but the way thinks.

5. CONCLUSION

The paper was dedicated to contribute to all three parties, i.e. Slovak University of Technology, selected company from the construction industry and engineering graduates with the aim to improve common sustainable development. It could be concluded that company’s core values positively support the hypothesis that “both parties, university teachers and corporate managers are using the same competences, communications patterns and kinds of behaviour at the time they perform the role of mentor”. Based on our research company’s HR development program The Roadmap for Future Corporate Leaders will be adapted and extended with three modules that will by gradually included in the phases Local Talent Management, International Talent Management and Successors. This will invoke the desired emotional responds and new quality of personal responsibility employees and managers in the role of mentor. Development program for Slovak University of Technology teachers and doctorand has been designed to integrate mentoring into active – teaching methods. For category Assoc. Prof. the mental transition from technical and professional skills (as expert/ individual contributor) to interpersonal and behavioural skills (as mentor) will strengthen their ability to use the power of insight, keeping dialogue with students interactive, appealing to both rational and emotional mindset and demonstrate positive attitude. For the category doctorands (Ph.D.) the main task was to create a standard regarding their consistency and personal integrity which will cover answers to following the questions:

- How to understand the role of mentor?
- What kind of core initiatives are involved to the role of mentor?
- What competences are needed for this role?
- How can be assessed and develop these competences?
- What are the person’s inner motivators to perform this role?

The development program for doctorands are also focused how to struggle with own thinking about mentees' thinking, misalignments and to provide awareness towards cognitive dissonance and confirmation bias. In order to practical verification of the research results the pilot project is now in the ready stage, the selection process of 15 participants has been already performed. Learning agility is one of the defining components of potential (Silzer, Church, 2009) and therefore the selection criteria were the key factors to get the teachers with willingness and capability to learn. Based on model of learning agility (Eichinger, Lombardo, Capretta, 2010) the approach of the following four facets of learning agility was used as assessment tool: (1) Mental Agility, (2) People Agility, (3) Change Agility, and (4) Results Agility. Finally each of selected teachers actively participated in our research questionnaire survey. This project will take place in the period May - July this year. EMCC competence framework elaborated into list of Seven Core Mentor's Competences represents theoretically verified concept for aligning mentorship understanding and related development programs. This will support the fulfilment of students' expectations according more learner-centred environment and also will contribute to a comparable mentor style whether at university or at the future employer.

ACKNOWLEDGEMENT: *The paper was created as part of the KEGA project 019STU-4/2018 The Process of Integrating Mentoring and Coaching into Teaching at Technical Universities.*

LITERATURE:

1. Clutterbuck, D. A. et al. (2017). *The SAGE Handbook of Mentoring*. SAGE Publications Ltd; 1 edition. p. 241-242. ISBN 978-1412962537.
2. Ehrich, L. C. et al. (2004). *Formal Mentoring Programs in Education and Other Professions: A Review of the Literature*. Educational Administration Quarterly 40. 4. p. 518-540.
3. Eichinger, R. W., Lombardo, M. M., and Capretta, C. C. (2010). *FYI for learning agility*. Minneapolis: Lominger International: A Korn/Ferry Company. p.19. ISBN 978-1933578217.
4. EMCC. (2015). EMCC Competence Framework V2. p. 2. Retrieved 10.10.2019 from <https://www.emccouncil.org/wp-content/uploads/2018/10/EMCC-competences-framework-v2-EN.pdf>
5. Megginson, D., and Clutterbuck, D. (2005). *Techniques for Coaching and Mentoring*. Routledge Taylor & Francis. p.17-18. ISBN 978-0-7596-5297-2. Retrieved 10.12.2019 from <https://www.davidclutterbuckpartnership.com/wp-content/uploads/Diversity-book-sample-chapter.pdf>
6. Silzer, R., and Church, A. H. (2009). *The pearls and perils of identifying potential*. Industrial and Organizational Psychology, 2. p. 377–412. ISSN 1754-9426
7. STU. (2019). *Slovak University of Technology in Bratislava*. Retrieved 11.11.2019 from https://www.stuba.sk/english.html?page_id=132
8. Turner, G. (2014). *Is it statistically significant? The chi-square test*. Retrieved 11.12.2019. Retrieved from http://www.ox.ac.uk/media/global/www.ox.ac.uk/localsites/uasconference/presentations/P8_Is_it_statistically_significant.pdf

RURAL HOUSEHOLD DECISION TO PARTICIPATE IN OFF FARM WORK: USING A DOUBLE HURDLE MODEL

Hussein N. Nassoro

Institute of Finance Management, Tanzania

hussein.nassoro@ifm.ac.tz

ABSTRACT

Rural Household decision to engage in off farm work, passes through two stages, firstly is the decision to participate and secondly is the extent or intensity of participation. Using the Tanzania national panel survey data, this study investigated factors determining household labour decision on whether to participate or not and intensity of participation using a double hurdle model. A likelihood ratio test confirmed that indeed participation is a two stage decision. Analytical results have shown that, marital status, land quality, farm size, level of farm output and household size are important variables that influence the decision to participate in off farm work. In addition, age, the dummy variable of male gender, marital status and land quality were the main determinants of the intensity of participation in off farm work. These factors should be considered in designing a rural development policy that focuses on promotion of off farm activities.

Keywords: Double hurdle model, off farm work, logit, Tanzania

1. INTRODUCTION

A long held view that farming is the only economic activity of the rural household has begun to change owing to proliferation of off farm works. Available literature is showing an increasing trend in off farm activities ((Maliyamkono and Bagachwa, 1990; Ellis and Mdoe, 2004; Mduma, 2006; Dimeva and Sen, 2010). Importantly is that, a significant amount of income is generated from these activities (URT, 2010, Barrette et al., 2001). Literature indicates that, about 50 percent of rural household income is generated from the off farm activities (Ellis and Mdoe 2004, Mduma 2006). This income has a low level of risk covariance compared to farm income and there is a possibility of using this source to purchase agricultural inputs and improve household welfare. Given the significance of the income, there is a possibility of using off farm activities as a potential pathway towards poverty reduction. Because of that, rural household labour allocation decision has become a major research topic. Researchers and development experts are particularly interested to understand factors which are affecting household decision to participate in off farm work. Apparently, most of the research studies which were done in this topic in Tanzania have modelled participation in off farm work as a single decision. This approach, preclude the possibility of having household which are willing to participate but have not participated yet due to various factors. In reconciling the fact, this study applies the double hurdle model to investigate household labour decision on whether to participate or not and extent of participation. In estimating these factors, the study applies the dataset from the National Panel Survey (NPS wave 1) collected by the National Bureau of Statistics. The layout of this paper covers issues related to rural household characteristics with a farm household model, methodology with details on an econometric approach, double hurdle model and estimation techniques. Finally, the analytical results are presented together with a discussion. The paper ends up with a conclusion and policy recommendations.

2. CHARACTERISTICS OF RURAL HOUSEHOLD

According to literature rural households make simultaneous decisions related to production and consumption (Udry and Bardhan, 1999, Singh et al., 1986). Such decisions are considered to be non-separable (Reardon and Corral, 2001, De Janvry and Sadoulet, 2001, Escobar, 2001).

Separation property is derived from twin assumptions of utility maximization and complete markets. It implies that the marginal productivity of inputs is derived solely from plot characteristics and the prices of farm produce. In this context, households are assumed to derive their production decisions as if they are risk –neutral profit maximizing firms. This is contrary to a situation in which factor demand is derived by the household characteristics and marginal productivities are not equated across household and production is not optimized. This theory lacks empirical relevance in a developing country such as Tanzania, where the behavior of farm households is different from what is prescribed (Mduma, 2006, Ahituv and Kimhi, 2002, Kimhi, 2001, Woldehanna, 2000). This argument is supported by Udry and Bardhan, (1999,) who argue that a separation property is more useful as a benchmark for comparison, rather than a basis, for empirical work. Thus, it would be better to represent rural households by a non-separable Farm Household Model. This model has been extensively applied by numerous studies to rural households' labour allocation behavior (Mduma, 2006, Ahituv and Kimhi, 2002, Kimhi, 2001, Woldehanna, 2000). In fact, a non-separability scenario reinforces the relevance of analyzing determinants of off farm labour supply among the Tanzanian rural households.

2.1. A Farm Household Model

On the basis of the description given above, this study adopts the model developed by Becker (1965), in which a household is described as production unit and a utility maximizer. Based on the model, decisions are made by a single person who is the head of the household consistent with studies done by Mduma (2006); Woldehanna (2000), Matshe and Young (2004) and Kimhi and Ahituv (2002). This household has the choice of engaging in both farm production and off farm activities or choosing just one activity. This is achieved through a combination of capital goods, raw materials and labour to produce useful commodities. The rural household is endowed with labour ll (being total hours) which can be allocated for working (allocated on farm production, off farm activities) and leisure. In Equation 3.1 below W represents the off farm wage rate, F stands for farm hours that are spent by a respective household, T is the total household labour hours, L stands for leisure time, and M represent the hours spend on off farm work. P is the price of consumption goods, while P_F represents the price of farm outputs, (Q) is the column for the vector of prices of other farm inputs, and X is the column for the vector of other inputs quantities. The letter A stands for non-labour income, such as remittances, which is a common phenomenon in developing countries. In this regard, it is important to point out that farm production (Q) is using farm labour, human capital (K) and other farm inputs denoted as the X vector above. In this context, a household seeking to maximize utility function is expressed as below.

$$U = U(q, L, \kappa) \quad 1.1$$

Subject to

$$Pq + r'X = wM + P_F Q(X, K, F) + A \quad (1.2)$$

$$T = F + L + M, \quad (1.3)$$

$$F \geq 0, L \geq 0, M \geq 0$$

2.1.1. Household Optimal Conditions

Based on the equations expressed above, a Lagrangian equation is generated. This equation is used to derive Kuhn-Tucker first order conditions while incomes are the major constraints facing the household.

$$P_F Q'_{xk} - r_k = 0, \text{ for all inputs} \quad (1.4)$$

$$K = 1, \dots, K$$

$$\lambda w - \gamma \leq 0, \quad M(\lambda w - \gamma) = 0, \quad (1.6)$$

$$\lambda P_F Q'_F - \gamma \leq 0, \quad F(\lambda P_F Q'_{FH} - \gamma) = 0, \quad (1.8)$$

$$U'_q - \lambda p = 0, \text{ and } U'_L - \lambda = 0$$

From the above equations λ and γ_i are Lagrange multipliers for the household income and time allocation. Solving equation (5) and (6) yield the following conditions:

$$\frac{U'_q}{U'_L} = \frac{p}{w}, \quad (1.9)$$

This equation suggests that the marginal rate of substitution between leisure and the consumption is equal to the ratio between price of the goods and the wage rate. In addition, we also derive that

$$P_F Q'_F = w$$

The value of the marginal product of labour is equal to the off farm wage rate. Our derivations are based on the assumption of interior solutions, such that an increase in the price of farm output or an increase in on-farm labour productivity would induce more supply of labour for farm production and less for off farm works, and vice versa. However, this will be determined by a number of factors.

3. METHODOLOGY

In order to model household participation in off farm work, this study applies reported hours allocated for off farm work by each particular household in the NPS dataset (2008/9). The dataset comprises households who were asked whether they participated in off farm work, or not, in a week that preceded the survey. In this case they reported positive and zero hours. The zero hours in the data set may signify a corner solution (voluntary decision) or inhibition factors (involuntary decision). The inhibition factors may range from personal disability, low level of education or relevant skills, and even remuneration attached to off farm work. Even if farm households are willing to participate in off farm work, several factors, such as rationing in the labour market and transaction costs related to search costs, information and other costs as elaborated earlier, may inhibit their participation (Woldehanna et al., 2000; Blundel and Meghir, 1987). Therefore, a household may have been a potential participant, but didn't engage in off farm work due to some reasons that were prevailing at that specific period. However, in the absence of those factors, a household can participate in off farm work.

This means that the decision to participate and the intensity of participation are two distinct decisions that are made by the household separately. Such household decisions are considered to be latent. A decision to participate or not will involve weighing between the net benefits of engaging in off farm work and the expected transaction costs (including what will be lost from farm production).

3.1. Econometric Approach

Determination of the household behaviour in allocating labour in off farm work is problematic if a standard regression analysis is used (Matshe and Young, 2004). The zero hours reported may imply a censoring effect, which would warrant application of a Tobit model. However, the Tobit model will combine the two decisions (participation and intensity) as a one hurdle. Another option is to analyze the two decisions separately using a Probit or logit model. However, there is a risk of estimating a non-random sample if this approach is used. To circumvent these problems this study adopts a double hurdle model, which is capable of capturing such behavioral aspects.

3.2. A Double Hurdle Model

The assumptions of this model facilitate measurement of the two latent decisions related to participation and the number of hours or intensity of participation in off farm work. Since it was established by Crag 1971, the model has been widely applied in consumer preference literature. However, subsequently it has been found to be useful in labour allocation studies (Woldehanna et al., 2000, Matshe and Young, 2004). Other studies which have applied the model include: Teklewold et al. (2006), IFPRI, (2011), Setsofias et al., (2013), and Asfaw et al., (2010). Amsalu et al. (2013) applied the model in analyzing off farm labour supply decisions in Ethiopia. Asfaw et al. (2010) used an augmented double hurdle model to analyse the determinants of the intensity of variety adoption conditional on overcoming seed access constraints. Woldehanna et al., (2000) used the model to analyse the off farm work decisions of Dutch cash crops farms and agenda 2000 CAP reforms. Matshe and Young (2004) applied a double hurdle to analyse off farm labour allocation decisions in small-scale rural households in Zimbabwe. Details of the model are presented below, whereby the two latent dependent variables are expressed with their set of exogenous variables;

$$y_1^{**} = X_1\beta_1 + \mu_1 \quad (1.10)$$

This a participation equation

$$y_2^{**} = X_2\beta_2 + \mu_2 \quad (1.11)$$

This is equation measures intensity of participation (hours of work)

Where y_1^{**} = latent variable related to the decision to participate, while μ_2 and μ_1 represents the error term in the equations above. y_2^{**} = latent variable that captures the latent variable related to off farm hours

X_1 & X_2 = hurdle regressor,. If $y_1 = 0$ then $y_2 = 1$ and if $y_1 = 1$ then $y_2 = 0$

If the error term is normally distributed, then the first hurdle will correspond to the Probit or logit model (Matshe and Young, 2004).

From the second hurdle $y_2 = y_2^{**}$ if $y_2^{**} > 0$.

And

$y_2^{**} = 0$ Otherwise

Thus, the second hurdle yields a Tobit model¹. The first equation (hurdle) is independent of the second hurdle, thus there is a possibility of observing zero hours of work. However, zeros in the second hurdle do not necessarily mean that an individual does not participate in off farm work; rather, it may reflect a failure of either of the hurdles² (the first or second). In view of that, observed time or hours of work is an outcome of the interaction between the first and second decision hurdles³.

$$y = y_1^* y_2^* \quad (1.12)$$

$$y_j^* = x_{ij} \beta_j + \varepsilon_j \quad (1.13)$$

$j = 1, 2$ Showing the first and second hurdle

$$(\varepsilon_1, \varepsilon_2) \approx N(0, \Omega)$$

$$\Omega = \begin{bmatrix} 1 & \sigma^{12} \\ \sigma^{12} & \sigma^2 \end{bmatrix}$$

If σ is restricted to being equal to zero, the model collapses to the independent Craggy model. If the assumption is made that the probability of participating in off farm work is 1, then a Tobit model is nested within the independent double model.

3.3. Dependent Variable

Engagement in off farm work is a matter of probability, such that it may 1 or 0. Thus, it is a dichotomy variable which takes a value of 1 if a household is engaging in off farm activities and 0 for non-participant. Similarly, Mduma (2006), Dimeva and Sen (2010) have considered participants and non-participants as a dichotomy variable. However, given that we are applying a double hurdle model, this study uses reported hours spent on off farm work to present participants and non-participants. This approach is similarly used by Cameron and Trivedi (2010) to estimate a double hurdle model.

¹Most commonly this occurs when the dependent variable is zero for a substantial part of the population, but positive (with many different outcomes) for the rest of the population (Verbeek, 2008).

² In modeling zeros in the dependent variable there are basically two scenarios, the first is related to a case in which the zero is genuine, reflecting a corner solution (which may permit application of the Tobit model for estimation). This may be further disaggregated into a double hurdle model (accounted for by the fact that the first decision may influence the second) and other is the two part, or sequential, model). Sometimes the zeros are non-observable responses which motivates application of the sample selection model, commonly known as Heckman.

³The Hurdle model assumes that both decisions (participation and intensity) are made simultaneously.

3.4. Key Independent Variables

There are a number of factors that determine participation in off farm work in Tanzania. Those attributes have been applied in different studies to explain household decisions to participate in the activities (Mduma, 2006; Woldehanna, 2000; Matshe and Young, 2004; Huffman, 1984). These factors are derived from the theoretical exposition which argues that participation in off farm activities is a function of incentives. As documented in different studies, these factors can be classified into the following categories: individual and household characteristics, farm characteristics, location factors, barriers to income diversification and risks factors⁴ (Barrett et al., 2001; Abdulai and Crolerees, 2001; Woldehanna and Oskam, 2001; De Janvry and Sadoulte, 2000; Reardon et al., 2007)⁵. Mduma (2005) analysed the determinants of off farm employment in Tanzania and considered a set of variables such as individual characteristics, household characteristics and community variables, which are closely related to those presented above.

3.5. Estimation Approach

The analysis started with the descriptive statistics to characterize the variables prior to estimation of the double hurdle model. We understand that, due to a censoring effect, the Ordinary Least Square would not yield consistent estimates. Therefore, a maximum likelihood estimator was selected, consistent with Cameron and Trivedi (2010). However, a maximum likelihood estimator works under the assumption that errors in the hurdle equations are normally distributed and homoskedastic⁶ $(0, \sigma^2)$. Estimation of the model without due consideration over how the error term is distributed runs risks of inconsistent estimates. Therefore, in this study, we were compelled to carry out a test of normality. Analytical results revealed that the error term was not normally distributed. In order to circumvent this problem, the Box Cox transformation approach, developed by Yen (1993), was adopted. The principle behind this is the relaxation of the normality assumption of the dependent variable. This method has been applied by numerous studies. For instance, the study by Yen et al., (1995), which investigated the determinants of Crawfish consumption in South Louisiana using a generalized limited dependent variable model that accounted for both participation and consumption decisions, applied the Box Cox transformation. Abrevaya (2002) computed fitted values and marginal effects in the Box Cox regression model. Bai et al., (2010) applied the approach prior to estimating the determinants of household preferences to dine out.

The transformation of the dependent variable is as shown below:

$$Y^{(\lambda)} = \frac{Y^{(\lambda)} - 1}{\lambda} \quad (1.14)$$

Y = off farm hours spent by a household per week. λ = unknown parameter

Several functional forms are embedded in the transformation, as shown below.

⁴Mishra and Morehat (1999) consider factors such as educational level, age of the operator, off farm income, household net worth, leverage, farm size, farm diversification, management skills and location as the major determinants of off farm investment.

In this particular study, a list of factors that appear to have a theoretical and empirical relevance to the Tanzanian context and how they influence off farm participation are described.

⁶When the error term is not normally distributed and homoskedastic, computation of the log likelihood function will be incorrect under the model, as it will not reflect the true distribution of dependent variables y_i given x_i and the derived estimators will be incorrect (Verbeek, 2008)

$$y^{(\lambda)} = \begin{cases} (y-1) \text{ if } \lambda = 1 \\ \ln(y) \text{ if } \lambda = 0 \\ 1 - \frac{1}{y} \text{ if } \lambda = -1 \end{cases}$$

The likelihood function of the Box Cox model can be derived as;

$$L = \prod_{y_i=0} \left[1 - \varphi\left(z_i' \alpha_i - \frac{X_i' B + 1/\lambda}{\sigma_i}, P\right) \right] \prod_{y_i>0} \phi \left[\frac{Z_i' \theta + \left(\frac{P}{\sigma_i}\right)(y_i^T - X_i' B)}{(1-P^2)^{1/2}} \right] y_i^{\lambda-1} \frac{1}{\sigma_i} \theta \left(\frac{y_i^T - X_i' B}{\sigma_i} \right) \quad (1.15)$$

The likelihood function is maximized with respect to the key variables that explain participation in off farm work. The Box Cox transformation leads to a richer model which includes the linear and log –linear models as special cases (Cameron and Thrived, 2010) Thus, we express the transformed dependent variable as:

$$g(y_i, \theta) \equiv \frac{y_i^\theta - 1}{\theta} = +X_i' B + v_i \quad (1.17)$$

The expression can yield three outcomes,

$$g(y_i, \theta) = y - 1 \text{ if } \theta = 1, \quad (1.18)$$

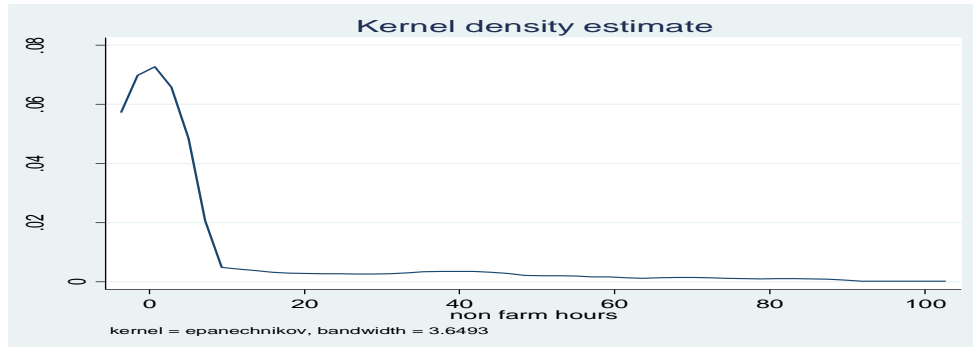
$$g(y_i, \theta) = \ln y \text{ if } \theta = 0, \quad (1.17)$$

$$g(y_i, \theta) = 1 - \frac{1}{y} \text{ if } \theta = -1 \quad (1.18)$$

Off farm labour supply is measured by the number of hours that a household reported as having engaged in off farm work in a week that preceded the survey. According to the NPS report, (2010) data collection was done from October 2008 to October 2009; the period coincides with the crop production season in most of the areas which experience either uni-modal or bimodal rainfall patterns. Therefore, the reported hours of household off farm labour supply may reflect how they allocate labour resources between different economic activities (anticipating an interior solution). This study started the analysis by first transforming the dependent variable, following the Box Cox approach. Given various transformation approaches, we adopted the theta method, which entails transformation on the right hand side of the equation. The generated theta value was applied in subsequent transformations of the dependent variable. The Box Cox transformation is guided by a strong assumption of the normal distribution pattern of the dependent variable. Thereafter, a distribution pattern of the variable was established, based on the degree of skew-ness, which was found to be very low, approximately zero (0), signifying a normal distribution pattern, which provided leeway for subsequent estimations. The transformed dependent variable was then applied in the double hurdle model, as previously discussed.

We estimated a logit model to establish the factors that determined or explained rural household decisions to participate in off farm work. This was then followed by the estimation of the second equation, which seeks to identify the derivatives of the intensity of participation in off farm work by the rural households. Figure 1 below shows the kernel density of the off farm hours per week in a household. The curve shows how the hours reported within the household are widely spread from each other.

Figure 2: Kernel Density Estimate



Source: NBS (2008/9) Hours spent per week

Table 1 : Descriptive Statistics

Variable	Mean	Standard Deviation	Minimum	Maximum
Off farm hours per household per week	7.89	18.65	0	98
Age	47.37	15.78	19	102
Total Crop (maize) output (Kg)	1108.7	2942.7	0	7937
Maximum level of education measured in years of education	17.3	3.45	1	45
Household size	5.22	2.896	1	46
Distance to daily or weekly market in KM.	15.27	25.34	0.2	197
Land holding in acre	3.35	4.89	0	70
Quantity of fertilizer in Kg	139.92	1011.339	0	2400
Frequency				
Marital status				
Married		1549		
Single		489		
Gender				
Male headed household		1565		
Female headed household		498		
Land Quality (Perceived quality)				
Good quality		1614		
Poor quality		99		

Source: NBS (2008/9)

4. ANALYTICAL RESULTS

4.1. Factors Determining Participation in off farm Work

Analytical results provided in this section follow an estimation of equation 1.10 which is establishing factors that influence decision to participate in off farm work. The approach by Cameron and Trivedi (2005) was adopted in estimating the equation. Results generated from the Logit model are presented in Appendix for comparison purposes. Table 3 shows that the dummy variable of married was positive and significant at 10 Percent.

This suggests that whether a head of the household is married or not is an important factor determining participation in off farm work. As it appears, households with married couples were likely to participate in off farm work. This phenomenon may be attributed to the fact that households with married couples may divide their labour between off farm and on farm more easily, given the available manpower to oversee both activities. This study asserts that a household undertaking crop production on infertile land (degraded) is more likely to seek off farm work in order to ensure survival (driven by the fact that agricultural income will be relatively low and may be exposed to intermittent food shortages). Thus, the hypothesis is attested in this study by including a dummy variable that captured soil quality. The analytical results showed a positive coefficient, which was significant at 5 percent. Thus, the null hypothesis was rejected, suggesting that good quality land has a positive influence on the decision to participate in off farm work. Probably, there is a positive linkage between the farm production and off farm work when the land is of a relatively higher quality. If this assertion holds, then households with fertile land are more likely to seek off farm work given that they have sufficient food produced from the farm. Surprisingly, area under cultivation showed a positive sign, which is highly significant. Probably participants of off farm work opt to hire labour from the market in order to continue with on farm activities. There is a possibility that households with relatively large farm areas to use off farm wage to hire labour from the market. Off farm work may generate cash income which may be reinvested in farm production consistently with Anríquez and Daidone (2008), who observed similarly that, households are utilizing the opportunities of the non-farming sector to generate cash income which is reinvested to purchase farm inputs. However, Anríquez and Daidone warned on the need to undertake a thorough analysis before this is concluded for well-designed rural development policy. Other studies which have examined the determinants of off farm work are such; De Janvry and Sadoulet (2001) and Matshe and Young (2003), who have observed that land area under cultivation was one of the household assets which may influence participation in off farm activities. Greater access to land is said to reduce participation in off farm work (De Janvry and Sadoulet, 2001, Matshe and Young 2003, Escobal, 2001).

Table 2: Double Hurdle Model Analytical Results –Decision to Participate or Not

Participation	Coefficient	Standard Error	T
Age	0.5469694	0.291921	1.87
Dummy (marital status)	-0.1506434	0.165447	-0.91
Dummy of gender	0.0994655	0.077165	1.29
Dummy of soil quality	0.9063689	0.389175	2.33**
Farm size	-0.000054	0.000119	-0.45
Amount of fertilizer	0.1957155	0.0395	4.95***
Total crop output	-0.000489	-0.00012	-3.97***
Max education	-14.51297	5.649298	-2.57**
Household size	-0.1933996	0.048581	-3.98***
Age squared	-0.007339	0.000712	-1.03
Max education squared	0.4677316	0.183207	2.53**
Distance to a market	-0.0072242	0.005123	-1.41
Cons	111.6489	43.8404	2.55**

*Source: NBS (2008/9); ***= Highly significant at 1 percent and **=significant at 5 percent*

The coefficient for total agricultural output was shown to be negative, which was significant and consistent with the theory that higher agricultural output will be inversely proportional to off farm work or income.

Thus, relatively higher agricultural output had a negative effect on the decision to participate in off farm work. High agricultural output may ensure that the household had sufficient food. This situation may reduce the chances of the household to seek off farm work in order to ensure survival. The effect of education of the household head was examined for how it affected the decision to participate in off farm work and the corresponding levels of intensity. The results depicted a coefficient with a negative sign, which was significant (see also Escobal 2001). This was contrary to assertion that education fosters participation in off farm work. This was a departure from what had been observed by Woldehanna et al. (2000) that agricultural education had no effect at all on off farm work decisions. Woldehanna et al.(2000)s' findings are in contrast to Sumner (1982), De Janvry and Sadoulet (2001) and Yunez-Naude and Taylor (2010). The negative influence of education on off farm work may probably suggest that rural households seek off farm work simply to ensure survival. The increase in human capital (education) ensures that a household stands a better chance of increasing the level of farm productivity. If that is the case, then a household would not be obliged to seek off farm activities. The coefficient of household size displayed results which were contrary to the existing assertion that large family size had a relatively higher marginal utility of income and a strong desire to participate in off farm work (Woldehanna, et al., 2000). However, given that the coefficient was not statistically significant, this study failed to derive any inference about how the variable affected the decision to participate in off farm activities. There was no indication that a nearby market (daily or weekly) influenced the decision to participate in off farm work, as suggested by the insignificant coefficient, as was similarly found by Escobal, (2001).

4.2. Factors Determining Intensity of Participation.

As highlighted earlier there is a possibility that, the Tobit model may be nested in the independent hurdle model. In view of that, in the second stage of determining the intensity of participation, a Tobit model is estimated as well for the purpose of undertaking a test of nested models. Analytical results suggest that there some variables which were not significant in the first hurdle but they have significant influence in the second hurdle. This is a testimony that, these variables can't be combined and estimated by a single equation such as Tobit as it may end up generating ambiguous results (Matshe and Young 2003). Nevertheless, a likelihood ratio test conducted, rejected the Tobit model as a nested model. This led to a conclusion that, the participation and intensity of off farm work are two different decisions.

Table 3: Double Hurdle Model Analytical Results –Participation Intensity

Participation	Coefficient	Standard Error	t
Age	-0.0019771	0.0061561	-0.32
Dummy (marital status)	0.0626109	0.0568085	1.1
Dummy of gender	-0.1198746	0.051792	-2.13**
Dummy of soil quality	0.2460991	0.1116458	2.2**
Farm size	0.0000238	7.65E-06	3.11**
Amount of fertilizer	0.0090992	0.0030761	2.96**
Total crop output	6.50E-06	5.39E-06	1.21
Max education	0.215897	0.192346	1.21
Household size	-0.0031172	5.61E-03	-0.56
Age squared	0.0000965	0.000551	1.75
Max education squared	-0.007178	5.36E-03	-1.34
Distance to a market	0.000355	0.0007209	0.49
Cons	5.818505	4.06E-01	14.33***

Source: NBS (2008/9); ***= Highly significant at 1 percent and **=significant at 5 percent.

Wald Chi-Square (12) = 65.23 Prob> Chi-Square =0.000, PseudoR2=0.2864, Log likelihood=-48736.705

Therefore the discussion focused on the analytical results of the double hurdle model and disregarding the Tobit model although the table is included. The analytical results showed that, age didn't influence over the decision on how many hours this is reflected by a coefficient which is not statistically significant at 5 percent. However, the squared age of the household's head showed a positive sign which was significant. Probably this is consistent with the theory that off farm participation will be heavily practiced by the relatively young population, which is consistent with the life cycle hypothesis. The marital status of the head of the household appeared with a significant coefficient, which implies that a married person was more likely to work more hours (the variable was measured as a dummy with a value 1 if one is married and 0 if otherwise). Probably this may be explained by the fact that married couples assume heavier family responsibilities and have to work more hours to generate income to cater for their needs. The dummy variable of male gender appeared with a positive coefficient and was statistically significant at 1 percent. This indicates that hours of working in off farm work are influenced by whether a household head is male or female. Households with male headed households worked more off-farm hours. This implies that male headed households had a greater chance of reducing poverty than female headed households. The coefficient of land quality was negative and highly significant. The result reflects an assertion that where land is of high quality, farmers may wish to concentrate on farming alone, as it guarantees them the achievement of a relatively high crop output.

Table 4 : Tobit Analytical Results

Participation	Coefficient	Standard Error	T
Age	0.0484902	0.740986	0.65
Dummy (marital status)	-1.029115	0.6257369	-1.64
Dummy of gender	2.170943	0.52371298	4.04***
Dummy of soil quality	-2.48999639	1.140822	-2.18**
Farm size	-0.0002842	0.0000875	-3.25**
Amount of fertilizer	-0.126293	0.377899	-3.33**
Total crop output	-0.000074	0.0000565	-1.31
Max education	-0.26999769	0.2694402	-1
Household size	0.1126258	0.0741565	1.52
Age squared	-0.0013961	0.0006598	-2.12**
Max education squared	0.0114905	0.0081651	1.41
Distance to a market	-0.0096736	0.0073167	-1.32
Cons	7.551756	3.385454	2.23**

*Source: NBS (2008/9); ***= Highly significant at 1 percent and **=significant at 5 percent*

5. CONCLUSION AND RECOMMENDATIONS

This chapter aimed at investigating the rural household off farm participation decision. It started with a discussion of the major reasons why rural households should participate in off farm work. Thus, theories of Push and Pull were thoroughly discussed. The characteristics of rural households in Tanzania have been described and provided a basis of presenting a relevant conceptual framework whereby a farm household model was used. A double hurdle model was used to represent two latent decisions related to whether or not to participate and the corresponding level of intensity of participation. Details of the dependent and independent variables have been presented and they provided a lie way for estimating the double hurdle model. Hours spent on off farm work was taken as the dependent variable, while the list of independent variables included age, gender, household size, marital status, perceived land quality, educational levels, quantity of fertilizer used, total amount of crop harvested and total

area under cultivation for each household. The analytical results have shown that, marital status, land quality, farm size, level of farm output and household size are important variables that influence the decision to participate in off farm work. In addition, age, the dummy variable of male gender, marital status and land quality were the main determinants of the intensity of participation in off farm work. The study has further confirmed that, the decision to participate passed through two hurdles. Variables that determined the intensity to participate or number of hours to work in off farm work include: age of the household's head which has showed a positive sign which was significant. The married couples are more likely to work hours. Male headed households are more likely to work more hours compared to their counterpart female headed households while the coefficient of land quality was negative and highly significant, reflecting that where land is of high quality, farmers may wish to concentrate on farming alone, as it guarantees them the achievement of a relatively high crop output.

LITERATURE:

1. Abdulai, A. and A. CroleRees. (2001). Constraints and Income Diversification Strategies: Evidence from Southern Mali. *Food Policy* Vol. 26, No. 4, pp. 437-452.
2. Abrevaya, J. (2002). Computing Marginal Effects In The Box-Cox Model. *Econometric Reviews*. Vol. 21, No. 3, Pp. 383–393, 2002.
3. Ahituv, A. and Kimhi, A. (2002). 'Off-Farm Work and Capital Accumulation Decisions of Farmers over the Life Cycle', *The Journal of Development Economics*, Vol. 68 (2002): 329-353.
4. Alobos S (2012). "Determinants of Rural Household Income Diversification in Senegal and Kenya". Lund University, Sweden.
5. Amsalu, B. Kindie, G. Belay, K. and Chaurasia, S.P.R. (2013) Off-Farm Labor Supply Decision of Adults in Rural Ethiopia: Double Hurdle Approach. *Journal of Agricultural Economics and Development* Vol. 2(4), pp. 154-165.
6. Anríquez, G. and Daidone, S. (2008). Linkages between Farm and Non-Farm Sectors at the Household Level in Rural Ghana. A Consistent Stochastic Distance Function Approach. The Food and Agriculture Organization. Ghana.
7. Asfaw, S., Shiferaw, B., Simtowe, F. & Haile, M. B. (2010). Agricultural Technology Adoption, Seed Access Constraints and Commercialization in Ethiopia. *Journal of Development and Agricultural Economics* Vol. 3(9), 436-447.
8. Bai, J. T.I Wahl, B.T. Lohmar, and Huang, J. (2010). Food Away From Home in Beijing, Effects of Wealth, Time and Free Meals. *China Economic Review* 21:432-441.
9. Baltagi, B. (2008). *Econometric Analysis of Panel Data*. New York: John Wiley & Sons.
10. Bardhan, P. and Udry, C. (1999). *Development Microeconomics*. Oxford University Press.
11. Barrett R. B. and Reardon T. (2000) Asset, Activity, and Income Diversification among African Agriculturalists. Some Practical Issues. Michigan State University.
12. Barrett, C.B., Reardon, T. and Webb, P. (2001). Nonfarm Income Diversification and Household Livelihood Strategies in Rural Africa: Concepts, Dynamics, and Policy Implications. *Food Policy*, 26(4), 315-331.
13. Becker, G.S. (1965). A Theory of the Allocation of Time. *The Economic Journal*. Vol. 75. No 299. Pp 493-517.
14. Blundell, R. and Meghir, C. (1987) Bivariate Alternatives to the Univariate Tobit Model, *Journal of Econometrics*, 34, 179-200.
15. Cameron, A.C. and Trivedi P.K. (2010) *Micro-econometrics Using Stata Revised Edition*. Stata Press, 706 pages. Original Edition (2009).
16. Cragg, J.G., 1971. Some Statistical Models for Limited Dependent Variables with Applications To The Demand For Durable Goods. *Econometrica* 39, 829–844.

17. De Janvry, A., Sadoulet, E., 2001. Income Strategies among Rural Households in Mexico: The Role of Off-Farm Activities. *Journal of World Development*. 29, 467–480.
18. Deaton, A (1997) *The Analysis of Household Surveys. A Micro-econometric Approach to Development Policy*. The Baltimore, MD, Johns Hopkins University Press.
19. Dimova, R. and Sen, K. (2010). Is Household Income Diversification a means of Survival or Accumulation? A Panel Data Evidence from Tanzania. World Poverty Institute, The University of Manchester, Brooks.
20. Ellis, F. and Allison, E.H. (2004). *Livelihood Diversification and Natural Resources Management*. Working Paper No. 6, Livelihood Support Programme, FAO, Rome.
21. Escobal, J. (2001). The Determinants of Non farm Income Diversification in Rural Peru. *Journal of World Development*. Vol.29 No 3. 497-508.
22. IFPRI (2011). *Cereal production and technology adoption in Ethiopia*. IFPRI discussion paper. 2011.
23. IMF (2009): *Tanzania: The Story of an African Transition*. Washington DC: IMF.
24. Johnston, B. F., and Mellor, J. W. (1961). The Role of Agriculture in Economic Development. *The American Economic Review*, 51(4), 566–593.
25. Jones, A. M. (1989). A double Hurdle Model of Cigarette Consumption. *Journal of Applied Econometrics*. Vol 4. No. 1. 23-29.
26. Kabede, T. A. (2001). *Farm Household Technical Efficiency: A stochastic Frontier Analysis, A Study of Rice Producers in Mardi, Watershed in the Western Development Region of Nepal*. Unpublished Msc Thesis Submitted to Department of Economics and Social Science Agricultural University.
27. Karamagi, I.J.(2002) . *Examining and Economic Technical Efficiency: Empirical Applications Using Panel Data from Alberta's Dairy Farms*. A Unpublished PhD Thesis Submitted to the Faculty of Graduate Studies and Research in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy. Department of Rural Economy. Edmonton, Alberta, Canada.
28. Kibaara, W. B. (2005), *Technical Efficiency in Kenyan's Maize Production: An Application of the Stochastic Frontier Approach*, Department of Agricultural and Resource Economics, Colorado State University, USA. Unpublished Master Thesis.
29. Kilic, T., Carletto, C., Miluka, J. and Savastano, S. (2009). Rural Nonfarm Income and its Impact on Agriculture: Evidence from Albania. *Agricultural Economics*, 40(2),139-160.
30. Lajos, Z. B, Bojnec S. fertő, I and Latruffe, L. (2010). The Impact of Non-Farm Income on the Investment in Agriculture: Evidence From Hungary and Slovenia. Paper Presented in 118th EAAE Seminar on “Rural Development: Governance, Policy Design and Delivery” Ljubljana.
31. Lanjouw J.O and Lanjouw P. (1997) *Rural Nonfarm Employment. An Update*, Washington D.C Unprocessed Policy Research Department, the World Bank
32. . Lay, A. and Schuler D. (2007). *Income Diversification and Poverty in a Growing Agricultural Economy; The Case of Ghana*. Kiel Institute for the World Economy. University of Gottingen.
33. Lien, G., Kumbhakar, S.C. and Hardaker, J.B. (2010). Determinants of Off-farm Work and its Effects on Farm Performance: The case of Norwegian Grain Farmers. *Agricultural Economics*, 41: 577-586.
34. Lire, E. (2003) *Income Diversification in Zimbabwe. Welfare Implications from Urban And Rural Areas*. FCND Discussion Paper. International Food Policy Research Institute.
35. Maertens, M. (2008) *Horticulture Exports, Agro-industrialization and Farm- nonfarm linkages with the smallholder farm sector: Evidence from Senegal*. LICOS. Centre for Institutions and Economic Performance. Centre of Excellence. Discussion Paper 214/2008.
36. Mathenge M.K. And Tschirley, D (2007) *Off Farm Work And Farm Production Decision*.

37. Evidence From Maize Producing Households In Rural Kenya. Paper Submitted For The SAE Conference 2007 On Economic Development In Africa. St. Catherine College, University Of Oxford- Uk.
38. Matshe, I.A. and Young, T. (2004). Off-Farm Labour Allocation Decisions in Small-Scale Rural Households in Zimbabwe. *Journal of Agricultural Economics* 30 (2004) 175–186.
39. Mishra, A. and Goodwin, B. (1997); Farm Income Variability and the Supply of Off-Farm Labor. *American Journal of Agricultural Economics*, 1997, vol. 79, issue 3, pages 880-887.
40. Modigliani, F., 1986. Life Cycle, Individual Thrift, and the Wealth of Nations. *American Journal of Economics. Rev.* 76, 297–313.
41. Mduma, J.K. (2006). Rural Off farm Employment and its Effects on Adoption of Labour Intensive Soil Conserving Measures in Tanzania. *Development Economics*. Peter Lang. Vol.54.
42. Mduma John K. And P. Wobst (2005). Determinants of Rural Labor Market Participation in African Studies Quarterly Volume 8, Issue 2 Spring Tanzania.
43. Pfeiffer, L., L´opez-Fledman, A.,and Taylor, J.E., 2009. Is Off-Farm Income Reforming The Farm? Evidence from Mexico. *Journal of Agriculture Economics*. 40, 125–138.
44. Reardon T. (1997). Using Evidence of Household Income Diversification to Inform Study Of Rural Non- Farm Labor Market In Africa. *World Development*, 25 (5) 735-748.
45. Reardon, T. and Corral, L (2001). Rural Non-Farm Income in Nicaragua, *Journal of World Development* 29(3) Pp. 427-441.
46. Reardon, T. E, Crawford & V. Kelly (1994):”Links between Non-farm Income and Farm Investment in African Households: Adding the Capital Market Perspective,” *American Journal of Agricultural Economics*, Vol. 76 (December): 1172-1176.
47. Richard, T.J., and Jeffrey, S.R. (1998). Economic Performance of Alberta Dairy. Staff Paper No. 98-102, Department of Rural Economy, University of Alberta.
48. Stevenson, R.E. (1980), "Likelihood Functions for Generalized Stochastic Frontier Estimation", *Journal of Econometrics*, 13, 57-66.
49. Singh, I. Squire, L. and Strauss. J. (1986). *Agricultural Household Models: Extensions, Applications and Policy*. John Hopkins University Press, Baltimore.
50. Schultz, T. W. (1964). *Transforming traditional agriculture*. New Haven, Connecticut: Yale University Press.
51. Shi X., Heerink, N., & Qu, F. (2007). Choices between Different Off-Farm Employment Subcategories: An Empirical Analysis for Jiangxi Province, China. *China Economic Review*, 18(4), 438-455.
52. Singh, I., Squire, L. and Strauss, J., 1986. *Agricultural Household Models. Extensions, Applications and Policy*. The World Bank, The Johns Hopkins University Press, Baltimore, MD.
53. Smith, K.R., 2002. Does Off-Farm Work Hinder Smart Farming? *Agricultural Outlook, Economic Research Service/Usda*, September, 28– 30.
54. Smitha, D.R. Gordon, A.Meadows,K. and Zwick, K (2001). Livelihood Diversification in Uganda: Patterns and Determinants of Change Across Two Rural Districts. *Journal of Food Policy* 26 (2001) 421–435.
55. Sumner,D.A.(1982). The Off Farm Labour Supply of Farmers. *American Journal of Agricultural Economics*. Vol. 64: No.3.3 Pp499-509.
56. Teklewold, H., Dadi, L., & Dana, N. (2006). Determinants of Adoption of Poultry Technology: A Double Hurdle Approach. *Livestock Research for Rural Development*, 18(3), 40-43.
57. URT (2012). Ministry of Agriculture, Food Security and Cooperatives, Agricultural census sample survey. Tanzania.

58. URT (2013). National Agricultural Policy. The Ministry of Agriculture Food Security and Cooperative, United Republic of Tanzania.
59. Verbeek, M. (2008). A Guide to Modern Econometrics. Third Edition. RSM Erasmus University, Rotterdam, John Wiley & Sons Ltd.
60. Weir S. & Knight, J. (2000). "Adoption and diffusion of agricultural innovations in Ethiopia: the role of Education," CSAE Working Paper Series 2000-05, Centre for the Study of African Economies, University of Oxford.
61. Woldehanna, T. (2000a). Economic Analysis and Policy Implication of farm and off-farm employment: A Case Study in the Tigray Region of Northern Ethiopia. Mansholt Studies 18 and PhD Thesis. Agricultural Economics and Rural Policy Group, Wageningen University.
62. Woldehanna, T., and Oskam, A. (2001). Off-farm employment and income inequality: The implication for poverty reduction strategy. Ethiopia. Journal of Economics. 4, 41–57.
63. Woldehanna, T., Oude Lansink, A., Peerlings, J., (2000b). Off-Farm Work Decisions on Dutch Cash Crop Farms and the 1997 and Agenda 2000 CAP Reforms. Journal Of Agricultural Economics. 22, 163–171.
64. World Bank (2008). Small Enterprise Growth and the Rural Investment Climate: Evidence from Tanzania. Agriculture and Rural Development Unit, Africa Region.
65. World Bank (2009) Climate Volatility and Poverty Vulnerability in Tanzania. The World Bank.
66. World Bank (2015) What Drives Local Food Prices? Evidence from the Tanzanian Maize Market. Policy Research Working Paper 7338.
67. Yang, D. T. (1997) "Education and Off-Farm Work," Economic Development and Cultural Change, 45(3): 613-632.
68. Yen, S. (1993). Working Wives and Food Away from Home. The Box- Cox Hurdle Model. American Journal of Agricultural Economics. Volume 75, Issue 4, Pp 884-895. Yen, S.T. (1995) Alternative Transformations in a Class of Limited Dependent Variable Models- Alcohol Consumption by US Women. Journal of Applied Economics, 2, 258–262.
69. Yunez-Naude, A. and Taylor, J.E. (2010). The Determinants of Non Farm Activities and Incomes of Rural Households in Mexico, with emphasizes on education. Journal of World Development. Vol. 29. No3. 561-572.

THE ROLE OF 'ORIENT' AS 'OTHER' IN EUROPE'S VISUAL COMMUNICATION STRATEGIES

Ilze Loza

Art Academy of Latvia, Latvia
Vidzeme University of Applied Sciences, Latvia
ilzelozagd@gmail.com

ABSTRACT

The globalization processes throughout the world have fostered an amalgamative intertwining of cultural and religious systems. The affluence of visual communication, such as advertisements, print media, and the arts, into a region, can be indicators of shifting identity and an acknowledgment of growing diversity. Particularly sensitive ethical issues in design today are racial stereotypes and the reflection of religious ethical standards, notably, reflection of Islamic culture. Consequentially, in global visual politics, the controversial role owned by the “veil”, means different things to different people. In the 21st century, particularly in Europe veiling/unveiling becomes a symbol of visual cultural performance and identity matter, that marks communities of race and religion in popular culture. The veil has become a symbol of “cultural sovereignty”, visual expression of identity, embodied in interactive participatory performance. The research paper explores the meaning of the “veil” in visual communication systems in the European region. The cultural differences between Eastern and Western culture structures conduct implications in visual communication strategies as the same design communication intend can be applied to different means of content and, vice versa, the same content can be 'designed' in different ways. The reflection and comprehension of immersion in cross-cultural conversations and fresh perspective to “orient” as “other” is the keynote to nowadays reality. This paper considers the interactions between design and visual communication and cultural and religious systems.

Keywords: Eastern and Western culture, Globalisation, Veil, Visual Communication

1. CROSS CULTURAL INTERACTIONS

This article analyses visual politics, the impact of Islamic culture on visual communication strategies in 21st century Europe and the influence of cross-cultural interactions. The interaction between the principles of culture, religion and visual politics as a result of 21st-century globalization and migration processes as well as contemplate visual communication strategies in Europe and visual global politics directions. Globalization at the end of the 20th century and the beginning of the 21st-century experience digital revolution and breakthroughs in information and communication technologies have drawn nations closer together and have enabled producers of mass media artifacts to rapidly transmit their messages to a global audience. The global processes and migration are leading disparate human groups to integrate to a point that national and local boundaries and the traditional concept of a community rooted in a geographic area may lose their meaning. Haque, is the book *Advertising in Developing and Emerging Countries: The Economic, Political and Social Context* stated that "globalization in today's world clearly has implications for every conceivable arena of human endeavor, especially for cultural products and commodities where they are accessible to people as part of a global market" (Haque 2016, 19). The past half-century has witnessed a growth in scholarship and course offerings on topics concerning cross-cultural, international communications and visual communication, furthermore, Thatcher expounding “researchers simply do not know how and what is happening” (Thatcher et al. 2007,125). Such rapid cross-cultural fluctuations call for new approaches that reach beyond the confines of any predetermined, localized frames, and/or sets of cultural understandings, including consideration of meanings that are to be found

“outside the language” (Findler, 1985, 64). As a consequence, visual communication, visual politics strategies, and cross-cultural interactions, within a nation in today’s world may contain certain distinctive values and features; yet it has to be understood in the context of the larger ongoing process of globalization. Accordingly, Thatcher apprise that, any cross-cultural transition is understandably difficult to achieve in the absence of exposure to a differently situated communicative strategy based on another set of assumptions (Thatcher, et al., 2007).

2. VISUAL GLOBAL POLITICS DIRECTIONS

Integration in the European region is sustained more than ever before by forms of communication rather than by a stable system of cultural values and norms. Thatcher states: *Various approaches to human experiential ordering stem from very different sets of assumptions, and, therefore, tend to generate disparate results. This insight is particularly relevant to the immediate context of the transition from 20th to 21st-century commerce where reliance on cross-cultural communications is continually generating greater juxtapositions among a variety of cultures (Thatcher, et al, 2007).*

Migration processes in the 21st century Europe develop heterogeneous societies and circumstances, other than offering myriad possibilities for miscommunications, also provide a unique opportunity for new bases of cross-cultural exchanges. According to Bell, one of the main tenets of cultural studies, however, is that cultures have their own logic and their own “specific meanings, rules, and practices which are not reducible to, or explainable solely in terms of, another category or level of a social formation” (Bell, 1976). Furthermore, in the article of Globalization and culture, Pieterse indicates three possible ways of cultural interactions and that when two or more distinct cultures interact, they are likely to clash with each other, experience significant change, or both. Culture theorists disagree, though, over whether the cultures are more likely to clash with each other or amend their cultural norms.

There are three main “cultural confrontation approaches.” The first theory, referred to as “cultural mixing” or “hybridization,” maintains that separate cultures will mix together relatively easily and ultimately form one or more new hybrid cultures. The second theory, referred to as “cultural convergence,” posits that the different cultures will be subsumed into one common culture. The third theory, referred to as “cultural differentials,” postulates that the members of the different cultures will cling stubbornly to their own traditions and engage in a series of clashes with each other aimed at preserving their own cultural norms (Pieterse, 2015).

Consequently, the mass migration at the end of the 20th century and the beginning of 21st century brought the attention of the scholars to the “cultural confrontation approaches” and revaluation of Edward Said (1979) discussion of “Orientalism”, sense of the “other” as semiotic production of cultural identities. ‘Orient’ is the geographical and cultural area that is ‘adjacent to Europe’ (Said, 1979) and that roughly corresponds to the ‘Middle East’. Therefore a sense of collective identity was (re) produced in Europe partially through the construction of otherness and the (re)production of knowledge about an ‘other’. In other words, the dominant discourse can use otherness and its oppositionality to the ‘other’ as devices to (re)produce and reinforce its own belief system, and thus also its own identity.

By imagining and constructing the ‘Orient’ as ‘other’ - and Orientalism as a scholarly and literary field - European authors and readers have also internalized assumptions and ‘knowledge’ about themselves as part of a collective entity, such as the ‘West’. As Said (1979) states in his introduction, ‘the Orient has helped to define Europe (or the West) as its contrasting image, idea, personality, experience’ (Said, 1979).

Submergence in sense of on the role of the 'other' in processes of identification emerges particularly relevant in the context of European integration and identity formation, as the very notion of 'Europeanness' is the assumption of the cultural differences and otherness.

3. THE ROLE OF 'ORIENT' AS 'OTHER' IN EUROPE VISUAL COMMUNICATION STRATEGIES

As previously stated, 'Orient' is the geographical and cultural area that roughly corresponds to the 'Middle East' and therefore the term “other” coincides with the contemporary integration processes in Europe. The role of 'Orient' as 'other' emerges particularly in an apparent and relevant way when looking at the context of European cultural differences and otherness in the relationship between design and representational resources. The cultural differences between Eastern and Western culture structures conduct implications in visual communication strategies as the same design communication intend can be applied to different means of content and, vice versa, the same content can be 'designed' in different ways. Visual communication imagery gains meaning in relation to the personal and societal assumptions and norms that surround us. This is why Barthes (1977: 17–19) stresses:

There are always two aspects to a photograph. There is the “denoted message,” which is a perfect representation of a visual image. But there is also a “connoted message,” which includes how a photograph is read and interpreted, how it fits into existing practices of knowledge and communication. This interpretation contains values that inevitably have as much to do with the position of the interpreter as with the content of the image itself. Some refer to this process more specifically as “secondary image construction” (Barthes, 1977).

Accordingly, the meaning of a visual communication item can be translated differently according to the emergence of the perceiver. When the viewer observes a photograph, the person never just looks at a photograph alone. Actually, the viewer looks at a complex relationship between a photograph and oneself (Berger, 1972). There are inevitably involved interrelated connections between visibility, society, and politics. Images, in this sense, are political because they frame what William Connolly (1991) called “conditions of possibility” within which politics takes place. Mark Reinhardt in the book “Visual global politics” stresses that the politics of photography relates, mostly, to how they “are used, and by whom” (Reinhardt, 2018). In the same book, Nayanika Mookherjee speaks of the need to “explore the social life” of images and how they “perform or co-construct a global politics.” One of the most visible examples illustrating such controversies is the so-called Denmark cartoon crisis. This crisis was caused by the publication of 12 drawings of the prophet Mohammad under the headline of ‘The face of Mohammad’ by the Danish newspaper Jyllands-Posten in the fall of 2005 (Klausen, 2009; Sløk, 2009). The publication induced a worldwide concussion:

The publication caused massive discontent and protests from and around the Arab and Muslim world. The grand mufti of Egypt issued a fatwa against Denmark and demonstrations against Denmark took place worldwide. Apart from ritual flag burnings some of these demonstrations escalated in terms of violence: the Danish embassies in Syria and Lebanon were attacked; the latter burned to the ground. As a result of these violent demonstrations, the Cartoon Crisis is estimated to have cost the lives of around 150 people in Nigeria, Libya, Pakistan, and Afghanistan, and the boycotts resulted in a net loss to Danish business of around the US \$182 million (Lester, 2006).

The attack on the satirical magazine Charlie Hebdo in 2015 demonstrated how visual artifacts play an increasingly important role in shaping international political events and our understanding of them.

This incident also showed unsettling relation of culture and politics, especially when cultural activities in civil society become immerse in global politics. As follows, visual communication strategies and visual artifacts become inconsequential and harmless to some, a form of freedom of expression for others, extremely offensive to another. Consequentially, in global visual politics, the controversial role owned by the “veil”, means different things to different people. In the 21st century, particularly in Europe veiling/unveiling becomes a symbol of visual cultural performance and identity matter, that marks communities of race and religion in the popular culture. The veil has become a symbol of “cultural sovereignty”, visual expression of identity, embodied in interactive participatory performance. Following poster visually promote considerations to the previous statements:

Figure 3: West/East. Both Sides of Intolerance



Source: www.adsoftheworld.com

In 2002, the agency "Master" created a media campaign "West/East. Both Sides of Intolerance"(Figure 1). The poster depicts the face of two women cheek to cheek, one with her eyes covered and the other with her eyes uncovered. The poster reads "West/ East – Both sides of intolerance". Under the theme of tolerance, it shows that what we believe about each other across the West/ East divide is often based on an unwillingness to really find out about each other. The poster was created by Marcos Rene, Patricia Papp, and Luis Trevisani. Question of identities—as in ‘identity politics’, which the first known use is Goffman, (1963: 123–5), is a matter of personal self-understanding, identity is always political because declarations of identity always made on the verge of demanding membership (Goffman,1963). Roland Bleiker in the book “Visual Global Politics” wrote:Following poster visually promote considerations to the previous statements:

Significant implications follow because veiling is not just a private issue but a highly political one. Some states enforce a mandatory practice while others have banned it – using female bodies and their visual appearance as political markers of culture or of secularism respectively (Bleiker, 2018).

The ban of the full-face Islamic veil in public places was introduced on 11 April 2011. France became the first European country to ban the full-face Islamic veil in public places. Under the ban, no woman, French or foreign, is able to leave their home with their face hidden behind a veil without running the risk of a fine. France the largest Muslim minority in Western Europe, about five million Muslims, only about 2,000 women wear full veils (BBC, 2018).

According William A. Callahan veil produces essentialized self–other relations in Western society:

The guiding image of the veil is of a woman wearing a burqa, a black garment that covers the face and the body, somewhere in the Middle East. Such visual cultural performances produce essentialized self–other relations, which in turn evoke other sites of identity/difference: race, ethnicity, religion (Callahan, 2018).

As a response to states enforced mandatory practice caused a backlash within some part of Western society members. Two young women, who call themselves “NiqaBitch,” protested the veil bans through a video of themselves walking around Paris dressed in niqab that covered their faces and upper bodies, along with hot pants and high heels that displayed their bare legs (Figure 2).

Figure 4: NiqaBitch



Source: www.theguardian.com

The video shows how they got “thumbs up” support from many on the street, and even a request for a fan photo from the policewoman guarding France’s Ministry of Immigration and National Identity. Here timing was crucial – when the law went into effect a few months later, the same policewoman would be obliged to fine them for the same veiling activity (Malik, 2010). Memac Oglivy and SHE (Saudi Heroines Empowering a Nation) collaborated with director Omar Hilal for an evocative film that challenges perceptions of Saudi, Arab and Muslim women. Film advertisement ‘How Well Do You Know Her?’ calling out globally for the tolerance of cultural differences and acceptance of the veil. Film advertisement created within the category: Public Interest, NGO, challenges perceptions of the veil as a tool of oppression. Social advertisement ‘How Well Do You Know Her?’ sought to challenge negative stereotypes by focusing on women’s achievements (Figure 3).

Figure 5: How Well Do You Know Her?



Source: www.adsoftheworld.com)

Featured advertisement avoiding any confrontations, deliberately keeping historical tendency of modesty of the displayed person keeping traditions of Islamic restrained style when it comes to visualization of the female figure. In the Islamic culture, gender roles, particularly women’s roles, is a sensitive topic in visual communication, strongly influenced by religion. Publicizing female images in the Middle East amounts to being irreligious and disrespectful; images of

Arab women in advertising seemingly violate long-held traditions within the Islamic private and public spheres (Kraidy 2006). Therefore, even if the advertisement “How Well Do You Know Her?” was launched in February 2018, communication strategy didn’t achieve attention in the global visual politic scene. In comparison, there are appearances of visual communication systems in the Europe region displaying aggressive and confrontational approaches when it comes to the veiling/unveiling issues. The example below depicts print advertisement called “Burka”, created by the advertising agency “Grabarz & Partner”, Germany, December 2007 (Figure 4).

Figure 6: Burka



Source: www.adsoftheworld.com

The veil also became a site of art, fashion, satirical activism. “Princess Hijab” uses graffiti art “to spark debates about fundamentalism and feminism” by drawing veils with a black marker pen on fashion posters in the Paris Metro (Christafis 2010). Advertisements combine the Eastern with the Western in a startling way. The images seem to call attention to the binaries that are used to justify Western “liberation” and Eastern “oppression,” expressed by the sexualized bodies of Western advertising and the Islamic veil, and also suggest the damaging effects of advertising images (Chrisafis, 2010). The precise artifact is important for culture theorists for the impact of global communication as similar art performances took a place in the past but never before had drawn international attention towards the visual communication of the symbolism of the Veil. Guerrilla niqab art has been exhibited from New York to Vienna, sparking debates about feminism and fundamentalism (Figure 5).

Figure 7: Guerrilla niqab



Source: www.theguardian.com

Another example of satirical activism is Hussein Chalayan's provoking "Burka" show (Misanthrope, 2010). In 1997 Hussein Chalayan, fashion designer and professor at the University of Applied Arts Vienna crossed the line between performance art and fashion in his show "Burka" (Figure 6). The performance challenged ideas of modesty, identity, and femininity, challenging taboos of Western and Eastern societies.

Figure 8: Burka show



Source: ilikecatsmorethanpeople.blogspot.com

Hussein Chalayan's provoking 'Burka' show in 1997 detained press attention, nevertheless, didn't emerge to the visual symbol of the Veil politics as "Princess Hijab" or "NiqaBitch" did even if appears much more provoking and controversial than the two latter ones. In 2013, the Italian brand "Diesel" launched an advertising campaign called "I Am Not What I Appear To Be" designed by Nicola Formichetti (Candice, 2013). The advertisement as a part of the new "Diesel Reboot" campaign, which seeks to "baptize a new era of energy, bravery, and bold iconography at Diesel." Diesel's visuals featuring a tattooed, a topless white woman wearing a redesigned denim burqa (Figure 7).

Figure 9: Diesel Reboot



Source: www.dailylife.com.au

Many Muslim women spoke out, mainly against the advertisement, but others, including a female Muslim marketing consultant Aameena Meer, who advised Diesel, said the idea was to make people question assumptions and stereotypes.

This was to challenge that idea that when you see a woman in a burqa, or niqab or even hijab, that you assume certain things about her (Religion News Service, 2013).

There are inevitably involved interrelated connections between visibility, society, and politics. Images, in this sense, are political because they frame what William Connolly (1991) called “conditions of possibility” within which politics takes place (Connolly, 1991). Mark Reinhardt in the book “Visual global politics” stresses that the politics of photography relates, mostly, to how they “are used, and by whom” (Reinhardt, 2018). In the same book, Nayanika Mookherjee speaks of the need to “explore the social life” of images and how they “perform or co-construct a global politics” (Mookherjee, 2018). Shruti Parekh in an article for MTV Desi, comments on “Diesel” advertisement campaign:

This image would mean something drastically different if it was created by Muslim women, and if the woman was actually a Muslim model in the context of a fundamentalist Islamic regime. It might be radical, bold, and subversive. It might actually be an empowered assertion of women's sexuality. If created and released in drastically different context, this ad might be less offensive and even "empowering" (Jha, 2013).

In response to the “Diesel” advertisement campaign, a non-profit organization, Media Literacy Project (MLP) offered a counter-ad emphasizing Islamic value, Muslim women’s modesty, and power. The counter-adverts is a deconstruction of the original Diesel ad and intended to start conversations about modesty, Islam, women, and the media. MLP collaborated with Afia Fitriati to create the text, “I don’t need to be naked to be free” (Figure 8) MLP stressed that, taking one’s clothes off does not equal to freedom, rather making woman sexual tools for advertisers (Project, 2013).

Figure 10: *I don’t need to be naked to be free*



Source: newmexicomercury.com

The 21st century is bringing the shifting edge of visual culture distribution, which is not only owned by powerful media conglomerates that generate and distribute discourses, genres, and styles of communication. Rather, communication of visions and cultural discourses is also created by social media users, photographers, artists, and designers - found within and across global flows of semiotic commodities which are responsible for shaping and reshaping or producing and reproducing transnational visual identities.

4. CONCLUSION

The reflection and comprehension of immersion in cross-cultural conversations and fresh perspective to “Orient” as “other” is the keynote to nowadays reality. From the research, above, implies, the ethics of graphic design and visual communication are closely related to globalization processes and intercultural influences. Particularly sensitive ethical issues in design today are racial stereotypes and the reflection of religious ethical standards, notably, reflection of Islamic culture. Visual communication both - forms and reflects our social life, activities are widely affected by intercultural processes; new types of ethical values are present in the 21st century based on the interaction of different nationalities in the proximate space. Mass migration from Middle East regions to European countries influencing the way society responds and reflects on ethically sensitive topics of Islamic culture. One of the most visible and controversial symbols of Islamic culture in Western society's is the veil (niqab, burka). Consequentially, in global visual politics, the controversial role owned by the “veil” means different things to different people. In the 21st century, particularly in Europe veiling/unveiling becomes a symbol of visual cultural performance and identity matter, that marks communities of race and religion in popular culture. The appearance of visual communication systems in Europe region displaying an aggressive and confrontational approach when it comes to the veiling/unveiling issue, as an example is a print advertisement called “Burka”, created by advertising agency “Grabarz & Partner”, Germany December 2007. The veil also became a site of performance art, fashion item, subject of social activism as shown in examples “niqabitch”, graffiti art of “Princess Hijab”, Hussein Chalayan's “Burka” show. In conclusion, globalization is a new stage in the development of social relations, in which politics, economy, culture, and ecology are united in a single interdependence network that influences every society and individual person. Further research will be conducted for a doctoral degree in the History of Arts, the Art Academy of Latvia: “Influence of Globalisation and Islamic Culture on the European Advertising Design 21st Century.”

ACKNOWLEDGEMENT: *This research was supported by Art Academy of Latvia.*

LITERATURE:

1. Barthes, R., 1977. Image, Music, Text. London: Fontana Press.
2. Bell, D., 1996. The cultural contradictions of capitalism. New York: Basic Books.
3. Berger, J., 1972. Ways of Seeing. London: Penguin Books.
4. Bleiker, R., 2018. Visual Global Politics. First edition ed. London: Routledge.
5. Bleiker, R., 2018. Visual Global Politics. First edition ed. London: Routledge.
6. Callahan, A., 2018. Culture . In: R. Bleiker, ed. Visual Global Politics. London: Routledge, pp. 82-88.
7. Callahan, W. A., 2018. Culture. In: R. Bleiker, ed. Visual Global Politics. London: Routledge, p. 81.
8. Chalayan, H., (2010). Hussein Chalayan - Burka (1996) Retrieved 25.01.2020. from <http://ilikecatsmorethanpeople.blogspot.com/2010/11/hussein-chalayan-burka-1996.html>
9. Connolly, W. E., 1991. Identity/Difference: Democratic Negotiations of the Political Paradox. Ithaca, NY: Cornell University Press.
10. Findler, R., 1985. Reason and spontaneity: A new solution to the problem of fact and value. The Modern Schoolman, March , Volume 66(Issue 3), pp. Pages 236-238.
11. Formichetti, N., (2013). Diesel ad campaign features tattooed woman in Niqab Retrieved 25.01.2020. from <http://www.dailylife.com.au/dl-people/dl-entertainment/diesel-ad-campaign-features-tattooed-woman-in-niqab-20130911-2tj84.html>
12. Goffman, E., 1963. Stigma. New York: Simon and Schuster.

13. Grabarz & Partner. (2007). Burka Retrieved 16.01.2020. from <https://www.adsoftheworld.com/media/print/burka>
14. Haque, S., 2016. Introduction. In: E. C. Alozie, ed. Advertising in developing and emerging countries : the economic, political and social context.. London: Routledge, p. 19.
15. Jha, R., 2013. Diesel's New Ad Campaign Features A Model Who Is Both Topless And In A Burqa.
16. Klausen, J., 2009. The Danish cartoons and modern iconoclasm in the cosmopolitan Muslim diaspora. Harvard Middle Eastern and Islamic Review, Volume 8.
17. Kraidy, M. M., 2006. Islamic Popular Culture, Common Ground News Service.
18. Lester, R., 2006. Cartoon crisis will not damage Danes. Marketing Week, 29(6).
19. Marcos, R., Patricia P., & Luis T. (2005). West/East. Both Sides of Intolerance Retrieved 10.01.2020. from https://www.adsoftheworld.com/media/print/west_vs_east
20. Marcos, R., Patricia, P. & Luis, T., 2005. Ads of the world
21. Media Literacy ProjectPrint. (2013). Counter-Ad to Diesel's Affront to Muslim Women Retrieved 5.02.2020. from http://newmexicomercury.com/blog/comments/counter_
22. Millar, A., 2013. A "Topless Burka-Clad Model" and Radical Islamic Fashion.
23. Mirzoeff, N., 1999. An Introduction to Visual Culture. New York: Routledge.
24. Mookherjee, N., 2018. Memory. In: Visual Global Politics. London: Routledge, pp. 201-208.
25. Nesrine, M. (2010). 'Niqabitch' unveil themselves in Paris Retrieved 10.01.2020. from <https://www.theguardian.com/commentisfree/2010/oct/07/niqabitch-niqab-debate>
26. Nesrine, M., 2010. 'Niqabitch' unveil themselves in Paris. [Online]
27. NiqaBitch, 2010. NiqaBitch shakes Paris.
28. Ogilvy. (2018). How Well Do You Know Her? Retrieved 15.01.2020. from https://www.adsoftheworld.com/media/film/she_how_well_do_you_know_her
29. Pieterse, J. N., 2015. Globalisation and Culture: Global Mélange. Lanham: Rowman & Littlefield Publishers.
30. Princess Hijab. (2010). Cornered – Princess Hijab, Paris's elusive graffiti artist Retrieved 20.01.2020. from <https://www.theguardian.com/artanddesign/2010/nov/11/princess-hijab-paris-graffiti-artist>
31. Reinhardt, M., 2018. Violence. In: Visual Global Politics. London: Routledge, pp. 321-327.
32. Religion News Service, 2013. Diesel Burqa Ad: Islamophobic Or Empowering.
33. Said, W. E., 1979. Orientalism. New York: Pantheon Books.
34. Sløk, C., 2009. Here I Stand: Lutheran stubbornness in the Danish Prime Minister's Office during the cartoon crisis. European Journal of Social Theory, 12(2), p. 231–248.
35. Thatcher Barry B., 2007. Web Site Analysis across Cultures: An Inquiry into Intercultural Values and Web Site Design. Linguistic and Cultural Online Communication

MEDIA INDUSTRY IN A POST-INDUSTRIAL SOCIETY: MEDIA INDUSTRY REVENUE CONVERGENCE AND BLURRED BOUNDARIES IN MEDIA SECTOR

Josko Lozic

*University North, Varazdin/Koprivnica, Croatia
josko.lozic@unin.hr*

ABSTRACT

The aim of this paper is to point out the changes brought about by post-industrial society and the way in which income within individual industries is calculated. The "old" media industries used the method of calculating income as other industries created during the development of classical capitalism in the 20th century. The development of the internet and post-industrial society has directly influenced the development of "new" media industries. The digitization of the production process has enabled the convergence of different sectors of the media industry and the distribution of content on the Internet. Digitization, convergence of media sectors and distribution of content online have enabled media corporations to define themselves in other industrial sectors as the "blurred boundaries" of industries. The incomes of the classical media industry can no longer be precisely divided into individual media sectors. The gaming industry was created in the middle of the last century, but it is only fully developing its production and distribution on the Internet. The revenue generated in the old media industry will be compared to the revenue of the gaming industry as a new media industry. Post-industrial society and the blurred boundaries of corporations and industry require a redefinition of how the media industries are calculated.

Keywords: *blurred border, convergence, gaming industry, old media industry, post-industrial society*

1. INTRODUCTION

The digitalization of production process and the development of the Internet have enabled the development and transformation of all types of industries. The media industry was one of the first industries to be pressured by the changes dictated by digital technology. The digitalisation of media content was so dramatic that it shook the foundations laid with the invention of the printing press. Media production was closely linked to the classical economic paradigm that could be applied to all forms of manufacturing industries. In this context, we define the manufacturing industry as a form of manufacturing activity as described by Marx, that is, we are talking about a model of productive capitalism. The end of the 20th century will mark the end of a social era in which the model of productive capitalism is coming to an end, and the development of social relations in the 21st century is analysed as a post-industrial period or post-modern society. Classical productive capitalism is being transformed into metacapitalism, creating a whole new business paradigm for analysing income, costs and profits generated within existing business organizations. Post-industrial society is developing new forms of media content consumption, which is a direct consequence of the digitalisation and convergence of business systems. The common feature of all these processes lies in the blurred boundaries of the business reach of media corporations as well as the blurred boundaries of social structures that consume particular types of media content.

2. DIFFERENTIATION BETWEEN “OLD” AND “NEW” MEDIA INDUSTRY

Media encompass all goal-orientated technical means or instruments for the procurements of information in print, visual, or auditory forms as well as the organizational and institutional entities behind them that generate and provide this information (Wirtz 2011: 15).

The media industry is not monolith but rather a conglomerate of different industries that have the creation of mediated content as a common activity (Kung 2008: 1). Terminology is important, but like mercury, it's slippery. The term "media industry" covers a huge slice of territory ranging over print, sound, screen, and digital bits in space, in Venus as various as corporate communications, advertising, web sites, novels, films, recordings, and music being shared person to person Internet (Hilmes 2009: 1). Companies that are engaged in cable television [...]. Companies now compete with one another across markets and in different industries in the media economy (Albarran 2010: 3). The old media industries used the financial methodology of calculating revenue and costs like all other industries. The sectors of the media industry referenced by Kung, as well as other scholars, are divided into four basic categories: broadcasting, publishing, film and entertainment and advertising. The development of the Internet, the digitization of production and distribution of content, and in particular the convergence of media platforms, marked the end of existing forms of the media industry, which peaked at the end of the 20th century. What is meant by "new media" varies somewhat, but generally it includes the Internet, video and computer games, and mobile devices including iPods, PDAs, and telephones. (Marshall 2009: 81). Technology has become the word most closely associated with new media (Hendricks 2010: 5). New media are based on computing technologies, use digital information, and usually involve connection to an open digital communication network. New media products combine different types of content, often involve communication, and can be products of service (Kung 2008: 10). The "new media" industry has changed the fundamental paradigm of the old media industry. The mass media that produced and distributed content from one place was replaced by multiple focal points that produced and broadcast content. The media corporations that controlled the media market could no longer control the distribution of content on platforms that appeared on the Internet. This has irreversibly affected the economics of the media industry and not the methodology for calculating the revenues, expenses and expenses of business activities in the media industry.

3. VIDEO GAMING INDUSTRY

The video game industry is opening up completely new segments of media industry research. While research in the old media industry was more focused on media ownership, quality of media content and aspects of the political economy of the media, new media industry research focused on convergence of media platforms, technological development and distribution of content as a basis for generating revenues for media industries. Old media industries have developed specific development techniques for each segment of the media industry. The entire development, production and distribution infrastructure was closed within the media organization. A production model known as productive capitalism with an emphasis on winning and defending an existing market segment. The new media industry uses an open organization model and creates an ecosystem within which it develops completely new segments of the media industry. The new model implies completely new forms of distribution and the Internet as a core infrastructure. Publishing was among the first media industries to be hit by new production models. Digitization and development based on the use of Internet distribution have completely changed the business paradigm. The distribution of digital copies and the use of zero marginal cost effects have paved the way for a completely new business concept (Lozić 2019: 125-136). The foundations have been laid to build a new media industry. Within that, the video game industry began to grow rapidly. The video games software industry appears to be one of the most innovative labs for the coming digital economy: it is developing and experimenting new digital services (online, offline and mobile) that manage to reach a growing share of the population, across all demographics (De Prato et.al 2014). Video games is a specific kind of digital entertainment in which the gamer interacts with a digital interface and is faced with challenges of various kinds, depending on the plot of the game (Zackarsson, Wilson 2012:

5). Although video games are software, they are more than software, and too often they and their producers remain lumped into the same categories as software developers. Assumptions are made about what comprises a game and its production process, which continues to hold the video game industry and the art of game production back from its full potential (O'Donnell 2012: 30). Video games, as an evolution of the analogical game, as a digitalization of the game, have become the most relevant contemporary emergent cultural form, in terms of consumption and business volume (Escribano 2012: 201). Video games occupy a (pop) cultural niche competing most directly with the movie and music industries for the consumer's time and money[...] (although the so-called serious games space is starting to make its mark more clearly (Egenfeldt-Nielsen et.al 2016: 16). Those days, a mobile game is typically one of three things (Manning, Buttfield-Addison 2017: 4): a) a simple game, with carefully chosen interactions, graphics, and controlled complexity, because the game design was best supported by these facets; b) a much more complex affair, available for anything ranging from specialized mobile game consoles to smartphones; and c) a mobile port of a game that debuted on a console of PC. In an era where Angry Birds is a household name, mobile gaming becomes more than a pastime activity. It's a serious 21st century industry that spans markets, continents and cultures (Alegre 2018). Although video games were introduced in the 20th century, their exponential growth only emerged with the development of fast internet. Video game revenue is rising sharply with the Generation Z, but only with the Generation of Y does it become a global phenomenon. This is why we link them to the development of a post-industrial society in which the barriers between genders, generations and social statuses that are found within the video game industry are breaking down. The phenomenon of video games can be analysed from a number of different perspectives. These include enjoyment, socializing, collaborating, competing, seeking recognition, escaping from routine and other reasons (Liu 2017). Researchers increasingly believe that understanding online-game player behaviour is crucial to the success of online-game providers (Liu, Chang 2016). Ip et.al. (2008) explores the correlation between playing time and school performance. Frequent gamers (measured as those who spend, on average, more than two hours per day playing games) are less likely to obtain higher marks across all subject disciplines than non- or infrequent gamers (Ip et.al 2008). Simulation games imitate realistic scenarios in life, sports, and economics. Strategy games require a global view, for instance when managing an economy while fighting rivals. Action games need game-play virtuosity as the gamer controls every move of the counter that usually can kill and can be killed. Role-playing games are rooted in pen-and-paper role-playing games and therefore have many creative and social aspects as the gamer creates and develops a character while interacting with real or digital others (Braun et.al.) The internet population is expected to reach approximately 746 million by 2020, and a large number of consumers expected to get introduced to using digital platforms (Simon 2016). The number of active video gamers worldwide increases every year as access to a variety of games and gaming platforms increases with new technologies. Statista estimates 2.21 billion gamers worldwide in 2017 with an estimate of 2.73 billion by 2021 (HKExnews).

4. BLURRING BOUNDARIES IN MEDIA INDUSTRY

Hamel and Prahalad are among the first to mention the term blurring boundaries at the end of the last century. They assume that there are no longer firm boundaries on the scope of organizations' business activities. Unless there are firm limits on coverage, revenue from core activities cannot be precisely defined. Some industries are more "structured" than others, in the rules of competition are more clear-cut [...]. Deregulation, globalization, fundamental breakthrough in science, and the strategic importance of information technology are blurring boundaries in a wide variety of industries (Hamel and Prahalad 1996). Technological advances are rapidly blurring traditional industry boundaries and enabling competition between various

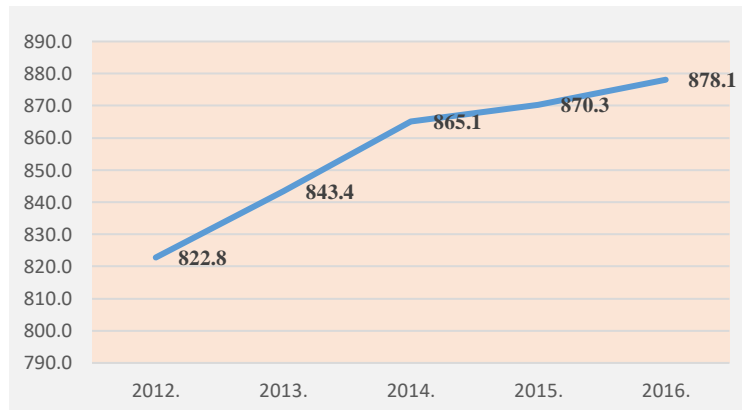
organizations. Within this overlapping area with blurring boundaries, the intersections are constantly changing (Gottsch 2000: 53). The industries engage in electronic media are a part of broad landscape that's changing rapidly, in which the boundaries among business are blurring (Turow 2011). Blurring boundaries are strongly linked to the development of the digital economy and the convergence of systems. Hackelin (2008) referring to Pennings and Puranam conclude that all convergence process has an impact of eroding boundaries between industries, which in turn poses challenges to firms, and forces them to face new technologies, customers and needs (Hackel 2008: 4). The development of new media has even speed up the blurring of boundaries and the convergence of different creative industries into one (Krenenburg, Ziggers 2013: 57). The convergence process also causes the fusion of different types of industries, creating blurred boundaries among them (Curan 2013). The development of technology and the convergence of industries influence the emergence of blurred boundaries between media ownerships and the need to develop entirely new legal legislation (Krenenburg 2017: 231; Khare 2019). The process of building blurred boundaries occurs between different age groups and genders, if the consequence of the convergence of the media industry (Johnson 2019). New media industries are deleting the classic boundaries between content and promotion. The revenues they generate cannot be precisely defined by type. At the same time, the boundaries between the revenues of different media segments as a consequence of convergence of the media system are also deleted. Both textually and industrially, the blurring the boundaries presents critical challenges to scholars of film, television and advertising (Grainge, Johanson 2015: 47). As a final consequence of the emergence of blurring boundaries within the media industry, a special industry has emerged, linking advertising, media production and the big data IT process. Revenues from marketing in the old media industries were recorded as revenues from advertising agencies or suppliers. There are no more gatekeepers or advertising agencies in the new media industries. The gaming industry generates revenue from marketing without the use of marketing agency services.

5. OLD MEDIA INDUSTRY REVENUE

The analysis of the revenue of the old media industry was made according to the reports of the specialized agency Marketline Industry Profile. Revenue is broken down into four basic categories: broadcasting, publishing, movies and entertainment, and advertising. During the analysed period of five years, the revenues of the global media industry and especially the revenues of the three largest geographical segments are covered: Europe, Asia & Pacific, and USA. Figure 1 shows the revenue trends of the global media industry. Total revenue grew from \$822.8 billion in 2012 to \$878.1 billion in 2016. Average total growth was 1.6 percent annually, with a trend of slowing revenue growth in recent years. Globally, broadcasting revenues accounted for the largest share of revenues, accounting for 50% of all revenues in 2016. The European media industry is seeing a fluctuation in revenue. Revenues fell in the first period analysed and then increased slightly. Only in the last analysed period were revenues higher than in the first analysed period. Revenues of the European media industry are stagnating and declining in all industrialized countries of Western Europe, so the growth of total revenues depends significantly on the growth of revenues in the new EU member states as well as in Russia. The average revenue growth in the analysed period was 0.1%, which is the average around which the income of the media industry in Europe was recorded (except for Russia, which had a 3% revenue growth in the analysed period). The analysis of the results is shown in Figure 2.

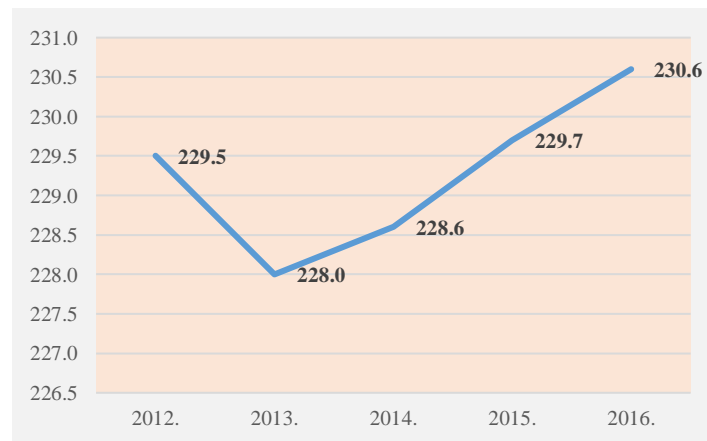
Figure following on the next page

Figure 1: Global media industry revenue (bill. \$)



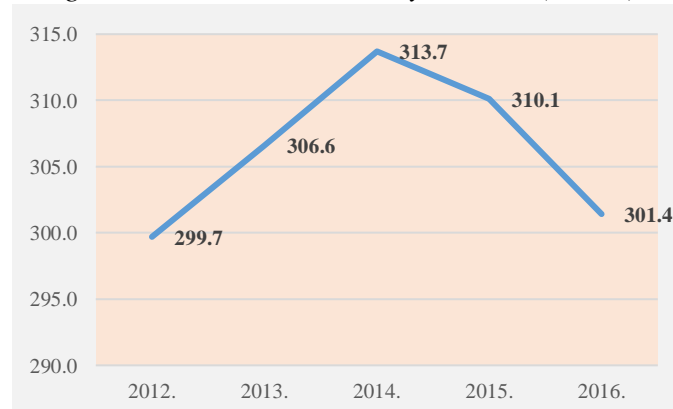
Source: EBSCO, MarketLine Industry Profile (Own illustration)

Figure 2: Europe media industry revenue (bill. \$)



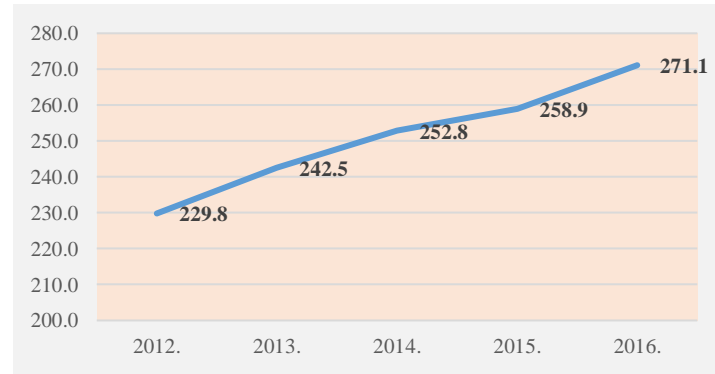
Source: EBSCO, MarketLine Industry Profile (Own illustration)

Figure 3: USA media industry revenue (bill. \$)



Source: EBSCO, MarketLine Industry Profile (Own illustration)

The US media industry generates the highest revenue from all other geographies, but at the same time, it shows the direction in which the old media industry is moving. The total revenue of the old media industry in the USA has fallen over the last two analysed periods, with an average annual growth rate of only 0.2%, which is almost the same as in Europe. On the US continent, we have a similar distribution of income as in Europe. Revenues in Canada are falling at an average rate of 3.1%, but revenues in Brazil are growing at an average annual rate of 7.8%.

Figure 4: Asia&Pacific media industry revenue (bill. \$)

Source: EBSCO, MarketLine Industry Profile (Own illustration)

The largest revenue growth of the old media industry is recorded in Asia and the Pacific. The average annual growth rate is 4.2%. India and China, which are rapidly building up the media industry, have seen the highest revenue growth. Average annual revenue growth in India is 9.6%, while China's average annual revenue growth is 8.7%. In contrast, in countries that have built up the media industry a long time ago, revenues recorded an average rate of decline over the analysed period. In Japan, the average annual rate was -0.4% and in Australia -0.2% which is very similar to the old media industries in USA and Europe.

6. VIDEO GAMES INDUSTRY REVENUE

The video game industry began to emerge in the middle of the last century, and games were adapted to be broadcast on television screens. The rapid technological development of the late 20th century, with the development of the Internet and digital technology, spurred the rapid development of this sector of the media industry. Video games in the context of the old media industry were adapted to television screens as arcade games. The business model consisted of selling gaming consoles that already had games in place and could not be upgraded. Digitization of production systems and convergence within the media industries have created the basis for a completely new way of producing and distributing video games. The turning point came in 2007 after the advent of the iPhone, that is, the development of applications for smartphone screens. We associate the old media industries with the industrial era, and the modern, and television screens used for broadcasting. The development of screens on smartphones, the development of applications and games for smart phones and tablets we connect with the post-modern and post-industrial society.

Table 1: Global video games revenue (bill. \$)

	2013.	2014.	2015.	2016.	2017.	2018.	2019.
North America	21,9	22,2	23,8	25,4	27,0	32,7	39,6
South America	2,9	3,3	4,0	4,1	4,4	5,0	5,6
Europe, Africa, M. East	18,7	19,1	20,5	23,5	26,2	28,7	34,7
Asia	31,9	36,8	43,1	46,6	51,2	71,4	72,2
	75,4	81,4	91,4	99,6	108,8	137,8	152,1
USA	n/a	n/a	22,0	23,5	25,1	30,4	36,9
China	n/a	n/a	22,2	24,4	27,5	37,9	36,5

Source: NewZoo (own illustration)

Table 1 shows the revenue of the global video game industry published by the Newzoo agency specialized in collecting and processing data from the video gaming industry.

2019 total media industry revenue was \$ 152.1 billion. Compared to 2016, which is the reference year for the old media industries, the revenue of the video game industry has increased by more than 50%, which has never happened in the recent history of measuring the revenue of the old media industries. Comparing the revenues of the US media industry, as the largest single media market, with the revenues of the global video game industry, it is significant to note that video game revenue would be one third of the revenue of the entire old US media industry. The average annual revenue growth of the video game industry in the analysed period was 25.3% annually. The highest average annual growth rate was recorded by China at 45.5% per year, followed by the USA at 38.9% per year.

7. DISCUSSION

Digitization and convergence of production systems have enabled the emergence of new segments of the media industry. The fundamental difference between new and old industries is precisely the erasure of the boundaries between the canonical boundaries of industries, and thus the revenue generated by particular segments of the media industry. The emergence of blurred boundaries in the media industry is reflected in a very wide range of production, consumption and revenue generation. We define three fundamental phenomena arising from the development of new media industries as:

- The blurring boundary between online games and real life has become an important global phenomenon (Kshetri 2009). New media industries are blurring the boundaries of reality and illusion. Baudrillard speaks about the phenomenon of hyperreality, and the very theme of reality and illusion is part of postmodern philosophical thought.
- Since 2004, the on line and wireless video games market has grown with remarkable rapidity [...], now smartphones are popular gaming platform (Simon 2018). The convergence of platforms within the media industry has directly influenced the rapid development of applications and games for smartphones and tablets. Smartphones are taking over the dominance of the media industry and erasing media availability limits.
- Game developers have now to deal with a dual task: creating a compelling game architecture and implementing a business strategy to sale virtual products (Ravoniarison 2019). The development of design solutions has directly influenced the exponential growth of the number of games on the market. Related to this are the problems of monetization and revenue generation of media corporations. On the one hand, there is increasing pressure on developers and corporations to create new games, but continued supply growth, on the other, results in the problem of monetizing content in the market. New techniques for monetizing blurred boundaries of classic billing and revenue generation models used by the old media industry.

The new media industry as well as the video game industry emerged as the product of two fundamental processes. The first is recognized as the development of technology for production, distribution and monetization of media content. The other is recognized as a change in the social paradigm, that is, the development of a postmodern society. Thanks to new techniques of monetization and blurring boundaries between different industrial segments, new media industries are making many times more profits than the old media industries.

8. CONCLUSION

The development of post-industrial society has significantly influenced and changed the way media is produced and distributed. The old media industries kept the classic way of distribution created in the time of mass media. New media industries have developed brand new management strategies for content distribution and revenue generation. In the first place, they left the mass media model and started distributing content on peer-to-peer platforms.

Postmodern society is characterized by blurred boundaries in all segments of activity, so this only spilled over to the consumption of content in the media industry. Blurred boundaries in the video game industry mean deleting boundaries between age groups, genders, professional orientations, marital status, living conditions and the like. New management strategies, in line with new circumstances within the media market, are developing new ways of generating revenue tailored to blurred boundaries in all segments of the social life and media industries.

LITERATURE:

1. Albarran, A.B. (2010). *The Media Economy*. Routledge. Taylor & Francis Group.
2. Alegre, M. (2018). "Why Mobile Games Are More Important To Your Brand Than You Thought". *Forbes*. <https://www.forbes.com/sites/forbestechcouncil/2018/09/05/why-mobile-games-are-more-important-to-your-brand-than-you-thought/#45b7f465122>; [20.01.2020.]
3. Braun, B.; Stopfer, J.M.; Müller, K.W.; Beutel, M.E.; Egloff, B. (2016), "Personality and video gaming: comparing regular gamers, non-gamers, and gaming addicts and differentiating between game genres", *Computers in Human Behavior*. Vol. 55, pp. 406-412.
4. Curan, C.S. (2013). *The Anticipation of Converging Industry: A concept Applied Nutraceuticals and Functional Foods*. Springer.
5. De Prato, G.; Feijoo, C.; Simon, J.P. (2014) "The Road to E-Services: Online and Mobile Games as Enablers". (eds), Beak, Y. et al. *Trends and Application of Serious Gaming and Social Media, Gaming Media and Social Effects*. Springer Science Business Media Singapore
6. Egenfeldt-Nielsen, S.; Smith, J.H.; Tosca, S.P. (2016) *Understanding Video Games: The essential Introduction, Third Edition*, Routledge, Taylor & Francis Group.
7. Escribano, F. (2012) „Gamification as the Post-Modern Phalanstere: Is the Gamification Playing with Gamification?“, (eds.) Zackarsson, P.; Wilson, L. T.(eds) (2012) *The Video Game Industry: Formation, Present State and Future*, Taylor & Francis.
8. Gottsch, C. (2000). *Business Strategy in Online Industry: Market and Network Strategy in Multi-layered Industry*. Deutscher- Universitäts Verlag.
9. Grainge, P.; Johnson, C. (2015). *Promotional Screen Industries*. Routledge. Taylor & Francis Group.
10. Hacklin, F. (2008). *Management of Convergence in Innovation: Strategies and Capabilities for Value Creation Beyond Blurring Industries Boundaries*. Physica-Verlag. Springer.
11. Hamel, G.; Prahalad, C.K. (1996). *Competing for the future*. Harvard Business School
12. Hendricks, J.A. (2010). *The Twenty-first century media industry: Economic and Managerial Implication in the Age of New Media*. Lexington books.
13. Hilmes, M. (2009). "Nailing Mercury: The Problem of Media Industry Historiography". (eds.) Holt, J.; Perren, A. *Media Industries: History, Theory, and Method*. Wiley-Blackwell. A John Wiley & Sons, Ltd., Publication, p.21-33.
14. HKExnews (2018), "Number of active video gamers worldwide from 2014 to 2021 (in millions)", Statista, available at: www.statista.com/statistics/748044/number-videogamers-world/ [20.01.2020.]
15. Ip, B.; Jacobs, G; Watkins, A. (2008). "Gaming frequency and academic performance", *Australasian Journal of Educational Technology*. Vol. 24, No. 4, pp. 355-373.
16. Johnson, D. (2019). *Transgenerational Media Industries: Adults, Children, and the Reproduction of Culture*. University of Michigan Press. Ann Arbor.
17. Khare. S. "Blurring Boundaries". <https://www.linkedin.com/pulse/blurring-boundaries-subhash-khare>. [21.01.2020.]

18. Kranenburg, Van H. (2017) "Summary and Best Practices". (ed.). Kranenburg, Van H. *Innovation Policies in the European News Media Industry: A Comparative Study*. Springer.
19. Kranenburg, Van H.; Ziggers, G.W. (2013). "Dynamic Competition and Ambidexterity". (eds). Towse, R.; Handke, C. *Handbook on the Digital Creative Economy*. Edward Elgar
20. Kshetri, N. (2009). "The Evolution of the Chinese Online Gaming Industry". *Journal of Technology Management in China*. Vol. 4 No. 2, 2009., pp. 158-179.
21. Kung, L. (2008). *Strategic Management in the Media: Theory and Practice*. Sage.
22. Liu, C. (2017). "A model for exploring gamers flow experience in online games". *Information Technology & People*, Vol. 30 No. 1, pp. 139-162.
23. Liu, C.C.; Chang, I.C. (2016), "Model of online game addiction: the role of computer-mediated communication motives", *Telematics and Informatics*, Vol. 33 No. 4, pp. 904-915.
24. Lozić, J. (2019). „Zero marginal cost in magazine industry: Changing of cos paradigm in "new" magazine industry. 44th International Scientific Conference on Economic and Social Development. ESD Conference Split., p.p. 125-136.
25. Manning, J.; Buttfield-Addison, P. (2017). *Mobile Game Development with Unity: Build Once, Deploy Anywhere*, O'Reilly
26. Marketline Industry Profile, EBSCO. [22.01.2020.]
27. Marshall, P.D. (2009). "New Media as Transformed Media Industry". (eds.) Holt, J.; Perren, A. *Media Industries: History, Theory, and Method*. Wiley-Blackwell. A John Wiley & Sons, Ltd., Publication, p.81-89.
28. Newzoo. Global Games Market Report. <https://newzoo.com/solutions/standard/market-forecasts/global-games-market-report/> [22.01.2020.]
29. O'Donnell, C. (2012) „This is Not a Software Industry“, Zackarssion, P.; Wilson, L. T. (eds), *The Video Game Industry: Formation, Present State and Future*, Taylor & Francis.
30. Ravoniarison, A. (2019). Mobile Games: Players' experiences with in-app purchases. *Journal of Research in Interactive Marketing* Vol. 13 No. 1, 2019., pp. 62-78.
31. Simon, J.P. (2016). "Catching a rising star. techno-platforms study of companies with high market capitalisation (HICAP) running global digital platforms", available at: <https://ec.europa.eu/jrc/en/publication/how-catch-unicorn-exploration-universe-tech-companies-high-market-capitalisation?search> <https://ec.europa.eu/jrc/en/publication/how-catch-unicorn-case-studies?search> [20.01.2020.]
32. Simon, J.P. (2018). "Triggering the emergence of digital ecosystems: the role of mobile and video games in emerging economies." *Digital Policy, Regulation and Governance*. Vol. 20., No. 5, pp. 449-478.
33. Turow, J. (2011). *Media Today: An Introduction to Mass Communication*. 4th edition. Routledge. Taylor & Francis Group.
34. Wirtz, B.W. (2011). *Media and Internet Management*. Gabler Verlag, Springer Fachmedien Wesbaden GmbH.
35. Zackarssion, P.; Wilson, L. T.(eds). (2012). *The Video Game Industry: Formation, Present State and Future*. Taylor & Francis.

PRICE RISK AND ITS IMPACT ON PRICE DECISION-MAKING AND PRICING OF A COMPANY

Anna Kubjatkova

University of Zilina, Slovakia
anna.kubjatkova@fpedas.uniza.sk

Jana Kliestikova

University of Zilina, Slovakia
jana.kliestikova@fpedas.uniza.sk

Lubica Gajanova

University of Zilina, Slovakia
lubica.gajanova@fpedas.uniza.sk

ABSTRACT

The most common impulse for buying a product for the customer is mainly its price. The price of a product indicates its quality and the quality of the company itself. What the price of the product itself will be the result of the efforts of many managers who have to choose between different pricing methods and practices. It is these practices and pricing methods that depend on the success of the company and its ability to adapt to market changes, with the right price of the product covering costs and ensuring a certain amount of profit. The main objective of this work is to analyze the price risk of a company when considering the production of two potential products. The aim was to determine, on the basis of calculations, which product would have a lower price risk, ie the production of which product would be less risky for the company and therefore more advantageous. In this work the methodology of mutual comparison and analysis of price risk of individual potential products of the company was used. After performing this analysis, we compared the price risks of these products, which we quantified based on price risk indicators. As a given indicator we used the decrease of risk and the necessary volume of sales. As a result of the previous analysis, we suggested that the company would naturally choose a product with a lower price risk. Based on the methods used, companies can choose the version where the price risk for the enterprise is the lowest when considering the production of a product.

Keywords: Price, Price risk, Pricing

1. INTRODUCTION

Everything has a price in the market as well as in the economy itself. This depends primarily on demand and supply. In particular, it is very important that the prices of the companies themselves are set in such a way as to make the business and the success of these companies on the market as efficient as possible. Each company should set its pricing in order to avoid as far as possible the potential risks arising mainly from incorrect price decisions (Rajnak et al., 2007). Businesses are no longer operating on the market just to make a profit, they have to realize that they have a certain duty to the company and therefore their business must be ethically correct because they influence social events. Therefore, pricing and its process must also be ethical in order for the company to be represented as a reliable business entity and respected by its customers (Sroka, Szanto, 2018). In a market environment, the customer is currently key to the company's long-term survival and success. It is also essential for companies to constantly strive not only to attract potential customers, but especially to maintain and strengthen their cooperation with existing customers. Therefore, it is necessary to think about both groups of customers when pricing, not only the customers whom the company wants to win at this price

(Nadanyiova, 2013). When pricing companies, they must take into account the fact that the price of a product primarily reflects the quality of the product itself or the company. To determine the price, companies often conduct market research on the quality requirements of the customers themselves for the product. The research of requirements and customer satisfaction with a certain quality level of the product at a certain price is therefore an essential part of the price decision-making process of the company and later the pricing itself (Valaskova, Krizanova, 2008). Companies need to set goals that they want to achieve to get the right price. Company goals are just one of a number of other questions that a business must answer. Establishing the right and most advantageous price for a business is a lengthy process whereby the price should respect the needs of customers, withstand the pressure of competition and ensure the highest possible income for the company (Kita et al., 2010). To be able to achieve its goals and meet its expectations, the company needs a sophisticated pricing strategy. Appropriate and detailed pricing strategy allows the company to get the lead. In the case of a company with limited resources, to optimize it is advantageous to develop a pricing strategy especially to maintain a competitive advantage. (Nwachukwu, Hieu Fadeyi, 2018)

2. PRICE DECISION-MAKING

Generally, we understand the price decision-making of various business activities that result in a specific pricing in the company. These activities include the collection, sorting and evaluation of various information, whether internal or external to the enterprise. In particular, it means information about the effects that affect prices in general and specific pricing practices for products and services (Jankok et al., 2007). It is a fact that price decision-making is difficult and complex, not to mention that it has a long time horizon. From setting business goals, through product or service development, distribution channel solutions and various phases to pricing and customer communications, this process is also demanding in terms of personnel and expertise. This is also a difficult process in terms of monitoring and investigating behavioral aspects of price decision making, so this process cannot be considered as simple (Valaskova, Bartosova, Kubala, 2019). There are a large number of factors in price decision-making in the business environment that can have a significant impact on this process. As the basic characteristic tells us, the information the company works with is very important. Equally essential is the target group of customers for whom the product is intended. The specific market segment in which the products or services will be offered is also important in determining their price. Competition is also a significant factor that also affects price decisions. Competitors' behavior may influence the company's behavior and procedure in price formation (Rajnak, 2002). We know several pricing approaches in price decision-making. Cost-oriented pricing is most commonly used in the Slovak Republic. The main idea is to cover costs and ensure a minimum profit by establishing a gross margin. Demand-oriented pricing considers the value perceived by the customer as the basis, not the seller's costs, as a previous approach. Competitive pricing takes into account, in particular, competitors' prices. The company basically follows the prices of competitors and thus does not use the possibility of setting its own pricing strategy (Lipianska, Hasprova, 2016). In particular, price decisions are related to the determination of the price of new products entering the market, to price changes caused by a change in demand or production costs, or by an effort to boost demand. Similarly, these decisions relate to price changes caused by competition and, in particular, competitive price, and also to the formation of optimal price relations of products within a given price level on the basis of their cost and price relationships. Price decisions in introducing new products have an impact not only on the manufacturer, but also on customers and their purchasing behavior in the private and non-private brands (Valaskova, Klietkova, Krizanova, 2018). All factors, both internal and external, must be taken into account in the context of price decisions. In addition to the above, it should be noted that not only a particular market segment and a specific target

group is crucial, because, for example, infrastructure design, logistics flows or established transport systems influence the pricing decision making process (Krizanova, 2008). Many of the economic factors involved in price decision-making are easier to quantify from a methodological point of view and are therefore more often studied, studied and taken into account (Caryl, Kral, Siekelova, Horak, 2019). The price decision process and pricing in an enterprise are often exposed to limited resources and information. The fact that, in general, terrestrial resources are not infinite contributes to the fact that continuous economic growth is not sustainable for the future. All company decisions, including in pricing, must work with this idea. (Popp, Olah, Fekete, Lakner, Mate, 2018)

3. PRICE RISK

An integral part of any business is a certain risk. Generally, it can be defined as an activity with which material or physical damage or loss and consequently a disadvantage is associated. It is most often associated with business failure, which will result in a negative economic result, ie a loss. Risk involves some form of responsibility for the consequences of a selected business decision, ie a certain risk option. The success rate of this business decision in terms of the results achieved affects the position and rating of the decision-maker, ie the accountable manager. That is why it is important for businesses to take into account all possible risks that might arise. Companies should be able to assess the risk and learn how to handle it so that they can react appropriately and manage it (Varcholova, Korzeniowski, 2002). When making price decisions, there may be a risk that is mainly caused by the purchasing power of the customer. Whether a customer decides to buy or not directly affects the market presence. There are other factors that influence the risk arising from price decisions. These include, for example, relations with suppliers, the success of competition, the prices of substitution products and the current situation, whether on the domestic or foreign market. The company is not able to anticipate changes in these factors when they occur, they have to face them (Lipianska, Hasprova, 2016). Price risk is a part of business risk and can be characterized as a possibility to achieve a worse result in business activity than expected result. This worse result may occur because of a decrease, increase or change in price of the product or service. Price changes can cause various consequences. Increasing the price of a product often results in a decrease in sales volume. Conversely, if the price is lowered, it is possible to have an impact on the amount of profit, namely its reduction and the like (Kufelova, 2017). In dealing with risk, businesses can generally apply different pricing decisions. If the risk can be identified in a timely manner, it is best for the company to avoid it completely by restricting activities in risk areas. If the risk cannot be completely avoided, it can be reduced by taking measures that could prevent major losses such as insurance. Companies may also create a financial reserve in advance from previous earnings periods to cover possible losses in a risky business. Equally, companies can diversify this risk, shifting part of the risk to other entities and thereby reducing the imminent loss (Rajnak, 2002). Determining price risk for a company is a time-consuming process, and the approach to risk itself should address all aspects in this area. From quantitative identification and modeling to the development of techniques for practical application, this process must include a modern and open approach from management (Belas, Smrcka, Gavurova, Dvorsky, 2018). Price risk quantification for companies is based on price changes and is therefore a complex process where businesses can use the company's intelligent computing systems to provide a fast and accurate data base (Tuffnell, Kral, Siekelova, Horak, 2019). In price decision making, companies can use a large number of systems, predictive algorithms or databases of various data and similar models and indicators in addition to intelligent computing to determine and price a particular representative of a product portfolio or a specific product. Each company can therefore choose one of the methods used according to its needs and market conditions (Bourke, Kovacova, Klietkova, Rowland 2019).

The use of intelligent systems and digital technologies can be used in general within companies, government, self-government, but also in communication with each other or with customers and citizens. However, these systems can be very expensive for small and medium-sized enterprises. It is therefore appropriate to outline a simple procedure that would not put pressure on companies' costs (Kearney, Kliestik, Kovacova, Vochozka, 2019). The impact of price changes in pricing and price decision-making can be measured using two basic indicators. The first indicator is a decline in sales, indicating how much sales volume can fall before a company reaches a critical point. If this indicator is less than 1 or close to 0, this means that there is a much greater risk that the business will fall below the critical point and be loss-making. The calculation of a given indicator can be expressed as the difference between sales and sales at a critical point, divided by revenue. Of course, the indicator must be expressed as a percentage. The result is how much the company's sales can fall before it reaches a critical point. The specific calculation formula is as follows:

$$\text{Decline in sales} = \frac{\text{sales } (S) - \text{sales at a critical point } (SCP)}{\text{sales } (S)} \times 100 \quad (1)$$

The critical point in pricing is the relationship between sales, ie sales volume, profit and cost. It can be argued that the critical point is when the company covers all its costs from its sales. It reflects how the change in sales and costs, whether variable or fixed, affects the company and especially its profit. The following formula is generally used to calculate this point:

$$\text{Critical point (CP)} = \frac{\text{fixed costs } (FC)}{\text{selling price } (P) - \text{variable unit costs } (VCu)} \quad (2)$$

The second indicator by which the impact of price changes in pricing and price decisions can be measured is the necessary volume of sales. This indicator expresses the necessary volume of sales until the company reaches a critical point. This is the ratio of sales to critical point for a particular demand and price and the maximum sales generated for a particular demand and price. The result of the following formula expresses what percentage of sales the company must actually sell in order to reach a critical point. The formula for calculating the necessary sales volume is as follows:

$$\text{Necessary volume of sales} = \frac{\text{sales at a critical point } (SCP)}{\text{sales } (S)} \times 100 \quad (3)$$

If the indicator of decrease in sales is known, the indicator of necessary volume of sales can be calculated as: $1 - \text{decrease in sales}$. This relationship can also be applied in the opposite way, ie if we know the amount of the indicator of the necessary volume of sales, we can similarly calculate the indicator of decrease in sales (Kufelova, 2017).

These two indicators can be used to measure the impact of price changes in price decisions, and the application of the indicators can be used in virtually all companies.

4. PRACTICAL APPLICATION OF PRICE RISK CALCULATION

The calculation of price risk is very beneficial for companies as it helps them in various pricing areas and in price decision-making. When a company is considering the production of a product, it usually focuses not on one, but on a number of analogous products, in which it seeks to determine, by means of a marketing survey, the preliminary interest of customers and thus to determine the estimated sales volume. If we assume that a company is considering making two analogous products (we will call their product X and Y), then they need to do the marketing

research. Upon execution, the company assumes that the sales volume of product X is 6232 units and product Y is 5964 units. Of course, the fixed production costs for both products are the same amount of 8235 €. The selling price of product X is 26,34 € each and the variable cost is 6,20 € each. For Y, the selling price is 22,85 € per piece and the variable cost is 8,36 € per piece. Price risk indicators can be used to determine which product would be more profitable for the company, ie which product would have lower price risk. For the calculation of the given indicators it is necessary to determine the critical point (CP) in pricing for both products, while the information for the calculation of this point is available according to the formula. To calculate the decline in sales as the first indicator of price risk, it is necessary to determine sales, using the general formula as a multiple of the estimated sales quantity and the selling price per piece. Subsequently, the sales in critical point (SCP) can be determined by multiplying the critical point (CP) by the selling price (P) per piece, according to the formula (2) above. After partial calculations, we substitute the components into formula (1) and calculate the decrease in sales for individual products. The result of this indicator can be interpreted verbally as a situation by how much revenue from the sale of a particular product can fall until the company reaches sales at a critical point. Calculation of the second indicator of price risk, which is the necessary volume of sales, according to formula (3), we already have all the necessary information that we have obtained from the previous calculations. The procedure is clear, we substitute the given variables into the formula, or the given result can also be obtained by subtracting the calculated amount of the decrease in sales from 1. The result is the same in the case of substituting into the formula or difference (1 - decrease in sales). This indicator tells us how much volume a particular product has to sell before reaching a critical point. The results for products X and Y are shown in the following table:

Table 1: Price risk indicators for products X and Y

Indicators	Products	X	Y
Critical point (CP)		409 €	569 €
Sales		164 151 €	136 278 €
Sales at a critical point (SCP)		10 773 €	13 002 €
Decline in sales		93 %	90 %
Necessary volume of sales		7 %	10 %

Source: processed by the authors

Table 1 shows that the company will be less risky to produce and sell product X, while its expected sales volume in € may fall by up to 93% and only 7% of its possible sales are sufficient and the company reaches a critical point. For this reason, we can say that the production of this product will be less risky for the company because its price risk is lower.

5. CONCLUSION

Based on previous calculations and analysis, it can be said that companies can use this process to favor the production of the product with the lowest price risk. In particular, companies considering the production of a new product and having a large number of alternatives to decide on can benefit from this process. This will enable them to simplify their choices, particularly in terms of minimizing price risk.

ACKNOWLEDGEMENT: *This paper is an output of scientific project VEGA no. 1/0718/18: The impact of psychographic aspects of pricing on the marketing strategy of companies across products and markets.*

LITERATURE:

1. Belas, J., Smrcka, L., Gavurova, B., Dvorsky, J. (2018). The Impact of Social and Economic Factors in the Credit Risk Management of SME. *Technological and Economic Development of Economy*, 1215–1230.
2. Eilis, B., Kovacova, M., Kliestikova, J., Rowland, Z. (2019). Smart Industrial Internet of Things Devices, Services, and Applications: Ubiquitous Sensing and Sensory Data, Predictive Analytics Algorithms, and Cognitive Computing Technologies. *Journal of Entrepreneurship Management and Innovation*, 50–56.
3. Jankok, M. et al. (2007). *Ceny a cenova strategia*. Bratislava: MIKA – Consult.
4. Kearney, H., Kliestik, T., Kovacova, M., Vochozka, M. (2019). The Embedding of Smart Digital Technologies within Urban Infrastructures: Governance Networks, Real-Time Data Sustainability, and the Cognitive Internet of Things. *Geopolitics, History, and International Relations*, 98–103.
5. Kita, J. et al. (2010). *Marketing*. Bratislava: Iura Edition.
6. Krizanova, A. (2008). The Current Possition and Perspectives of the Integrated Transport Systems in Slovak Republic. *Eksplatacja i Niezawodnosc-Maintenance and Reliability*, 25-27.
7. Kufelova, I. (2017). *Ceny a cenove rozhodovanie*. Bratislava: Wolters Kluwer.
8. Lipianska, J., Hasprova, M. (2016). *Cenove rozhodovanie v marketingu – praktikum*. Bratislava: Ekonom.
9. Nadanyiova, M. (2013). The Possibility of Introducing the CRM System in Railway Company Cargo Slovakia. *17th International Conference on Transport Means*, 87-92.
10. Nwachukwu, Ch., Hieu, V. M., Fadeyi, O. (2018). Influence of strategy formulation drivers on strategic performance. *Ekonomicko-manazerske spektrum*, 15-25.
11. Popp, J., Olah, J., Fekete, MF., Lakner, Z., Mate, D. (2018): The Relationship Between Prices of Various Metals, Oil and Scarcity. *Energies*, 1-19.
12. Rajnak, M. et al. (2007). *Cenove rozhodovanie*. Bratislava: Sprint.
13. Sroka, W., Szanto, R. (2018). Corporate Social Responsibility and Business Ethics in Controversial Sectors: Analysis of Research Results. *Journal of Entrepreneurship, Management and Innovation*, 111-126.
14. Tuffnell, C., Kral, P., Siekelova, A., Horak, J. (2019). Cyber-Physical Smart Manufacturing Systems: Sustainable Industrial Networks, Cognitive Automation, and Data-Centric Business Models. *Economics, Management, and Financial Markets*, 58–63.
15. Valaskova, K., Bartosova, V., Kubala, P. (2019). Behavioural Aspects of the Financial Decision-Making, *Organizacija*, 22-32.
16. Valaskova, K., Kliestikova, J., Krizanova, A. (2018). Consumer Perception of Private Label Products: An Empirical Research. *Journal of Competitiveness*, 149-163.
17. Valaskova, K., Kramarova, K., Kollar, B. (2015). Theoretical Aspects of a model of credit risk determination- Credit risk. *Advances in Education Research*, 401-406.
18. Valaskova, M., Krizanova, A. (2008). The Passenger Satisfaction Survey in the Regional Integrated Public Transport System. *Promet-Traffic & Transportation*. 401-404.
19. Varcholova, T., Korzeniowski, L. (2002). *Podnikatelske riziko*. Bratislava: Ekonom.

THE RELATIONSHIP BETWEEN TERRITORIAL COHESION AND REGIONAL COMPETITIVENESS IN THE EUROPEAN UNION

Lela Tijanic

*Juraj Dobrila University of Pula
Faculty of Economics and Tourism "Dr. Mijo Mirković", Croatia
letijan@unipu.hr*

Ines Kersan-Skabic

*Juraj Dobrila University of Pula
Faculty of Economics and Tourism "Dr. Mijo Mirković", Croatia
ikersan@unipu.hr*

Daniel Tomic

*Juraj Dobrila University of Pula
Faculty of Economics and Tourism "Dr. Mijo Mirković", Croatia
dtomic@unipu.hr*

ABSTRACT

Territorial cohesion, as one of the important goals of the European Union cohesion policy, represents research interest important also in perspectives of the future 2021-2027 cohesion policy. It focuses on strengthening territorial potentials, balanced development, which can be observed through competitiveness factors, even though the connection between territorial cohesion and competitiveness still provokes different discussions with confronting conclusions. Regarding diversified structure of European regions and the differences in its competitiveness results, there are also studies about the adequate cohesion policy implementation which will improve European competitiveness and other development goals such as territorial cohesion. The aim of this paper is to present the relationship between territorial cohesion and regional competitiveness in the European Union, through investigating the results of the latest European Regional Competitiveness Index. Theoretical part of the paper will be focused on the definition, the background and the role of the territorial cohesion, as well as on the connection between territorial cohesion and regional competitiveness. More detailed analysis and interrelations will be performed on the sample of European NUTS 2 regions, in order to present the characteristics which should be included in managing territorial cohesion. Regional competitiveness results are correlated with the chosen indicators of territorial cohesion. There can be seen that competitiveness results are connected with different determinants of territorial cohesion, but the estimated influences regarding specific determinants have shown ambiguous nature. A polycentric pattern of development should be improved by observing the differences between capital city regions and the rest of the country together with the untapped regional potentials of regions that are at the same time facing competitiveness hurdles.

Keywords: regional competitiveness, NUTS regions, territorial cohesion

1. INTRODUCTION

Through its cohesion policy, the European Union (EU) aims to achieve economic, social and territorial cohesion. The third dimension is relatively new and it has become important especially with the strategy Europe 2020, but also with the EU enlargements when arises a need to consider the evolution of the European territory due to new, diversified countries that join the integration. The territorial cohesion is focused on: (1) „the capitalisation of the strengths of the each territory so they can best contribute to the sustainable and balanced development of the EU as a whole, (2) managing concentration because cities have both positive and negative

impacts - intensifying innovation and productivity at the same time as pollution and social exclusion, (3) better connecting territories (people should be able to live wherever they want, with access to public services, efficient transport, reliable energy networks and broadband internet throughout the territory), (4) developing cooperation between countries and regions (the EU Strategy for the Baltic Sea Region and the EU Strategy for the Danube Region are examples of new, macro-regional approach), (5) fostering urban-rural linkages“ (European Commission, 2020b). On the other hand, the EU is focused to achieve high level of competitiveness on the integration, national but also on the regional level. These two terms cohesion and competitiveness can be observed as two parallel development paths, but also as two opposite processes - because if the EU will put more emphasize and efforts on cohesion, it can represent burden for the developed regions to become more competitive. With the rise of competitiveness, the development gap between countries and regions can widen. The aim of this paper is to present the relationship between territorial cohesion and regional competitiveness in the EU, through investigating the results of the latest European Regional Competitiveness Index (RCI). Regional competitiveness results will be analyzed and then compared with the chosen indicators of territorial cohesion. This relationship will be also empirically estimated. The paper contributes to previous researches on territorial cohesion and discussions about the connection between cohesion and competitiveness by its research approach, including the novel database of the RCI which will be used in order to estimate the relationship in question. The next section presents literature review. In the third section the main results of the RCI are synthesized with emphasis on parts important for investigating and measuring territorial cohesion. Empirical estimation of the relationship between territorial cohesion and regional competitiveness in the EU is presented in the fourth section, while final section gives concluding remarks.

2. LITERATURE REVIEW

Territorial conditions are important in socioeconomic development which is presented in numerous studies and implementations of public policies, through activities of international organisations such as the World Bank and the Organisation for Economic and Co-operation and Development (Szlachta, 2017). This is also confirmed in cohesion policy of the EU and regional development policy doctrine. Cohesion in the framework of the EU cohesion policy is observed from an economic, social and territorial point of view. Elissalde and Santamaria (2014) explain the term of territorial cohesion as a set in the continuation of the policy known as “economic and social cohesion in the EU”. This term refers to main aim of regional policy - reduction of imbalances between regions and countries within the EU to create better living conditions for all citizens of the EU. The term “territorial cohesion” considers the diversity of European societies and nations, but also points on the need to avoid straining links between European territories. The notion of territorial cohesion appeared at first in the Amsterdam treaty (1997) and (officially as a pillar of the cohesion) was included as part of the Lisbon treaty (2009) - the last treaty that regulates the EU functioning. Strengthening the territorial dimension of the Europe 2020 strategy and other EU and national policies, promotion of practical ways of applying the territorial approach are recognized as opportunities to improve the effects of the Europe 2020 strategy’s implementation (Böhme, Doucet, Komornicki, Zaucha and Świątek). New instruments have been introduced to achieve territorial cohesion objective in the 2014-2020 programming period (Medeiros, 2016). It is seen that the concept of territorial cohesion is accompanied with the higher possibilities to act on regional and local level. The development of cohesion policy, including territorial cohesion as one of the goals, was described through the cohesion reports. The EU has published 7 cohesion reports and in the newest one (2019), the European Commission points that territorial cohesion comprises various issues which are central to cohesion policy, and „among these are the environmental dimension of sustainable

development and the use of flexible functional geographies for territorial development“ (European Commission, 2017, p. 96). Medeiros (2016, 2019) highlights the growing importance of territorial cohesion with the inclusion in Lisbon treaty and elaborates on the challenges to present territorial cohesion as understandable and measurable concept. He explains that territorial analysis is complex, involves interrelated elements of territory. Therefore, in defining the concept, the author identifies different dimensions and components of territorial cohesion, which should also be connected with economic and social aspects. In measuring territorial cohesion in a given territory these dimensions and components can be linked to related indicators. The definition of territorial cohesion as “the process of promoting a more cohesive and balanced territory by supporting the reducing of socioeconomic territorial imbalances, promoting environmental sustainability, reinforcing and improving the territorial cooperation/governance processes, reinforcing and establishing a more polycentric urban system” (Medeiros, 2016, p. 26), he suggest as possible to construct of a Territorial Cohesion Index, based on four aggregated indexes (socioeconomic, environmental sustainability, morphologic polycentricity and territorial governance/cooperation) (Medeiros, 2016, 2019). More about challenges in defining, measuring and implementation of territorial cohesion can be found in Jouen (2008), ESPON (2013), Hanell (2015), Medeiros (2018) and Zaucha and Böhme (2020). Territorial dimension of the cohesion is clearly connected with regional characteristics and regional disparities, which is important for EU cohesion policy interventions. Territorial imbalances challenge the economic, social and territorial cohesion within Europe (ESPON, 2006). Fratesi and Perucca (2018, p. 265) found the „complementarities between different territorial assets of regions and the impact of EU regional policy: Cohesion Policy effectiveness is higher when investments are focused on the assets complementary to those already abundant in the region“. Here can be also seen the need to observe potential of territorial capital, the tangible and intangible assets of an area (OECD, 2001), as a basis for future growth and cohesion. Dudek and Wrzochalska (2019) in their research found differences in the intensity of support of EU cohesion policy tools per capita in favour of urban regions. They also provide theoretical differences in regional policies oriented towards competitiveness vs. sustainability. Crescenzi, De Filippis and Pierangeli (2014) analyse financial allocations of different policies (regional, rural development and agricultural policies) in the EU to investigate their coordination and synergies with the territorial cohesion. Among other conclusions, the authors have shown the importance of appropriate “place-based” allocation mechanisms. Regional specific characteristics and their disparities can be analysed through competitiveness factors. But, the competitiveness improvement of the EU (weaker) regions and at the same time strengthening the competitiveness of the EU integration, sometimes represent contradictory policy goals. In the Second Cohesion Report, where territorial cohesion is highlighted as important in promoting balanced development, this is confirmed with the explanation that concentrations in stronger regions may implicate greater efficiency and production in the short term in the EU but this can also lower the productive potential of less developed regions, with implication for the longer-term competitiveness (Medeiros, 2019). Mikuš, Kukoč and Jež Rogelj (2019) also warn on the conflict between cohesion and competitiveness objectives. Policies that foster competitiveness and put it into “the macro concept with spatial implication result in planning and implementation of inappropriate measures and instruments intended to encourage the balanced territorial development of the EU. From this arises a conflict of cohesion and competitiveness, coupled with long-term consequences for the most vulnerable areas” (Mikuš, Kukoč and Jež Rogelj, 2019, p. 143). Szlachta (2017) indicated the shift from cohesion to the competitiveness issues especially after Europe 2020. The connection between territorial cohesion and regional competitiveness is explained in Elissalde and Santamaria (2014, p. 28), as the two sides of the purpose of regional policies (“guaranteeing the European citizens comparable access to services

whatever the place of residence; territorial cohesion” and “supporting growth potential of the European territory in a regional framework; regional competitiveness”). They also discuss the definition of regional competitiveness, from competition of territory to wider definition that comprises different factors such as those relating to the initial economic and social structure (specialisation, cooperation among players, collective learning abilities etc.), to geographical location (e.g. accessibility), and resources available. Callois (2018) investigates the issues of cohesion and competitiveness but he focuses on the export competitiveness. On the example of French regions he found there is no “one best way” of development inside the region or on the country level. Both, cohesion or competitiveness, are important for economic performance, but mixing both strategies may not be the effective way to promote development. Local context and macroeconomic framework influence on both observed concepts. Bourdin (2018) presents the dilemma between equity and competitiveness and estimates the spatial expression of convergence and regional growth in the EU. He has demonstrated two scenarios which “show that the political choices between equity and competitiveness have a profound impact on territorial development. These choices in structural funding investment produce very different economic and spatial configurations” (Bourdin, 2018, p. 17). The author highlights that different pre-determined and random factors can influence the dynamics of regional growth and convergence. ESPON (2006) confirms that European competitiveness depends on contributions from regions, cities and rural areas and that rich regional diversity (unique set of potentials and challenges for development) has to be targeted with suitable policy instruments to achieve development goals. The same study recognizes that modern strategic objectives try to improve the cohesion and the competitiveness, attractiveness for investments and the liveability. Different territorial types, e.g. cities, rural areas, areas with specific characteristics (coastal areas, islands, mountain areas, outermost regions, border regions, cross-border, transnational regions), should be included in this observations and represent important segment in investigating territorial cohesion. Žitkus (2015) warns that regional competitiveness is more complex term than its dimension on national level. Fratesi and Senn (2009) have created the framework of regional competitiveness factors by grouping these factors in: macroeconomic factors; institutional and cultural factors; factors of spatial regional organization; factor of relations. One of the most complex studies on measuring regional competitiveness in the EU is the publication of the European Commission “The EU Regional Competitiveness Index” that recognizes the importance of territorial competitiveness in sustainable economic progress (Annoni and Dijkstra, 2019). This study produces detailed data on competitiveness factors across EU regions. The main results of the latest study are presented in the next section, before estimating the relationship between territorial cohesion and regional competitiveness in the EU, which is conducted based on the mentioned comprehensive and valuable database.

3. THE EU REGIONAL COMPETITIVENESS INDEX

The EU has published 4 issues (2010, 2013, 2016, 2019) of the EU RCI report and in the last one (published in 2019) it observes the performance of 268 regions at NUTS 2 (NUTS = Nomenclature of Units for Territorial Statistics) level, across 28 EU Member States (Annoni and Dijkstra, 2019). This studies allow regions to monitor and assess their development over time and in comparison with other regions, to see how the regions score in different competitiveness strengths and weakness, important also for public investments. The contribution of these publications is in measuring competitiveness factors at the sub-national level which is more suitable and reliable than the national one. This measuring implies on inequalities and monitors the performance on lower levels. It can enable researches to determine the opportunities to strengthen regional specificities which can also represent potential or obstacles in achieving territorial cohesion. “The RCI is a unique, comparable and transparent tool for national and local decision-makers responsible for regional development strategies, in

particular in the context of cohesion policy” (Annoni and Dijkstra, 2019, p. 3). Its importance is also recognized in preparations for the new EU cohesion policy programs for the 2021-2027, in identifying regional assets and focusing investments (European Commission, 2019). Index encompasses determinants and indicators that measure a region’s long-term potential and can be connected with the sustainability (capacity to provide attractive environment in short and long term), productivity and well-being. It is calculated based on 11 dimensions of competitiveness, which are represented with pillars grouped into three sub-indexes: basic (enabling aspects of competitiveness), efficiency (intermediate aspects) and innovation factors (most cutting-edge factors of competitiveness) to assess the “ability of a region to offer an attractive and sustainable environment for firms and residents to live and work” (Annoni and Dijkstra, 2019; European Commission, 2020a). It applies differentiated weighting scheme to regions based on their different stages of development, which assigns more relevance to specific characteristics that are more relevant to observed territories at particular stage of development (Annoni and Dijkstra, 2019). Results from the last report show the north-west, south-east divide across the EU. The capital/metropolitan regions perform strongly in many parts of the EU thus confirming the polycentric pattern. In most of the countries, capital regions have the highest results but with the (usual) exceptions in the Netherlands, Italy and Germany. Utrecht represents best-performing region in Netherlands, Lombardia is the best-performing Italian (highly productive) region, while in Germany the top position has Oberbayern region. Capitals or large metropolitan areas that also have high competitiveness have used opportunities of agglomerating economies, connectivity of economic activities and human capital attraction. The gaps between the capital region and the rest of the country are stable according to the research over the last (10) years, in some countries chasing regions have been catching-up, but the results show significant variability within countries (Annoni and Dijkstra, 2019; European Commission 2020a). “Monitoring the evolution of the capital and or metropolitan gaps is particularly important for cohesion policy whose main mission is to help regions catch up and reduce geographical disparities” (European Commission 2020a). Confirmed variations within and between the countries can have significant influence on territorial cohesion. The most competitive regions are regions of Stockholm, Utrecht and London with its wide commuting zone on the second position. Five Greek regions (Voreio Aigaio, Anatoliki Makedonia - Thraki, Dytiki Makedonia, Dytiki Ellada and Notio Aigaio), one Romanian (Sud-Est), one Bulgarian region (Severozapaden) and the Spanish autonomous city of Melilla on the north coast of Africa with the French outermost regions of Guyane and Mayotte are the least competitive NUTS 2 regions in the EU (Annoni and Dijkstra, 2019). Here can be seen that regions with specific characteristics, such as outermost regions (but also other typologies with specificities), deserve special attention in investigating (territorial) cohesion and competitiveness. More in-depth analysis of regional competitiveness factors in the last EU RCI has shown that higher variability is seen in the “innovation group” features because of significant differences in the innovative capacity of regional economies across and within countries, in comparison with “basic group”. It is concluded that high levels of index (as an aggregate measure) can “be achieved if above-average levels are reached across all 11 pillars... Good performances correspond to group of factors acting in unison” (Annoni and Dijkstra, 2019, p. 10). This implies on the need to develop different competitiveness areas to achieve success that can also be observed as determinants of higher territorial cohesion. RCI database enables to define comparative strengths (and weaknesses) of regions based on the given results with respect to its peers. Furthermore, the results of the study have shown that territorial competitiveness is important for a region’s economic development and that low regional competitiveness is connected with higher income inequality. The most competitive region (Stockholm) has low level of inequality, even though this is not the case with all most competitive regions (Annoni and Dijkstra, 2019).

All of this can be connected with the goal of the territorial cohesion, which is interesting to investigate in more detail and this is the main motivation for the next section.

4. DATA, METHODOLOGY AND RESULTS

In this section we will discuss methodological issues, describe the data and present the model which will be used to empirically explore the relationship between territorial cohesion and regional competitiveness in the EU. The relevance of territorial cohesion, based on different competitiveness pillars (territorial competitiveness determinants), in explaining the regional competitiveness (measured by the mentioned index) will be tested, where we will apply standard statistical tools to reveal potential nexus between the variables of interest. Data for the RCI for 268 regions at a NUTS 2 level across all EU member countries and for 11 groups of territorial competitiveness determinants (competitiveness pillars that capture concepts of great importance for productivity and long-term socioeconomic perspective), are collected from the European Commission's publication and database (Annoni and Dijkstra, 2019). Data (un)availability is a major obstacle in achieving more (time) extensive research on a cross-country base for most of the data needed because calculations are obtained on the different methodological scale across the years. Therefore, the focus of this study will be the results from the latest publication, with the most comprehensive presentations of the results so far, i.e. for the year 2019. For that purpose, data are presented as: regional competitiveness index as *RCI* and 11 (groups of) determinants of territorial competitiveness as x variable ranging from 1 to n as institutions (x_1), macroeconomic stability (x_2), infrastructure (x_3), health (x_4), basic education (x_5), higher education and lifelong learning (x_6), labour market efficiency (x_7), market size (x_8), technological readiness (x_9), business sophistication (x_{10}) and innovation pillars (x_{11}). Territorial cohesion is observed based on competitiveness determinants (as mentioned before), so in order to relate the cohesion from those 11 pillars of competitiveness to the RCI index we first calculated the divergence i.e. deviation based on the Medeiros (2018). Following his methodological approach, we estimated cohesion index for each of 11 competitiveness determinants as through the standardisation process (first step) in which we evaluated the bias from the distribution standard deviation of x index in the territorial unit of NUTS 2 to a distribution average of x for a distinct competitiveness determinant. By applying the so-called direct relation within the normalisation process (second step) in identifying the variable (as (present value – minimum value) / (maximum value – minimum value)) we obtained territorial cohesion index for each of the 11 competitiveness determinants with the value that fits between 0 and 1, suggesting that the lower the value – the deviation is lower – hence the cohesion is greater, and *vice versa*. In the third step, we also calculated the arithmetic average of the values for each competitiveness pillar. Though we found variations in the values of each pillar, the arithmetic average (ranging from 0.24 for macroeconomic stability, labour market efficiency and business sophistication to 0.40 for institutions) suggested relatively low deviation for all pillars, therefore greater cohesion between the NUTS 2 regions for the year 2019. Next, we wanted to confront these pillars to our main variable RCI index. In that sense, we calculated the correlation coefficients for all observed groups of competitiveness determinants (pillars) against the RCI index. Though, the correlation nexus between the original values of all determinants of competitiveness against the RCI index was quite strong and positive (results available upon request), we found that the calculated indexes are in fact negative and weakly correlated (ranging from -0.02 for infrastructure to -0.41 for health) to the RCI index. These correlation results suggest that there exists a negative statistical relationship between evaluated variables in the year 2019, meaning that some of the pillars could have been decreasing the cohesion and therefore general competitiveness. To test such statement, we went further and estimated the causal model.

The model, in its log-log form (meaning that all the variables have been transformed in their logarithmic form), identified the RCI index as a dependent variable and indexes of territorial cohesion as independent variables.

Thereby:

$$\ln RCI = \alpha_i + \beta_i \ln x_i + \varepsilon, \quad i = 1, 2, \dots, N, \quad (I)$$

where $\ln RCI$ stands for the logarithm of regional competitiveness index, $\ln x$ for indexes of territorial cohesion based on competitiveness pillars ranging from 1 to 11 and i for denotes the number of each pillar.

To demonstrate the causality between the observed variables we use a set of different regression measures such as ordinary least square, generalized least square and weighted least square, however, all of them provided us with questionable results due to a strong multicollinearity and non-normality in residuals. Considering the problems, we then opted for the heteroscedasticity corrected regression which provided us with unbiased and consistent standard errors.

Table 1: Heteroskedasticity-corrected regression (dependent variable: $\ln RCI$)

Variables	Coefficient	Std. Error	t-ratio	p-value
const (α)	2.28989	0.0102140	224.2	0.0001***
$\ln x_1$	0.00909076	0.00224633	4.047	0.0001***
$\ln x_2$	-0.00460956	0.00222236	-2.074	0.0391**
$\ln x_3$	-0.00424760	0.00183184	-2.319	0.0212**
$\ln x_4$	-0.00840326	0.00150882	-5.569	0.0001***
$\ln x_5$	0.00440901	0.00168678	2.614	0.0095***
$\ln x_6$	-0.00499923	0.00170661	-2.929	0.0037***
$\ln x_7$	0.0108524	0.00234371	4.630	0.0001***
$\ln x_8$	-0.000517099	0.00155160	-0.3333	0.7392
$\ln x_9$	-0.00509571	0.00272116	-1.873	0.0623*
$\ln x_{10}$	0.000699069	0.00196873	0.3551	0.7228
$\ln x_{11}$	-0.00208827	0.00138685	-1.506	0.1334

Sum squared resid	356.5907	S.E. of regression	1.180226
R-squared	0.288814	Adjusted R-squared	0.258255
F(11, 256)	9.451084	P-value(F)	2.95e-14
Log-likelihood	-418.5461	Akaike criterion	861.0923
Schwarz criterion	904.1841	Hannan-Quinn	878.4000

Mean dependent var	2.290831	S.D. dependent var	0.067260
Sum squared resid	1.163859	S.E. of regression	0.067426

Source: Authors' calculations

Results from Table 1 suggest that most of the independent variables are statistically significant with modest to low influence, however, some being positively and some being negatively causally related to our dependent variable. Adjusted R-squared indicates that we were able to explain around 26% of the dependent variable through the selected set of independent variables. The model does not show the problem of non-normality in residuals and rejects the possibility of the multicollinearity problem based on the VIF test (see Table 2) and Belsley-Kuh-Welsch collinearity diagnostics (available upon request).

Table 2: VIF test

Variance Inflation Factors (VIF test)		
(Minimum possible value = 1); Values > 10.0 may indicate a collinearity problem		
lnx_1	3,164	lnx_6 1,132 lnx_{11} 1,227
lnx_2	3,830	lnx_7 1,451
lnx_3	1,249	lnx_8 1,175
lnx_4	1,170	lnx_9 2,480
lnx_5	1,911	lnx_{10} 1,256
VIF(j) = $1/(1 - R(j)^2)$, where R(j) is the multiple correlation coefficient between variable j and the other independent variables		

Source: Authors' calculations

The general conclusion of the analysis suggests that most of the competitiveness pillars, presented as indexes of territorial cohesion have indeed had an impact on the value of aggregate RCI in 2019, however with relatively limited influence and ambiguous nature. Namely, indexes of institutions, basic education and labour efficiency had a positive impact on RCI suggesting that cohesion in these determinants had positive impact on regional competitiveness and indexes of macroeconomic stability, infrastructure, health, higher education and technological readiness had a negative impact on RCI suggesting they contributed to more diverging process on NUTS 2 level in 2019. On the other hand, indexes such as market size, business sophistication and innovation, did not have any impact on the regional competitiveness. In can be seen that the model suggested that only 3 pillars had a positive effect and even 5 pillars had a negative effect on the regional competitiveness in the observed year, suggesting that some 'institutions' have failed in their work in alleviating socioeconomic inequalities across the EU regions. We have to be assertive in our statements for they only mirror the situation in the specific year, and more time extensive analysis could provide us with more firm results of the influence of specific territorial cohesion index.

5. CONCLUSION

Territorial cohesion represents important challenge in development of European integration, which is confirmed also in this paper. The diversity of European regions is valuable development potential. At the same time there are areas confronted with constraints and issues which can undermine balanced territorial development but also social and economic cohesion. EU cohesion policy must be designed to target balanced development but at the same time another important goal of the policy is strengthening competitiveness, which leads to dilemmas and contradictions in tailoring development goals or adequate instruments. The results presented in the paper imply on differences in regional competitiveness results, factors of competitiveness and determinants of territorial cohesion in the EU. It is also confirmed that relationship between cohesion and competitiveness deserve research attention. Competitiveness results in the EU are connected with different determinants of territorial cohesion, but the estimated influences regarding specific determinants have shown ambiguous nature. The need to improve territorial integration will be a part of new programming period (2021-2027) in the EU, so it is necessary to extend the researches on territorial cohesion, its determinants and instruments of implementation that will foster cooperation and boost competitiveness/balance development in coordinated manner. In line with the analysis presented in this paper it would be interesting to investigate territorial cohesion and differences in its relations with competitiveness between groups of regions with specific characteristics (e.g. the paper confirms polycentric patterns of competitiveness, lower competitiveness in

outermost regions etc.). Another suggestion goes in line with the more particle analysis on the sub-pillar competitiveness level. Policy processes in the field of territorial development should be connected with territorial capital so its role in strengthening territorial cohesion can also motivate future researches.

ACKNOWLEDGEMENT: *This paper is a result of scientific project "The Determinants and Challenges of Competitiveness" supported by the Faculty of Economics and Tourism "Dr. Mijo Mirković", Juraj Dobrila University of Pula. Any opinions, findings, and conclusions or recommendations expressed in this paper are those of the authors and do not necessarily reflect the views of the Faculty of Economics and Tourism "Dr. Mijo Mirković" Pula."*

LITERATURE:

1. Annoni, P., Dijkstra, L. (2019). *The EU Regional Competitiveness Index 2019*. Luxembourg: Publications Office of the European Union. Retrieved 1.02.2020. from https://ec.europa.eu/regional_policy/en/information/maps/regional_competitiveness/.
2. Böhme, K., Doucet, P., Komornicki, T., Zaucha, J., Świątek, D. (2011). *How to strengthen the territorial dimension of 'Europe 2020' and the EU Cohesion Policy* (Report based on the Territorial Agenda 2020, prepared at the request of the Polish Presidency of the Council of the European Union). Warsaw. Retrieved 10.02.2020. from https://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/challenges2020/2011_territorial_dimension_eu2020.pdf
3. Bourdin, S. (2018). Modeling and Simulation of Cohesion Policy Funding and Regional Growth Diffusion in an Enlarged European Union. In J.-C. Thill (ed.), *Spatial Analysis and Location Modeling in Urban and Regional Systems. Advances in Geographic Information Science* (pp. 123-141). Berlin Heidelberg: Springer-Verlag.
4. Callois, J.-M. (2018). Revisiting the dilemma between cohesion and openness. *Regional Studies*, 52(11), pp. 1464-1476.
5. Crescenzi, R., De Filippis, F., Pierangeli, F. (2014). In Tandem for Cohesion?: Synergies and Conflicts between Regional and Agricultural Policies of the European Union. *Regional Studies*, 49(4), pp. 1-24.
6. Dudek, M., Wrzochalska, A. (2019). Between Competitiveness and Sustainability? Achievements and Dilemmas of Regional Policy in the Context of Economic Development of Rural Regions: the Case of Poland. *European Journal of Sustainable Development*, 8(2), pp. 299-311.
7. ESPON (2006). *Territory matters for competitiveness and cohesion*. Facets of regional diversity and potentials in Europe (ESPO Synthesis Report III). Retrieved 10.02.2020. from <https://www.globalurban.org/ESPON%20Synthesis%20Report.pdf>.
8. ESPON (2013). *INTERCO – Indicators of Territorial Cohesion*. Retrieved 1.02.2020. from <https://www.espon.eu/programme/projects/espon-2013/scientific-platform/interco-indicators-territorial-cohesion>.
9. European Commission (2017). *My Region, My Europe, Our Future* (Seventh report on economic, social and territorial cohesion). Luxembourg: Luxembourg: Publications Office of the European Union. Retrieved 1.02.2020. from https://ec.europa.eu/regional_policy/sources/docoffic/official/reports/cohesion7/7cr.pdf.
10. European Commission (2019). *EU budget: Commission helps prepare new Cohesion programmes with Regional Competitiveness Index and Eurobarometer*. Retrieved 1.02.2020. from https://ec.europa.eu/regional_policy/en/newsroom/news/2019/10/10-07-2019-eu-budget-commission-helps-prepare-new-cohesion-programmes-with-regional-competitiveness-index-and-eurobarometer.

11. European Commission (2020a). *European Structural and Investment Funds Data - The most competitive regions in Europe: capitals take it all*. Retrieved 25.02.2020. from <https://cohesiondata.ec.europa.eu/stories/s/yt77-f74u>.
12. European Commission (2020b). *Territorial cohesion*. Retrieved 8.01.2020. from https://ec.europa.eu/regional_policy/en/policy/what/territorial-cohesion/.
13. Elissalde, B, Santamaria, F. (2014). Territorial Cohesion and Regional Competitiveness: Defining Key-Notions in the EU's Regional Policy. *Social Sciences*, Special Issue: Geographical evidence in changing Europe, 3(4-1), pp. 4-12.
14. Fratesi, U., Perucca, G. (2018). EU regional development policy and territorial capital: A systemic approach. *Papers in Regional Science*, 98(1), pp. 265-281.
15. Fratesi, U, Senn, L. (2009). Regional Growth, Connections and Economic Modeling: An Introduction. In U. Fratesi, L. Senn (eds.), *Growth and Innovation of Competitive Region: The Role of Internal and External Connections. Advances in Spatial Science* (pp. 3-27). Berlin Heidelberg: Springer-Verlag.
16. Hanell, T. (2015). Measuring Territorial Cohesion: A Macro-Regional Approach. In T. Lang, S. Henn, W. Sgibnev, K. Ehrlich (eds.) *Understanding Geographies of Polarization and Peripheralization. New Geographies of Europe* (235-251). London: Palgrave Macmillan.
17. Jouen, M. (2008). *Territorial Cohesion: From theory to practice*. Retrieved 10.02.2020. from <https://institutdelors.eu/wp-content/uploads/2018/01/territorialcohesionjouennejune08.pdf>.
18. Medeiros, E. (2016). Territorial Cohesion: An EU Concept. *European Journal of Spatial Development*, 60, pp. 1-30. Retrieved 1.02.2020. from <https://archive.nordregio.se/Global/EJSD/Refereed%20articles/refereed60.pdf>.
19. Medeiros (2018). *How to measure Territorial Cohesion and Cooperation?* Retrieved 1.02.2020. from <http://www.interact-eu.net/download/file/fid/13305>.
20. Medeiros, E. (2019). Measuring Territorial Cohesion. *European Structural and Investment Funds Journal*, 7(2), pp. 88-95.
21. Mikuš O., Kukoč M., Jež Rogelj M. (2019). The coherence of common policies of the EU in territorial cohesion: A never-ending discourse? A review. *Agricultural Economics – Czech*, 65(3), pp. 143-149.
22. OECD (2001). *OECD Territorial Outlook*. Paris: OECD Publishing. Retrieved 1.02.2020. from <https://doi.org/10.1787/9789264189911-en>.
23. Szlachta, J. (2017). EU cohesion policy as a requirement to voivodeship development pathways. *Miscellanea Geographica – Regional Studies on Development*, 21(2), pp. 68-72.
24. Zaucha, J., Böhme, K. (2020). Measuring territorial cohesion is not a mission impossible. *European Planning Studies*, 28(3), pp. 627-649.
25. Žitkus, L. (2015), New Approach to Regional Competitiveness as Instrument of Regional Development. *European Integration Studies*, 9, pp. 114-126.

LINKING TRANSFORMATIONAL LEADERSHIP, SENSE OF BELONGING AND INTRAPRENEURSHIP

Fahd Slamti

*Faculté des Sciences Juridiques, Economiques et Sociales de Salé
Université Mohammed V, Morocco
fahd.slamti@gmail.com*

ABSTRACT

A varied range of factors have been identified to affect intrapreneurial behaviour in organizations. Among these, the support of top management has been considered to be one of the decisive factors, if not the most important one. Empirically, few studies have examined the link between transformational leadership and intrapreneurship at the organizational level. This research is theoretical; it builds on the extant literature to propose a model based on three hypotheses about how transformational leadership contributes to the development of a sense of belonging, and how it affects intrapreneurial behaviour among collaborators. It is also a question of demonstrating whether the sense of belonging can play a mediating role between transformational leadership and the development of intrapreneurial capacities.

Keywords: Transformational Leadership, Sense of Belonging, Intrapreneurship

1. INTRODUCTION

Today's companies live in highly competitive environments. Certainly, it is a new context characterized by volatility and the rise of civil society where change becomes the only constant. Companies with financial difficulty or those losing competitiveness facing the growing rise new entrants are invited to reinvent themselves in order to generate value and regain their lost balance. In this difficult context, leadership is called upon to play an important role for organizations, companies in particular. The concept is attracting a lot of interest from researchers around the world, who have studied its relationship to performance, and are trying to deepen the knowledge about possible links it may have with notions like creativity, innovation or resilience. Leadership can be defined as the process through which one person influences many in order to achieve a shared goal. That said, the concept cannot, in any case, be reduced to positive personality traits or extraordinary behaviours characterizing the actor: the leader. It must be emphasized that the dynamic of influence occurs between a person and a group of individuals in a well-defined context, and its implementation depends on people's aspirations in terms of authentic and human values such as exemplarity and consideration.

2. THEORETICAL BACKGROUND

James McGregor Burns, who treated the concept from a purely political angle, stated two types of leadership: transactional and transformational. According to Burns (1978): « [Transactional leadership] occurs when one person takes the initiative in making contact with others for the purpose of an exchange of valued thing. The exchange could be economic or political or psychological in nature (...) »¹. Thus, the relationship between the leader and the followers is based on transactions: jobs against votes, grants in exchange for election campaign funding (the case of politics), bonuses in exchange for achieving objectives (the case of the company), etc. For Antonakis, Avolio and Sivasubramaniam (2003), « Transactional leadership is an exchange process based on the fulfillment of contractual obligations and is typically represented as setting objectives and monitoring and controlling outcomes. »².

¹ McGregor Burns, J. (1978), *Leadership*, Harper Collins, p. 8

² Antonakis, J., Avolio, B., Sivasubramaniam, N. (2003) « Context and leadership: an examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire », *The Leadership Quarterly* 14, p. 265

Bass (1999) emphasizes the exchange relationship and defines transactional leadership as: « (...) the exchange relationship between leader and follower to meet their own self-interests. take the form of contingent reward in which the leader clarifies for the follower through direction or participation what the follower needs to do to be rewarded for the effort. It may take the form of active management-by-exception, in which the leader monitors the follower's performance and takes corrective action if the follower fails to meet standards »³. For the author, transactional leadership manifests itself through contingent reward and management by exception. The first factor means that the leader understands the relationship with followers as a negotiation through which objectives, rewards (in the case of success) and sanctions (in the case of failure) are set. As for management by exception, the leader will ensure the commitment of the teams by relying on two aspects, namely control and correction.

2.1. Transformational leadership

Burns (1978) writes: « [Transformational leadership] occurs when one or more persons engage with others in such a way that leaders and followers raising one another to higher levels of motivation and morality. Their purposes, which might have started out as separate but related, as in the case of transactional leadership, become fused. Power bases are linked not as counterweights but as mutual support for common purpose »⁴. The author focuses attention on both the complex and powerful nature of transformational leadership. Indeed, the transformational leader can observe deep motivations among his supporters and wishes to satisfy noble needs by fully mobilizing individuals. To this end, Burns mentions: « The transforming leader recognizes and exploits an existing need or demand of a potential follower. But, beyond that, the transforming leader looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower. »⁵. Very inspired by Burns' work, Bernard Bass (1990) will establish one of the most approved leadership models. The author takes up the distinction between transactional and transformational leader and develops Burns' contribution to make it a development process. For Bass, transactional leadership is based on reward and sanction. It aims the exchange relying on management by objectives. As for transformational leadership, the leader, oriented towards change, offers a shared vision advocating management by values. First, it raises the level of awareness of those around him about the importance of the goals pursued. He then succeeds in convincing them as to the supremacy of the general interest over the personal one. Finally, he invites them to satisfy higher needs. The author describes transformational leadership as the process by which a leader and followers engage in a mutual process of raising their motivation and their morality. Thus, we can read in his writings: « Transformational leadership refers to the leader moving the follower beyond immediate self-interests (...).It elevates the follower's level of maturity and ideals as well as concerns for achievement, selfactualization, and the well-being of others, the organization, and society »⁶. It is the same idea defended by those who support the concept of corporate liberation, in particular Getz, who underlines that « Thanks to transformational leadership, the two parties encourage and pull each other up, in a relationship where the followers become leaders and where the leader is likely to become a moral leader »⁷. According to Bernard Bass, four factors generate people's transformation (Table 1). The first factor is charisma, according to which the leader behaves in an exemplary manner and assumes the role of model to be followed by the others. Through regular good actions, the leader demonstrates an irrepachable level in terms of personal and professional ethics, arousing the confidence,

³ Bass, B.M. (1999). « Two Decades of Research and Development in Transformational Leadership », *European journal of work and organizational psychology*, vol. 8, p. 10

⁴ Leadership, op. cit., p. 20

⁵ Leadership, op. cit., p.11

⁶ « Two Decades of Research and Development in Transformational Leadership », op. cit., p. 11

⁷ Getz, I. (2016), *La liberté, ça marche !*, Flammarion, p. 97

respect and admiration of his teams. The second factor is inspirational motivation, which means that the leader communicates his vision strongly and positively. The major challenge is to make teams adhere to this vision. Inspirational motivation is a motivational lever for employees to achieve the objectives set. The third factor is the intellectual stimulation through which the leader invites employees to step out of their comfort zone, and challenge conventional thinking patterns by showing creativity and imagination. Antonakis et al. (2003) state: « Intellectual stimulation refers to leader actions that appeal to followers' sense of logic and analysis by challenging followers to think creatively and find solutions to difficult problems »⁸. The last factor is individual consideration. The leader manages to create a positive climate in which initiative is encouraged, the needs expressed by team members are satisfied and attaching importance to the organizational community. The authors write: « individualized consideration refers to leader behaviour that contributes to follower satisfaction by advising, supporting, and paying attention to the individual needs of followers, and thus allowing them to develop and self-actualize »⁹.

Table 1: Team's transformational factors

Factors	Leader behaviour
1. Charisma	<ul style="list-style-type: none"> • A role model for his teammates • Exceptionally talented • In the leader the team trusts
2. Inspiring motivation	<ul style="list-style-type: none"> • Communicates a positive vision • Gives the feeling of a collective mission • Undertakes the future with optimism
3. Intellectual stimulation	<ul style="list-style-type: none"> • The origin of new ideas • Initiate new projects • Makes aware about the need to reinvent
4. Individualized consideration	<ul style="list-style-type: none"> • Near from his teams • Shows individualized consideration • Sensitize to values to share

2.2. Transformational leadership and intrapreneurship

Intrapreneurship, which can be defined as the adoption of entrepreneurial attitudes and practices within established organizations, is arousing much interest in companies as among academics. The first studies on the intrapreneurial process were carried out in 1976. The results showed that both intrapreneur and entrepreneur have similar personal characteristics. Otherwise, the first work devoted to corporate venturing was published in 1978. In 1985, Gifford Pinchot introduced the neologism « Intrapreneurship » which will experience unprecedented success. Today, intrapreneurship is seen as a way to stimulate innovation in products, services but also in processes and techniques. It's also a, efficient way to retain company's best employees. Many authors explain the need for intrapreneurship by its contribution to the survival of firms and the achievement of performance in increasingly hostile and competitive environments. Peter Drucker mentions: « Today's businesses, especially the large ones, simply will not survive in this period of rapid change and innovation unless they acquire entrepreneurial competence »¹⁰. In the same vein, Torres affirms that the current context, characterized by the change in the space-time framework as well as the complexity of practices and structures, convinces top

⁸ Antonakis, J., Avolio, B., Sivasubramaniam, N. (2003) « Context and leadership: an examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire », *The Leadership Quarterly* 14, p. 265

⁹ Ibid.

¹⁰ **Fayolle A.**, « Instiller l'esprit d'entreprendre dans les grandes entreprises et les organisations : auto-administration d'une potion magique ou d'un bouillon de culture ? », *Gérer et Comprendre*, n° 73, 2003, p. 27.

management that survival remains closely linked to risk-taking and innovation¹¹. Thornberry believes that the more the company grows, becomes bureaucratic and its structures more complex, the more it moves away from agility, risk-taking and innovation. The author emphasizes: « Many large companies are seeking ways of reinventing or revitalizing their entrepreneurial roots. These companies often long for some of the spark, innovation, speed and risk taking that they once had, but which have slowly eroded under the weight of size, bureaucracy, complex processes and hierarchy. Corporate entrepreneurship encompasses a set of activities, attitudes, and actions that are believed to help large companies regain some of this lost magic »¹². The author considers intrapreneurship as the only way to recover the magic lost due to bureaucratization and the complexity of practices and structures. Carrier (2000) considers intrapreneurship as a path likely to support companies in their search for innovation in a context of globalization and trade liberalization.¹³ As just mentioned above, the concept of intrapreneurship refers to entrepreneurial activities carried out within existing companies. This includes activities such as innovation, business creation, renewal, proactivity and risk taking.¹⁴ Obviously, organizational success requires leaders who can inspire employees and direct their mindsets towards discovery and exploration, leaders who can build an environment that encourages innovation and empowers individuals (Stevenson, 2012). Transformational leadership improves organizational performance relying on his ability to adapt and his great responsiveness to the external environment. It encourages employees to adapt their actions to face regular changes of the environment (Su and Baird 2017; Waldman et al. 2004). In addition, transformational leaders encourage their employees to think unconventionally and to foster new ideas by involving employees in business projects (Howell and Higgins 1990; Jung et al. 2003). Transformational leaders also strengthen the intrinsic motivation of the teams by encouraging them to develop their innovation potential and to change their perception of risk. These leaders encourage entrepreneurial activities by encouraging their employees to engage in the development of innovative ideas (Chen et al. 2014; Audenaert et al. 2017). This kind of leaders provides strong support to employees by developing their autonomy and confidence (Jung et al. 2008). The managerial literature has studied the impact of transformational leadership on organizational performance through intrapreneurship. Indeed, many academics have examined the relationship between this kind of leadership and intrapreneurial behaviours such as creativity and innovation. Cheung and Wong (2011) confirmed that the positive link between transformational leadership and creativity is stronger when leaders chose a proximity management and display high support for employee's tasks. Sosik, Avolio and Kahai (1997) studied the impact of transformational leadership on the creativity of 36 work groups using a decision support system. The authors demonstrate that transformational leadership has direct and indirect influence on performance. In the same perspective, transformational leaders are interested in reversals of situations raising the employees creativity to a higher level (Sosik et al., 1997; Shin and Zhou, 2003, 2007; Gong et al., 2009; Henker et al., 2015) Several research studies have focused on the relationship between transformational leadership and innovation. Schweitzer (2014) confirmed the positive link between leadership and both innovation and operational capabilities in a situation of strategic alliance. The author studied the impact of transactional and transformational leadership on intrapreneurial behaviour and concluded that transformational leadership has a stronger impact on dynamic and operational capacity

¹¹ Torrès, O., « L'entrepreneuriat face à la globalisation », *Histoire d'entreprendre: les réalités de l'entrepreneuriat*, Éditions Management et Société, 2000, pp. 1-23.

¹² Thornberry, N., « Corporate Entrepreneurship: Antidote or Oxymoron? », *European Management Journal*, Vol. 19, n° 5, 2001, pp. 526-533. Cité par Allali, B., « Avons-nous vraiment besoin d'intrapreneurs dans nos organisations ? ».

¹³ Carrier, C., « Intrapreneuriat - à la recherche de complice innovant et entreprenant », dans Verstraete, T. (dir.), *Histoire d'entreprendre : les réalités de l'entrepreneuriat*. Éditions Management et Société, 2000, pp. 199-210.

¹⁴ Schmelter, Ralf, René Mauer, Christiane Börsch, et Malte Brettel, Boosting Corporate Entrepreneurship Through HRM Practices: Evidence from German SMEs. *Human Resource Management*, Vo 49, N°4, 2010, p. 715

development. For his part, Bass (1985) considers that these leaders, accustomed to change, are able to identify breakthrough innovations (those with high returns in the medium and long term) likely to generate constant development. Other studies have also shown that transformational leadership represents a main lever of innovation, with positive consequences on the degree of risk taking and creativity within business units. It must be remembered that transformational leadership manifests itself through several facets, including charisma, intellectual stimulation and inspiring motivation. First, using their charisma, transformational leaders set an example for subordinates to duplicate in terms of innovative behaviour (Waldman & Yammarino, 1999). Second, transformational leaders make the necessary improvements and give concrete responses to organizational dysfunctions by stimulating creativity and innovation among subordinates. Thus, using intellectual stimulation, they invite people to participate in the problems identification, to favor new solutions to the different organizational problems and to generate new ideas. (Bass, 1985; Avolio et al., 1999; Bass et al., 2003). Third, transformational leaders try to modify the beliefs of their subordinates by cultivating the feeling of a collective mission likely to serve the objectives of the organization and to strengthen their intrinsic motivation to implement innovations (Jansen, Vera and Crossan, 2009).

- *H1: Transformational Leadership has a positive impact on the development of Intrapreneurial Capacities.*

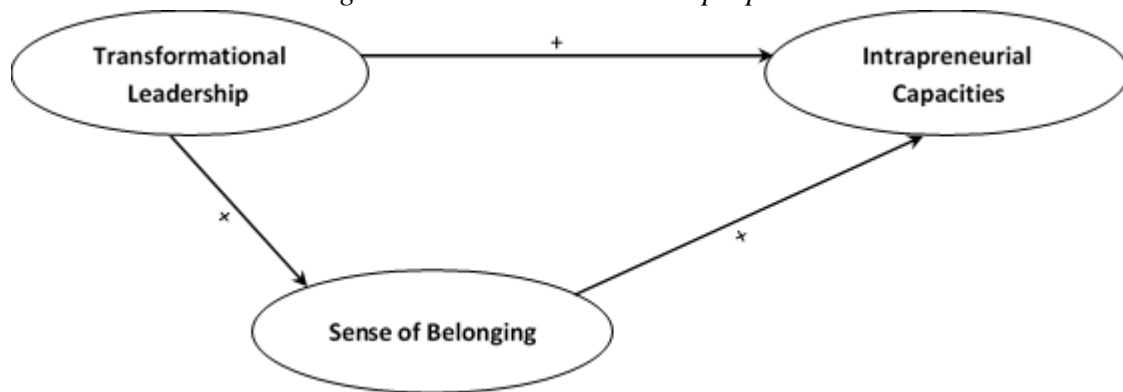
2.3. The mediating role of the sense of belonging

When people cultivate a sense of belonging, they feel freer to create and innovate. Once aware of the benefits of this identification, top management show more support to employees going beyond their job description to come up with new ideas and lead innovative projects. Teams become so passionate about what they do that they hardly feel the fear of failure. This mindset represents the DNA of intrapreneurship. The sense of belonging is a lever that strengthens the motivation and satisfaction of workers. Therefore, top management must ensure that staff feel proud to belong to the company and want to contribute to its success. Certainly, successful companies are those capable of developing a sense of belonging among their teams. Beyond its positive impact on job performance, the sense of belonging improves mental and physical presence at work, resistance to stress and openness to change. Several studies have confirmed that transformational leadership has a positive effect on the emotional identification and degree of involvement of collaborators. Xenikou (2014) conducted a survey of 200 employees working for a public organization. The results notably showed that charismatic leadership was positively associated with emotional identification. Zhu et al. (2009) examined the relationship between transformational leadership and employee professional engagement through the characteristics of followers (moderator variable). Data collected from 140 collaborators and 48 supervisors from various industries in South Africa showed that the characteristics of followers moderated the positive relationship between transformational leadership and professional engagement. For their part, Sommer et al. (2016) studied the effect of transformational leadership on organizational resilience during a crisis affecting the health sector. Data collected from 426 team members and 52 leaders made it possible to comment on the influence of the leader's behaviour on team member's resilience, mainly through affective mechanisms. Additionally, many authors (Avolio and Gardner, 2005; Gooty et al., 2009) agree on the existence of a close relationship between transformational leadership and resilience and that these two concepts have a positive impact on organizational performance. In addition to its effect on resilience, transformational leadership can have an impact on group cohesion. Carron (1982) defines this cohesion as a dynamic process that is characterized by a group's tendency to stick together and remain united in the pursuit of its objectives. Carless, Mann and Wearing (1995) have shown the effect of transformational leadership on strengthening group cohesion, and therefore a

positive impact on the Australian banking sector performance. The authors carried out a survey of 695 middle-managers working in a large Australian bank. The purpose of the study is to examine the relationship between self-efficacy and transformational leadership, as well as to show the role of group cohesion as a mediating variable between transformational leadership and performance. The hypotheses put forward by the three authors were confirmed since the results showed that self-efficacy significantly predicted transformational leadership and performance. In addition, group cohesion is confirmed as a significant mediating variable.

- H2: *Transformational Leadership contributes positively to instilling a sense of belonging.*
- H3: *The Sense of Belonging plays a mediating role between Transformational Leadership and the development of Intrapreneurial Capacities.*

Figure 1: The research model proposed



3. CONCLUSION

Research carried out by different authors has attempted to highlight the link that could exist between the nature of leadership and the triggering of an intrapreneurial dynamic within companies. As we have reviewed, it has been possible to establish the relationship between transformational leadership and certain facets of intrapreneurship such as creativity or innovation. However, we note that there is a considerable lack in managerial literature, either in relation to the triggering factors or the outputs of the sense of belonging. This theoretical research is the first in this field, which highlights the role of the sense of belonging as a mediating variable conditioning the development of intrapreneurial capacities within companies. The proposed model will be the subject of an in-depth study and will soon be tested in the Moroccan professional environment.

LITERATURE:

1. Antonakis, J., Avolio, B., Sivasubramaniam, N. (2003) « Context and leadership: an examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire », *The Leadership Quarterly* 14
2. Avolio, B. J. (1999). *Full leadership development: Building the vital forces in organizations*. Thousand Oaks, CA: Sage.
3. Avolio, B. J., Bass, B. M., Jung, D. I. (1999), « Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire », *J. Occup. Organ. Psychol.* 72, 441–462.
4. Avolio, B. J., Gardner, W. L. (2005), « Authentic leadership development: Getting to the root of positive forms of leadership », *Leadership Quarterly*, 16, 315–338.

5. Avolio, B. J., Zhu, W., Koh, W., & Bhatia, P. (2004), « Transformational leadership and organizational commitment: mediating role of psychological empowerment and moderating role of structural distance », *J. Organ. Behav.* 25, 951–968
6. Bass, B. M. (1985). *Leadership and Performance Beyond Expectations*. New York, NY: Free Press
7. Bass, B. M. (1998), *Transformational leadership: Individual, military and educational impact*. Mahwah, NJ: Erlbaum
8. Bass, B. M., Avolio, B. J., Jung, D. I., and Berson, Y. (2003), « Predicting unit performance by assessing transformational and transactional leadership », *J. Appl. Psychol.* 88, 207–218
9. Bass, B.M. (1990), *Handbook of leadership: A survey of theory and research*. New York : Free Press
10. Bass, B.M. (1999), « Two Decades of Research and Development in Transformational Leadership », *European journal of work and organizational psychology*
11. Burns, JM. (1978). *Leadership*, Harper Collins
12. Carless, S., Mann, L., & Wearing, A. (1995). An empirical test of the transformational leadership model. Symposium conducted at the Inaugural Australian Industrial and Organizational Psychology Conference, Sydney, Australia
13. Cheung, M.F. and Wong, C.S. (2011), « Transformational leadership, leader support, and employee creativity », *Leadership & Organization Development Journal*, Vol. 32 No. 7, pp. 656-672.
14. Getz, I. (2016), *La liberté, ça marche !* Editions Flammarion
15. Gooty, L., Gavin, M., Johnson, P. D., Frazier, M. L., & Snow, D. B. (2009), « In the eye of the beholder: Transformational leadership, positive psychological capital, and performance », *Journal of Leadership & Organizational Studies*, 15, 353-367.
16. Henker, N., Sonnentag, S., and Unger, D. (2015). « Transformational leadership and employee creativity: the mediating role of promotion focus and creative process engagement », *J. Bus. Psychol.* 30, 235–247.
17. Howell, J. M., and Avolio, B. J. (1993). « Transformational leadership, transactional leadership, locus of control, and support for innovation: key predictors of consolidated-business-unit performance », *J. Appl. Psychol.* 78, 891–902.
18. Jansen, J. J. P., Vera, D., & Crossan, M. (2009), «Strategic Leadership for Exploration and Exploitation: The Moderating Role of Environmental Dynamism », *The Leadership Quarterly*, 20, 5-18.
19. Schweitzer, J. (2014), « Leadership and innovation capability development in strategic alliances », *Leadership & Organization Development Journal*, Vol. 35 No. 5, pp. 442-469.
20. Shin, S. J., and Zhou, J. (2003), « Transformational leadership, conservation, and creativity: Evidence from Korea», *Acad. Manage. J.* 46, 703–714.
21. Sommer, S. A., Howell, J. M., & Hadley, C. N. (2016), « Keeping positive and building strength: The role of affect and team leadership in developing resilience during an organizational crisis », *Group & Organization Management*, 41(2), 172-202.
22. Sosik, J. J., Avolio, B. J., & Kahai, S. S. (1997), « The impact of leadership style and anonymity on group potency and effectiveness in a GDSS environment », *Journal of Applied Psychology*, 82, 89–103.
23. Stevenson, J. E. (2012), « Breaking Away - A New Model for Innovation Leadership », *Employment Relations Today*, 39, 17-25.
24. W. Zhu, B. J. Avolio, and F. O. Walumbwa, « Moderating role of follower characteristics with transformational leadership and follower work engagement », *Group and Organization Management*, vol. 34, no. 5, pp. 590-619, 2009

25. Xenikou, A. (2014), « The cognitive and affective components of organizational identification: the role of perceived support values and charismatic leadership», *Appl. Psychol. Int. Rev.* 63, 567–588
26. Zacher, H. and Rosing, K. (2015), « Ambidextrous leadership and team innovation », *Leadership & Organization Development Journal*, Vol. 36 No. 1, pp. 54-68.

ANALYSIS OF THE PAY AMOUNT IN THE RUSSIAN ECONOMY BY TYPES OF ACTIVITY AND EMPLOYMENT OF HIRED LABOR

L. Fyodorova

*Novosibirsk State University of Economics and Management, Russia
Lyufyodorova@yandex.ru*

ABSTRACT

This article views the level and wages dynamics in the context of aggregated categories of employed: heads of enterprises and their divisions, specialists, employees engaged in the preparation and execution of documentation, accounting and maintenance, skilled workers in industry, construction, transport and related enterprises. The data of the Federal state statistics service for the period 2005 – 2017 have been used to analyze the statistical information. The absence of wide differences in the analyzed indicator between the heads of enterprises, specialists, highly skilled workers and employees has been shown. Taking into consideration the different nature of the functions performed and the degree of responsibility of different categories employees for the results of the work performed, the existing relations in the Russian economy, from an economic point of view, should be assessed as acceptable. Information is require to analyze deeper and understand clearer the real problems in the field of labour remuneration, in particular, on the distribution of each category of employees by wage level in terms of decile groups, just as it is done in General for the economy. A gradual increase of average monthly nominal pay of the basic employee categories, the tertiary sector presented in this research by education system has been found out to fall behind the payment criteria amid a gradual increase of average monthly nominal pay of basic employee categories. The education sector is observed to have the lowest pay level and slow pay growth among the four employee categories under consideration: heads of the enterprises, specialists of the intermediate and advanced qualification, skilled workers. This tendency does not facilitate solving problems of structural adjustment of the Russian economy and its technological re-equipment. Current conditions, coupled with an increase of the pay levels of the low income employee categories, the need for its sustainable growth for all professional and job groups tends to be relevant. As an institutional pre-condition for pay rising, it is necessary to consider the application of social standards complying with the modern social standard requirements: subsistence minimum and the minimum wage depending on it. Existing social standards do not ensure the reproduction of the ability to work of skilled workers and ordinary employees of almost all sectors of the economy, as well as a significant proportion of professionals.

Keywords: *categories of employees, cost of living, differentiation, minimum labor wage, pay, salary, types of activity, wage*

1. INTRODUCTION

Understanding the issue of inequality existing both in the developed and developing economies is becoming relevant in recent decades. The extremes consist of recognizing a thorough differentiation in the income level of the population and well-being as a whole, being quite acceptable, or, on the contrary, in justifying, the need for radical changes in society, including political ones, connected with such differentiation. Emerging markets are generally characterized by various forms of so-called excess inequality in the revenue allocation. Since a large part of households pay forms a large part of personal income, its amount has a determining influence on the level of social stratification. Since the 1990s, within the framework of dramatic reform, Russian economists have been actively studying allocation processes applying to the realities of the transition economy. Attention has been paid to the analysis of the regulatory structure in the social sphere, including social standards - the size of the living wage and the

minimum wage. (Bobkov, 1995; Roik, 2006). Since poverty in Russia has become a real problem due to a sharp decline in the living standards of the population majority, the reasons and ways to reduce it are being analyzed (Gubanov, 2011; Zhuravleva, 2015). The interrelation between wages and the level and dynamics of productivity at Russian enterprises is being studied (Kapelyushnikov, 2004; Yakovlev, 2003). In recent times, gender differences in wages are actively studied, as well as a number of various aspects of allocation in the wide context of public relations of the country (Oshchepkov, 2006; Tikhonova, Mareeva, 2009; Lyukyanchikova, Yamshikova, 2019). In my opinion, the study of ratios and trends characterizing the sectorial and professional-position differences in pay is the most crucial in practical terms at the present time. The actual ratios existing at the micro level are hidden in aggregated assessment of pays and incomes. Status and professional characteristics of employees are factors that directly determine the amount of pay, but the mechanism of pay formation depends on social standards and other institutions of society, as well as macroeconomic conditions as a whole. In the conditions of modern Russia, the reduction of inequality in the pay level of employee of various types of activities and categories can be considered as a reserve for reducing income inequality. Moreover the nature of social relations in the field of remuneration is of great relevance to implementing the principle of social equity, which has an independent value for society and, at the same time, can manifest itself as a factor of social development. The article assesses the differences in the amount and dynamics of pay in the Russian economy by type of activity and occupation.

2. RATIO AND DYNAMICS OF THE PAY LEVEL OF BASIC CATEGORIES OF EMPLOYEES BY ECONOMIC ACTIVITY TYPES

Excessive social inequality tends to be a characteristic feature of the modern Russian society (Doklad o chelovecheskom razvitii v rossiyskoy Federatsii za 2014 god, 2014, pp. 84-105). The Gini income index was 41.0 in Russia in 2017, being significantly higher than in most European countries, but practically corresponding to the United States level, being 41.5 in 2016 (Rossia and strany mira, 2018, p. 108). Despite a sharp decrease in 2008 (after raising the minimum wage), inequality in earnings remains quite high: in 2017, the decile coefficient equaled 14.1 times (Trud i zanyatost' v Rossii, 2017, p. 233). Herein, 1% of the most paid workers in the Russian Federation received remuneration (2016) 63 times more than 1% of the least paid ones, while in Europe this ratio was 22 (Zarabotnaya Plata v Mire 2016-2017 gg., 2017). The high level of income and pay differentiation depends, in particular, on differences in pays of certain categories of the employees. In aggregate form, in accordance with the classification of the Federal state statistics service of Russia (Rosstat), there are four categories of employees: heads of organizations and their divisions, specialists, skilled workers in industry, construction, transport and related enterprises, employees engaged mainly in accounting and processing of information. From our point of view differences in the earnings of these of employee categories, should be considered the starting point to shape differentiation of incomes of the population in relation to wage labor. The main principle of fair parity remuneration should be the correlation of earnings to the results of labor, within the framework of the neoclassical theory-the marginal resource return, taking into account compensation payments for unfavorable working conditions and the stimulating component. The issue of the interrelation of remuneration with labour results is known to be as the most complicated issue in theoretical terms. The neoclassical views are based on the idea that each production factor creates an income equal to the costs of the corresponding resource for creating an economic good. A certain amount of wages is established directly on the labor market depending on the ratio between the demand for labor and its supply, the marginal return of labor. Moreover, as imperfect competition is characterized by the elements of monopolism and being not in the market equilibrium state, such a correspondence is usually violated.

In my opinion, the assumption that the equivalence of production factors in the production of good and the creation of its value, the symmetry of the relationship between labor and capital tend to be the disadvantage of this approach, which does not enable studying the phenomenon thoroughly. In addition, the Russian emerging market does not yet allow us to consider it as a mechanism that is able to appropriately evaluate the contribution of the production factor to the of utility creation basing on market principles. The share of the shadow economy and the corruption component being large, the structure of the Russian economy is too specific. Nevertheless, an analysis of the payment level by type of activity and by the status criterion for distinguishing employees enables us to see obvious discrepancies preventing from the tasks solution of the structural adjustment of the economic system. Taking into account all these circumstances, the correlation analysis of the employee earnings of different categories, dynamics and interrelations with existing payment standards, can be considered as information for obtaining an indirect assessment of the relationship between the amount of pay and the results of labor activity.

Table 1: Average monthly nominal pay of certain categories of employees by types of economic activity in 2017 (Svedeniya o zarabotnoy plate rabotnikov organizatsiy po kategoriyam personala i professional'nyh gruppam rabotnikov za oktyabr' 2017 g., 2018)

	Executives	Professionals	Workers	Employees
Natural resources extraction	117075	85648	56862	41705
Manufacturing	73624	46637	35140	31020
Construction	85809	57352	41418	34843
Production and distribution of electricity, gas and water	74251	47177	31142	26652
Retailing and whole selling; maintenance services	86484	50508	29877	31997
Hotels and restaurants	63990	40619	25199	35148
Transport and communications	75160	54470	37022	30305
Healthcare and social services	59417	36601	18834	22987
Real estate transactions, rental and services	79071	43638	26101	25775
Research and development	102388	58204	41096	30181
Education	50256	33254	14045	16699
Recreation and entertainment, culture and sports activities	47491	35041	18364	23985
The ratio of the maximum and minimum pay	2,5	2,6	4	2,5

As Table 1 shows, the salary of executives in ratio to the lowest paid category of employees in 2017 did not exceed three times, except the of research and development area, in which this ratio was 3.4 times. By type of activity for all categories of employees, except the workers category, difference in earnings was 2.5–2.6 times. Such a difference in pay is not excessive when compared with pay ratios in developed economies, moreover, compared with the 1990s, when the interindustry pay gap in the Russian economy reached 6-8 times.

The fourfold excess of workers' wages in the extractive industries compared with the education system is primarily caused by industry specifics and the arduous and harmful labour conditions of oil and gas extraction. It is important to analyze the ratio of pay to the minimum statutory monthly pay, amounting to 7,500 rubles in specific Russian conditions in 2017 (Fig. 1). This is only 69% of the cost of living for the able-bodied population, which was established in the amount of 10,899 rubles this year. (Rossiyskiy statisticheskiy yezhegodnik, 2018, pp. 152, 155). Those who are employed in the providing educational services tend to be in the worst position, in terms of meeting their urgent needs and to reproducing the ability to work. Thus, the wage of workers in the educational sector are less than two (1.9), of employees slightly above two minimum statutory monthly pay (2.2). Heads of enterprises and their subdivisions have undeniable advantages in comparison to all other categories of the employed. In extractive industries, pay of this category is almost 16 times higher than minimum statutory monthly pay, in education - 7 times, in activities related to leisure and entertainment, culture and sports - 6 times.

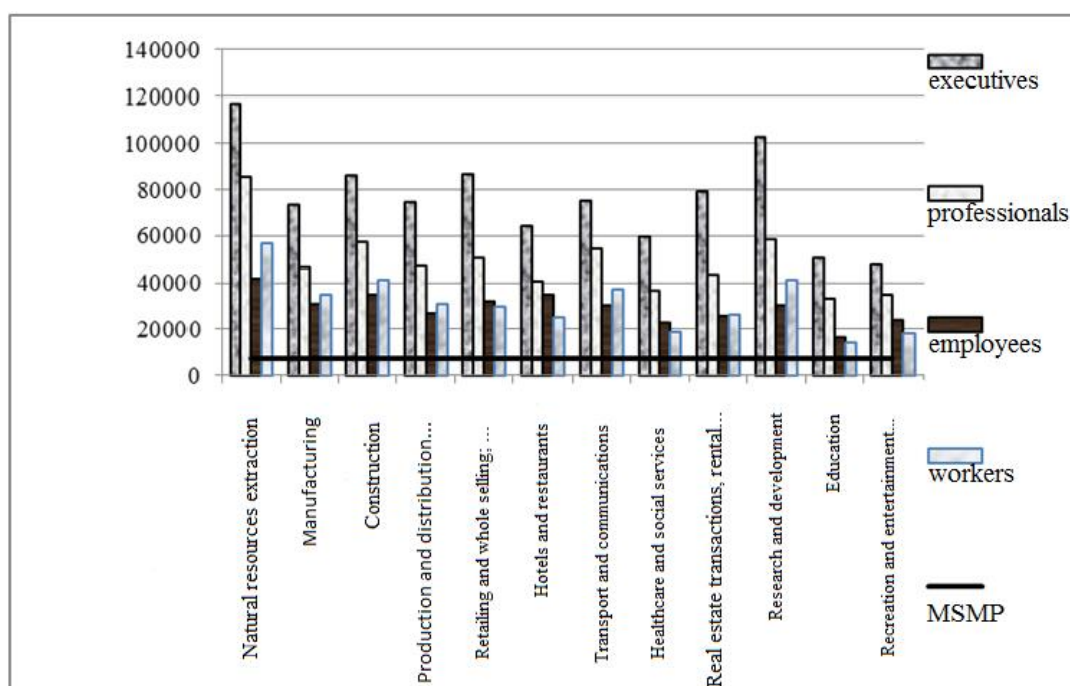


Figure 1: The ratio of the average monthly nominal pay of certain categories of employed by type of economic activity to the amount of minimum wage in 2017 (Rossiyskiy statisticheskiy yezhegodnik, 2018, p. 152; Svedeniya o zarabotnoy plate rabotnikov organizatsiy po kategoriyaam personala i professional'nyh gruppam rabotnikov za oktyabr' 2017 g., 2018)

Thus, the differences in the level of the average monthly nominal wage and salary of the main employee categories by type of activity as a whole do not seem excessively high, being within 3-4 times between their maximum and minimum levels. However, when compared with the minimum pay, the problem of inconsistency of the pay level with the demands of modern society becomes apparent. The ratios of wages with the minimum wage by type of activity for different categories of employees vary from 2 to 16 times, while the categories of workers and employees of all types of activity, with the exception of workers in the extractive industries, are within 4 to 5 times exceeding of the minimum statutory monthly pay. According to economist calculations, the simple reproduction of labor requires at least doubled cost of living, and only a seven-fold excess of this value enables a person to have a so-called high-income budget (Bobkov, 2005). From the point of view of V. Bobkov, the head of the laboratory of quality and living standards of the Institute of Socio-Economic Population Problems of the Russian

Academy of Sciences, in the current conditions the cost of living should be on average no less than three times higher than the existing level and should be approximately 35 thousand rubles (Ivanov, 2019).

3. INFLUENCE OF THE PROFESSIONAL-OFFICIAL STATUS ON THE PAY LEVEL

Implying an increase in the share of the high-tech sector and high-tech industries structural adjustment tends to be an urgent problem for the Russian economy. A necessary condition for moving in this direction one should consider tackling social problems, in particular, the improvement of the labor payment system, turning into an incentive for better work under certain conditions. It makes sense to consider the modern economy as a structure that includes three sectors, depending on the nature of production activity and the type of goods produced. The primary sector is the extraction of raw materials and their processing, the secondary - making industrial products, energy and water supply, construction. The service sector can be considered as the tertiary sector: transport, communications, trade, education, healthcare, tourism and other services. In addition, this includes services related to production planning and its arrangement - information technology, research, global marketing, banking and financial services (if the quaternary sector is not allocated separately). From a theoretical point of view, labor, regardless of industry specifics, but requiring an employee to have approximately the same level of qualification, should be evaluated equally by the market. Be it an engineer, operator or manager. In any case, if the market mechanism works quite efficiently, then a tendency of the equalizing these levels should manifest it. Fig. 1 - Fig. 4 show the ratio and dynamics of the pay level of particular professional and position groups of employed within the framework of activities representing three sectors of the Russian economy. The extracting sector was the leading one in terms of pay for all four categories of employees in 2017. But, if the heads of enterprises and their structural divisions in the field of fuel and energy resources extraction earned 2.1 times more than in education, so the professionals of the two categories mentioned earned 2.5 and 2.7 times more, respectively, and skilled workers in extractive industries - 3.1 times more. And the point here is not that the education sector has lagged behind in hiring highly qualified specialists and skilled workers. The determining factor is that a skilled worker in the educational sector earns only 25% of the amount the worker in the extractive industry does, according to 2017. At the same time, the executive's earnings in the field of education amounted to only 43% of the executive's earnings in mining. As for the latter, being reasonable a significant share of pay is made up of compensation and incentive payments for harmful working conditions. But wages only one and a half times higher than the current cost of living and cannot be considered as an adequate assessment of labor of any complexity in the modern economy, including the education system.

Figure following on the next page

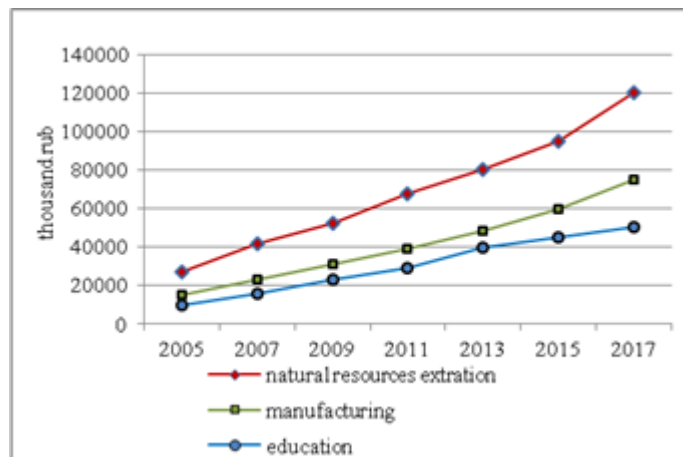


Figure 2: Dynamics of the average accrued wages of enterprise executives and their structural divisions by type of economic activity (*Trud i zanyatost' v Rossii*, 2007, 2009, 2011, URL; *Trud i zanyatost' v Rossii*, 2013, p. 470; *Trud i zanyatost' v Rossii*, 2015, s.269; *Trud i zanyatost' v Rossii*, 2017, p. 254; *Svedeniya o zarabotnoy plate rabotnikov organizatsiy po kategoriyam personala i professional'nym gruppam rabotnikov za oktyabr' 2017 g.*, 2018)

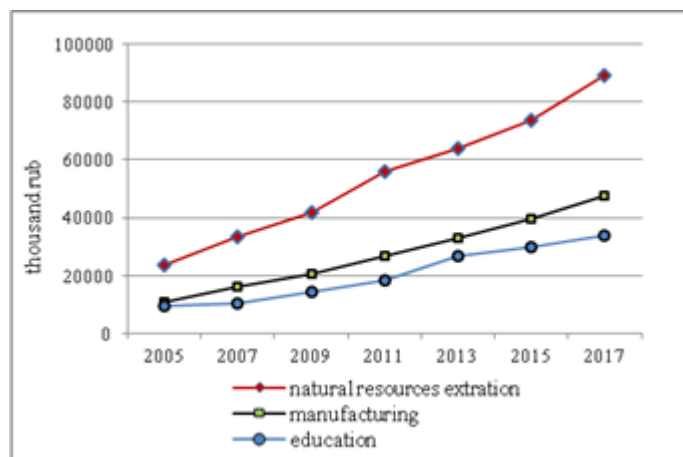


Figure 3: Dynamics of the average accrued wages of highly qualified specialists by type of economic activity (*Trud i zanyatost' v Rossii*, 2007, 2009, 2011, URL; *Trud i zanyatost' v Rossii*, 2013, p. 470; *Trud i zanyatost' v Rossii*, 2015, p.269; *Trud i zanyatost' v Rossii*, 2017, p. 254; *Svedeniya o zarabotnoy plate rabotnikov organizatsiy po kategoriyam personala i professional'nym gruppam rabotnikov za oktyabr' 2017 g.*, 2018)

Figure following on the next page

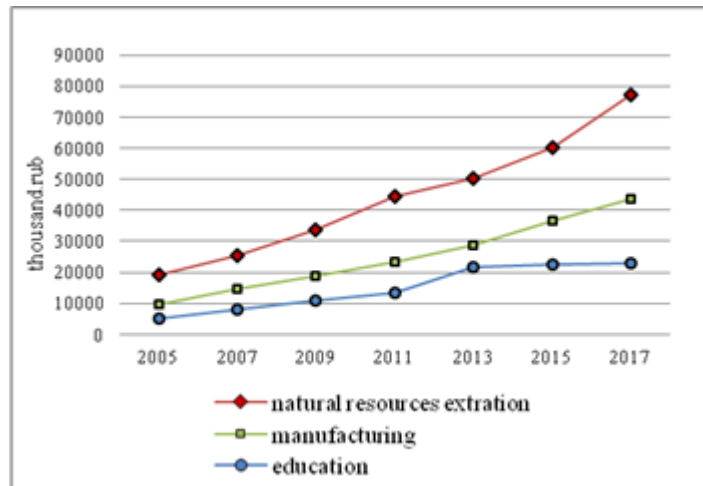


Figure 4: Dynamics of the average accrued payroll of mid-level specialists by type of economic activity (*Trud i zanyatost' v Rossii*, 2007, 2009, 2011, URL; *Trud i zanyatost' v Rossii*, 2013, p. 470; *Trud i zanyatost' v Rossii*, 2015, p. 269; *Trud i zanyatost' v Rossii*, 2017, p. 254; *Svedeniya o zarabotnoy plate rabotnikov organizatsiy po kategoriyaam personala i professional'nyam gruppam rabotnikov za oktyabr' 2017 g.*, 2018)

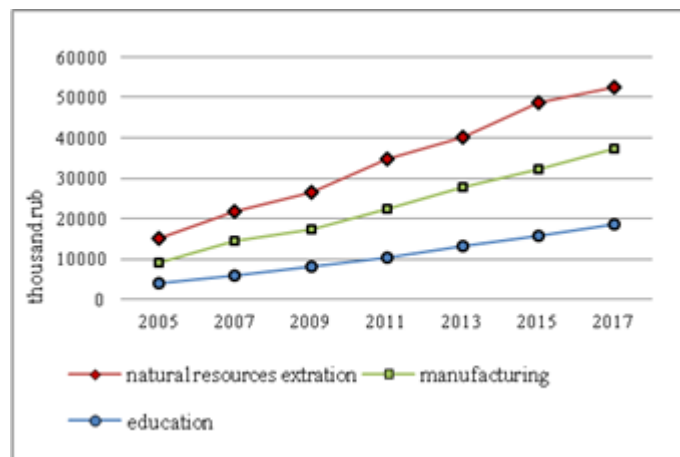


Figure 5: Dynamics of the average accrued wages of skilled workers in industrial enterprises of construction, transport, communications and related enterprises by type of economic activity (*Trud i zanyatost' v Rossii*, 2007, 2009, 2011, URL; *Trud i zanyatost' v Rossii*, 2013, p. 470; *Trud i zanyatost' v Rossii*, 2015, p. 269; *Trud i zanyatost' v Rossii*, 2017, p. 254; *Svedeniya o zarabotnoy plate rabotnikov organizatsiy po kategoriyaam personala i professional'nyam gruppam rabotnikov za oktyabr' 2017 g.*, 2018)

One can see the general growth trend in nominal wages, but the rates vary, and therefore the ratios become different. The gap between the maximum level (extractive industries) and the minimum level (education) at the beginning and at the end of the period under consideration is reduced for all categories of employees from 0.4 to 1.0 times, with the exception of highly qualified specialists, for whom the gap has grown slightly: from 2.5 to 2.6 times. It has equaled 3.4 for intermediate level specialists, workers - 2.8, executives - 2.4 times. The prevailing trend of reducing differences in the level of wages of the same category of the people employed in different types of activities is a positive point, since it reflects the smoothing out of unreasonable intersectorial pay differences in the Russian economy. From a theoretical point of view, it is difficult to explain the big differences in the earnings of workers in different activities versus the smaller differences between top-level professionals and executives, since more complicated work can be more differentiated in terms of pay.

However, our previous study, based on the trend identification and determining the reliability level of the approximation of data series had shown that workers displayed the lowest wage differentiation by type of activity was observed (according to data of 2013). It was somewhat lower for professionals, but noticeably higher for representatives of the administrative apparatus (Fyodorova, 2016). This was caused, in particular, by the fact that the managerial staff, as compared with workers, has a higher level of education and a specific human capital. Regardless the type of activity, the category of intermediate level professionals showed the highest increase of nominal wages between 2005 and 2017- more than five times, the earnings of executives and specialists of a higher category increased somewhat more slowly, the wages of skilled workers increased only three times. Education proved to be a lagging sector for all categories of the employed, being not appropriate for the development needs of the modern economy.

4. CONCLUSIONS

- 1) Analysis of the wage and salary level of the aggregated categories of employed in the Russian economy according to official statistics has showed no profound differences in this indicator. The salaries of enterprise executives as the highest paid employees in 2017 exceeded the salaries of the other categories of employees less than two times, and a little more than three times, being estimated as acceptable ratios from the economic point of view. A thorough analysis of existing problems in the field of remuneration can be given on the basis of additional information, in particular, on the allocation of each category of employees by pay level within the framework of decile groups of the employed by type of activity.
- 2) Along with the gradual increase in the nominal wages of the categories of employed under consideration, there is a lag in the tertiary sector, represented in this study by the education system. This sphere is characterized by the lowest pay level for all categories of employees and its slow growth, being inappropriate for the objective set to shape a new technological structure.
- 3) Since the existing artificially low social standards do not ensure the reproduction of the ability to work of skilled workers and ordinary employees of almost all sectors of the economy, as well as a significant part of professionals, it is relevant, along with raising the pay level of the lowest paid categories of workers, its steady growth for all professionally - position groups. The determining institutional prerequisite for pay raising is the development and application of social standards that meet modern requirements for economic development.

LITERATURE:

1. Bobkov, V. (1995). *Problemy otsenki urovnya zhizni v sovremennoy Rossii*. M.: Vseros. Tsentr urovnya zhizni.
2. Bobkov, V. (2005). Umen'sheniye bednosti: k razrabotke Natsional'noy programmy // *Chelovek i trud*. №5. pp. 13-18.
3. Gubanov, S. (2011). Sistemnyy vybor Rossii i uroven' zhizni // *Ekonomist*. №11. pp. 3-55.
4. *Doklad o chelovecheskom razvitiy v rossiyskoy Federatsii za 2014 god*, (2014). M.: Analiticheskiy tsentr pri Pravitel'stve Rossiyskoy Federatsii.
5. Zhuravleva, T. (2015). Platit li rossiyskoy gosudarstvo «spravedlivuyu» zarabotnuyu platu: obzor issledovaniy // *Voprosy ekonomiki*. №11. pp. 62-84.
6. *Zarabotnaya plata v mire 2016-2017: neravenstvo oplaty truda na predpriyatiyakh*. (2017). Moskva. MOT. Retrieved 5.05.2017 from http://www.ilo.org/moscow/news/WCMS_538290/lang--ru/index.htm

7. Ivanov, A. (17.09.2019). Prozhitochnyy minimum v Rossii dolzhen byt' 35 tys. rubley v mesyats. // *Svobodnaya pressa: Obshchestvo / Ekonomicheskiy krizis*. Retrieved 2.09.2019. from: <https://svpressa.ru/society/article/243839/>
8. Kapelyushnikov, R. (2004). Mekhanizmy formirovaniya zarabotnoy platy v rossiyskoy promyshlennosti // *Voprosy ekonomiki*. №4. pp. 66-90.
9. Luk'yanchikova, T., Yamshchikova, T. (2016). Teoriya i real'nost' sotsial'nogo neravenstva // *Ekonomist*. №11. pp. 28-35.
10. Oshchepkov, A. (2006). Gendernyye razlichiya v oplate truda v Rossii. M.: *Ekonomicheskiy zhurnal VSHE*. №4. pp. 590-619.
11. Roik, V. (2006). Uverzhdena novaya potrebitel'skaya korzina: naskol'ko uluchshitsya zhizn' rossiyan? // *Chelovek i trud*. №5. pp. 20-21.
12. *Rossiya i strany mira*. (2018). Stat. sb. M.: Rosstat.
13. *Rossiyskiy statisticheskiy yezhegodnik*. (2018). Stat. sb. M.: Rosstat.
14. *Svedeniya o zarabotnoy plate rabotnikov organizatsiy po kategoriyam personala i professional'nym gruppam rabotnikov za oktyabr' 2017 g.* (statisticheskiy byulleten'). (2018). Moskva. Rosstat.
15. Tikhonova, N., Mareyeva, S. (2009). *Sredniy klass: teoriya i real'nost'*. M.: Al'fa-M.
16. *Trud i zanyatost' v Rossii*. (2007). Stat. sb. M.: Rosstat. Retrieved 20.09.2019 from https://www.gks.ru/bgd/regl/B07_36/Main.htm
17. *Trud i zanyatost' v Rossii*. (2009). Stat. sb. M.: Rosstat. Retrieved 20.09.2019 from https://www.gks.ru/bgd/regl/B09_36/Main.htm
18. *Trud i zanyatost' v Rossii*. (2011). Stat. sb. M.: Rosstat. Retrieved 20.09.2019 from https://www.gks.ru/bgd/regl/B11_36/Main.htm
19. *Trud i zanyatost' v Rossii*. (2013). Stat. sb. M.: Rosstat
20. *Trud i zanyatost' v Rossii*. (2015). Stat. sb. M.: Rosstat
21. *Trud i zanyatost' v Rossii*. (2017). Stat. sb. M.: Rosstat
22. Fyodorova, L. (2016). Faktory differentsiatsii zarabotnoy platy otdel'nykh kategoriya rabotnikov v rossiyskoy ekonomike // *Vestnik Novosib. un-ta ekonomiki i upravleniya*. №4. pp. 56-66.
23. Yakovlev, R. (2003). Dinamika proizvoditel'nosti truda i zarabotnoy platy v postsovet'skoy Rossii: yest' li vzaimosvyaz'? // *Rossiyskiy ekonomicheskiy zhurnal*. №9-10. pp. 16-29.

ASSESSMENT OF MORTGAGE AVAILABILITY FOR THE POPULATION OF THE RUSSIAN FEDERATION

Lyudmila Rudy

Novosibirsk State University of Economics and Management, Russia
l.y.rudi@nsuem.ru

Tatyana Tropnikova

Novosibirsk State University of Economics and Management, Russia
tropnikova@inbox.ru

ABSTRACT

The experience of developed countries testifies to the success of mortgage loan mechanisms. This mechanism allows citizens who do not have sufficient funds for a one-time purchase of housing, but have a stable income and certain savings, to solve the housing problem. We can say that the practice of mortgage loans has been formed in the Russian Federation. The foundations have been laid and the legal framework for its operation has been created. This is reflected in the dynamics of a number of indicators such as: the number of credit institutions that provide mortgage loans; the volume and average size of mortgage loans; the mortgage interest rate and terms; the share of mortgage loans in GDP. But does these facts imply that mortgage lending has become widespread and affordable for the majority of citizens of the Russian Federation? To answer this question, the article assesses the availability of mortgage loans and services to the Russian population in 2001-2019 using the case of the Novosibirsk region. The most important factors of mortgage loan availability are analyzed on the basis of the state statistics: income as a source of monthly loan repayment and servicing; savings as a source of down payments; the price of one square meter in a standard two-room apartment on the secondary market; the mortgage interest rate; the loan term. The assessment of the purchased housing is given from the point of view of such indicator as "adequacy of housing", that is, the ability to meet human needs in accordance with modern society requirements. The main conclusions of the study are as follows: mortgage loans have become a real way to buy housing, primarily of economy class. And this is despite the fact that mortgages are still an expensive option for solving the housing problem. The availability of mortgage loans for various segments of the population is increasing gradually. There is a considerable potential for further growth. A large role in the development of mortgages is played by the state, which considers mortgage loans as a priority way to solve the housing problem.

Keywords: *the availability of mortgages; mortgages; factors of mortgage availability*

1. INTRODUCTION

In order to assess the availability of mortgage loans for various segments of the Russian population, it is necessary to determine their 'creditworthiness', i. e. the ability of the population to take a loan and repay it. On the one hand, this ability depends on average per capita income as a source of monthly loan repayment. On the other hand, it depends on average per capita savings as a source of down payment when buying a home. The income of the population determines, first of all, the availability of mortgages for different strata. And not just that. Such factors as the price of 1 square meter in the primary and secondary housing markets, the interest rate and the term of the mortgage loans, the "adequacy" of mortgage housing as the ability to meet the needs of the population in accordance with modern standards, etc. also have a significant impact. Let us analyze the impact of these factors on the mortgage lending using the example of the Novosibirsk region for the period of 2001-2019. The year 2001 was not chosen for the analysis by chance.

2001 is linked to the initial stage of mortgage system implementation – Law No. 98-03 "On mortgage loans in the Novosibirsk region" dated 11.05.2000 was adopted; economic and institutional framework was developed. The economic foundations of the mortgage lending include: the formation and development of primary and secondary housing market; the preponderance of private housing in the structure of the housing stock by forms of ownership; the decrease in budgetary financing of housing construction; the decline in the volume of free accommodation provided to the people in the housing waiting lists, low availability of housing for the majority of the population due to their low income; inability to purchase housing for those who have a stable income due to the lack of long-term loans. The organizational basis of the housing mortgage system was laid down by the establishment of the Novosibirsk Agency for Housing Mortgage Loans JSC as an institute of the secondary housing mortgage market. The majority stake (70%) belonged to the Housing Construction Fund of The Novosibirsk Region (state unitary enterprise). The bank granting loans was the Novosibirsk branch of Sibcontact Commercial Bank JSC. In the Novosibirsk region, first commercial mortgage loans were extended in September 2001, and by the end of the year only 3 loans were extended totalling 998 thousand roubles. In 2002, 24 loans were extended amounting to 12 million 735 thousand roubles. In 2003 240 loans were extended amounting to 138 million 677 thousand roubles. Since 2004, the Novosibirsk branch of Sobinbank and Sibakadembank have become primary creditors, in addition to Sibcontact. Independent programmes are implemented by Sberbank, Novosibirsk Vneshtorgbank, and others. Since 01.01.2003, the social mortgage programme for public sector employees has been implemented in the Novosibirsk region. And in 2018, the Novosibirsk region enters the list of TOP 20 regions of the Russian Federation by the volume of mortgage lending, taking the 8th position by the following indicators: the volume of mortgage loans of 70 billion 494 million roubles; the growth rate of mortgage loans as compared to 2017 – 51,2%; the share in total volume of loans in Russia – 2.3% [10].

2. CALCULATIONS OF THE MORTGAGE LOANS AVAILABILITY INDICATORS IN THE NOVOSIBIRSK REGION

The assessment of the mortgage availability can be presented in the form of an algorithm.

- Step 1 – calculation of an average monthly per capita income for decile groups. For this purpose, the assessment is based on official statistics: income, population, and distribution of total cash income by decile groups.
- Step 2 – calculation of savings per capita. In reality, the population saves only part of the income remaining after the deduction of final consumption. Since the saving behaviour of the population depends on the level of income, it is also advisable to calculate the savings rate for decile groups. But since official statistics data on savings is not available, let us assume that savings are distributed in proportion to the income received. At the same time, we exclude those groups whose average per capita income is below the subsistence minimum, at/or slightly above it. These groups do not have savings. The savings of the Novosibirsk region population are represented by cash balances of the population; investments in securities, foreign currency deposits, and investments in foreign currency.
- Step 3 – Calculation of savings and income required to pay the down payment, repayment and servicing of the mortgage loan for the purchase of a typical apartment in the Novosibirsk region secondary housing market.

Here is an example of the calculation for 2001:

- cost of 1 sq. m. in a typical apartment on the Novosibirsk region secondary housing market amounted to RUB 10,558;

- the floor area of a standard 2-room apartment, based on the social norm of housing for a family of 3 people, is taken as 54 sq. m. This corresponds to the standard of the Housing Federal target programme;
- the market price of this apartment was, respectively, 10,558 roubles x 54 sq. m = 570132 roubles;
- the down payment equal to 30% of the market price of the apartment is 171,039 roubles. And since the average family consists of 3 people it makes 57,013 roubles per a member;
- the amount of the mortgage loan is 70% or 399,093 roubles for a period of 10 years and the interest rate is 18%;
- an average monthly loan servicing and repayment on an annuity are equal to 7,191 roubles.
- taking into account that these expenses make up $\frac{1}{3}$ of the family's disposable income, we calculate the required income of 7,191 roubles: $0.33 = 21,791$ roubles or 7,264 roubles per a family member. We compare the required income with the income calculated using statistical data.
- As the income, we use the average salary for 10 decile groups of employees. The amount for 2 working family members in the 10th group is 14,438 roubles; 4,813 roubles per a family member.
- We compare the savings calculated from statistical data with the ones necessary for accumulating the initial payment for 7 years – 678 roubles per month.

It is obvious that even the 10th decile group as a whole did not have the income necessary for monthly payments to repay and service the loan. Its income constitutes 67% of the required amount. It also could not accumulate the amount needed for the down payment. We will make calculations to determine the availability of mortgage loan for the population of the Novosibirsk region in 2001-2019 and sum them up in a table.

Table following on the next page

Table 1: Dynamics of mortgage availability indicators for the population of the Novosibirsk region in 2001-2019[1-4,6,7,16,17]

Indicators	2001	2002	2003	2006	2007	2009	2011	2013	2015	2017	2019
1. Cost of 1 sq. m. in a standard 2-room apartment in the secondary housing market, thousand rubles.	10.558	13.388	13.419	35.7	50.7	49.9	45.1	50.95	54.97	50.78	53.79
2. Area of a standard 2-room apartment, sq. m.	54	54	54	54	54	54	54	54	54	54	54
• Market price of 2-room sq. m. RUB., (point 1 x point 2).	570.132	722.952	724.626	1927.8	2737.8	2694.6	2435.4	2751.3	2968.38	2742.12	2904.66
4. Down payment thousand rubles (30% p. 3)	171.039	216.885	217.388	578.34	821.34	808.38	730.62	825.39	890.51	822.64	871.39
5. Per a family member, thousand roubles (p. 4: 3)	57.013	72.295	72.462	192.78	273.78	269.46	243.54	275.13	296.84	272.2	290.47
6. Mortgage loan amount, thousand roubles (p. 3-p. 4)	399.093	506.067	507.238	1349.46	1916.46	1886.22	1704.78	1925.91	2077.87	1919.48	2033.27
7. Loan term, years	10	10	10	15	15	15	15	15	15	15	15
8. Interest rate, per annum, %	18	18	15	11.5	11.5	12.4	11.6	12.3	12.3	12.3	9.2
9. Average monthly payment (annuity payment) RUB.	7191.07	9119.0	8184.0	15764.0	22388.0	23125.0	20024.0	23487.0	25340.0	23409.0	20865.0
10. Average monthly payments (differentiated payment), RUB.	6343.92	8044.37	7423.66	13997.42	19878.73	20276.0	17756.54	20624.63	22252.05	20555.77	19133.51
11. Monthly income required by the family to repay the loan, RUB (p. 9: 0.33)	21791.13	27632.06	24800.0	47769.24	67842.24	70075.75	60678.8	71172.7	76787.87	70936.4	63227.3
12. Monthly average per capita income required to repay the loan, RUB (p. 11: 3)	7263.71	9210.69	8266.66	15923.2	22614.1	23358.6	20226.3	23724.2	25595.95	23645.5	21075.8
13. Availability as an ability of decile groups to service the loan: tenth ninth eighth seventh sixth	not available	not available	available	available	available	available	available available	available available	available available	available available available available	available available available available available
14. Availability as an ability of decile groups to accumulate a down payment: tenth ninth eighth seventh	not available	not available	available	available	available	available	available	available available	available available	available available available	available available available available

3. THE ANALYSIS OF THE DYNAMICS OF MORTGAGE AVAILABILITY INDICATORS FOR THE NOVOSIBIRSK REGION POPULATION IN 2001-2019

Based on the calculations presented in the table, the following conclusions can be made.

- Conclusion 1. Obviously, the availability of a mortgage loan depends on the dynamics of housing prices, since the mortgage and housing markets are closely linked. This connection results from the definition of a mortgage as a debt instrument that uses real estate to secure a debt obligation. The growth of residential real estate prices is a common pattern in all developed countries, including the Russian Federation and its regions. This leads to an increase in the volume and average amount of the mortgage loans. Thus, the price of 1 sq. m of housing and the price of a standard 1-room apartment in the secondary housing market of the Novosibirsk region increased by 5.1 times.

The amount of the mortgage loan also increased by 5.1 times. At the moment, the mortgage market in Russia does not shape prices in the housing market. The drop in prices that occurred during the analyzed period (point 1) did not result from "overheating" of the mortgage market. However, when mortgage market grows, the dynamics of housing prices will be determined to a greater extent by the availability of loans.

- Conclusion 2. When mortgage interest rates are decreasing, mortgage availability and demand for mortgage loans are increasing, and vice versa. In the Novosibirsk region, the mortgage loan rate has almost halved – from 18% in 2001 to 9.2% in 2019. But it remains high if compared to developed countries.
- Conclusion 3. The availability of mortgage loans depends not only on the interest rate, but also on the type of mortgage and, consequently, on the type the loan repayment. The table shows calculations of average monthly loan payments of two types: annuity payment (point 9) and differentiated payment (point 10). The comparison shows that with the same interest rate and the same loan term, the monthly amount of annuity payments is 10-14% higher than differentiated ones. The annuity overpayments by year are shown in figure 1.

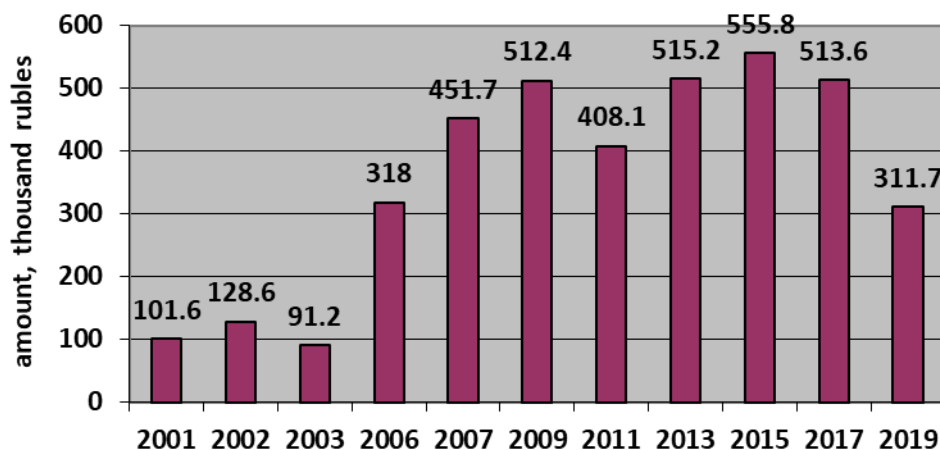


Figure 1: The amount of overpayments on an annuity payment within the mortgage term

Obviously, a differentiated payment is beneficial to the borrower, and an annuity payment is beneficial to the bank. Firstly, the bank includes a larger amount of interest on the loan in the annuity payment, and then the principal debt will constitute a larger proportion of the payment. This reduces the bank's risks in the event of the borrower's insolvency.

- Conclusion 4. The average amount of a mortgage loan increased from 399 thousand roubles in 2001 to 2033 thousand 270 roubles in 2019, i.e. 5.1 times. Accordingly, the average monthly payments have increased; regardless of the way the interest is accrued (see p. 9, p. 10). For annuity payments they increased from 7191 roubles to 20865 roubles; i.e. 2.9 times. And for differentiated payments the increase was from 6344 roubles to 19134 roubles; i.e. tripled.
- Conclusion 5. The average term of the mortgage loan has increased by 1.5 times – from 10 years in 2001 to 15 years in 2019. It should be noted that the loan terms offered by banks operating in the Novosibirsk region vary. They grant loans for a period of up to 30 years. In our calculations, we considered the most popular term of the loan. Choosing it, the borrower should understand that with the increase in the loan term, the amount of average monthly payments decreases. But the total amount of payments on the loan increases significantly. In our case, in 2019, a loan of 2033 thousand 270 roubles was taken. At an interest rate of 9.2% per annum and for a loan term of 15 years, monthly annuity payments

amount to 20,865 rubles; and the total amount of payments to repay the loan is 1,722,430 roubles. With a loan term of 25 years, monthly annuity payments amount to 17,342 roubles, and the total amount of payments to repay the loan is 3,169,330 roubles. At an interest rate of 12.3% and for a loan term of 15 years, monthly annuity payments amount to 24,796 roubles, and the total amount of payments to repay the loan is 2,430,010 roubles. With a loan term of 25 years, monthly annuity payments amount to 21,867 roubles, and the total amount of payments to repay the loan is 4,526,830 roubles. Thus, the increase in total loan payments with increasing terms is less noticeable as the interest rate of the loan decreases. Therefore, when the interest rates are high, it is advisable to increase the loan term.

- Conclusion 6. The availability of a mortgage loan is also determined by the amount of the down payment (point 4). It directly determines the amount of the mortgage loan (point 5). We can say that the "loan/collateral" ratio at the moment of the mortgage extension reflects the ability of the borrower to save money. The greater the share of own funds invested into the purchase of housing, the greater the motivation of the borrower to repay the loan, so that this housing is not lost.

In the analyzed period, the Novosibirsk Agency for Housing Mortgage Loans JSC for the Novosibirsk region, its successor Dom. RF. Mortgage Agent and the majority of banks that have their own mortgage programmes in the Novosibirsk region, followed the standard scenario – a down payment of 30% of the apartment price, 70% mortgage loan. However, some banks lessened the requirements for the borrower and provided a mortgage loan with a lower down payment (10-20%) and even without it. This approach has gradually become quite widespread, and at the beginning of 2019 in Russia, the share of loans with a down payment of 10-20% in the total volume of loans granted reached 43.3% [8]. It may seem that a lower down payment is beneficial to both the borrower and the lender. This allows the lender to increase the loan portfolio, and makes it easier for the borrower to access a mortgage loan. But in reality, loans with a lower down payment are characterized by an increased level of risk for both the borrower and the lender. The borrower is more likely to experience a temporary decrease in income and will have difficulty repaying the loan. The lender increases possible losses in the event of the borrower's insolvency.

- Conclusion 7. The calculations show that the availability of mortgage loans for the population of the Novosibirsk region is gradually increasing. This is especially noticeable since 2013. This conclusion is confirmed by our calculations made on the basis of other methods [12, 13]. In 2001-2002, the mortgage option under consideration was not available even to a family with a salary in the 10th decile group. In 2003-2009, such a family could afford a mortgage. Since 2011, the availability of mortgage loans has been growing and in 2019, a family with a salary in the 6th decile group could purchase a standard 2-room apartment with a mortgage. Its income is to exceed 60 thousand roubles. This is the evidence that mortgages are still an expensive solution to the housing problem. Families with incomes in 8-10th decile groups can and will most likely consider other options for improving housing conditions [14, 15].
- Conclusion 8. Calculations show that the availability of a mortgage loan in terms of the ability of the population to accumulate a down payment is also growing (p. 14). In 2001-2002, even a family with a salary in the 10th decile group could not do this. In 2003-2011, such a family could accumulate the down payment required to purchase a standard 2-room apartment. Since 2013, the availability of the mortgage loan has been growing, and in 2019, representatives of 7-9th decile groups could afford it. At the same time, the availability of mortgage loans is increasing against the background of falling real income of the population over the past few years. Is there a contradiction? It is believed that the stabilization of the

housing prices, as well as the reduction in the mortgage interest rate played a significant role in the growth of affordability. But it is too early to say that the mortgage lending have become mass and affordable.

Let us evaluate the housing purchased with a mortgage in terms of its "adequacy". "Adequate" is the housing that meets modern standards of society. Modern society recognizes the right to adequate housing as basic rights. The size of housing is regarded as a quantitative assessment of its adequacy. Adequate housing is a housing of the adequate size. Its sufficiency can be determined by a number of indicators: average floor area/home size per 1 person; number of families in one residential unit; number of people in one room or number of rooms per 1 person, etc. In this case:

- One family acquires separate, isolated housing, and this corresponds to average European standards.
- There are 18 square meters per a family member. This corresponds to the average floor area per 1 person in the Novosibirsk region in 2001-2003. In 2018, the average floor area per 1 person in the Novosibirsk region was 25.2 sq. m. Thus, the indicator of average floor area per 1 person in the purchased apartment is lower than the average for the Novosibirsk region. And is not comparable to the international minimum standard of 30 sq. m. per person.
- The occupancy density of the apartment is expressed in formula $K=n-1$, where k is the number of rooms and n is the number of family members. Thus, there are 0.67 rooms per 1 family member, with the minimum international standard of 1 room per 1 family member in a separate apartment or house. It is obvious that the purchased apartment can not be considered as adequate housing. It does not meet the requirements of society at the moment and will not be able to meet them in 15 years [13]. This is the evidence that with existing high housing prices, demand is primarily affected by the family income. And factors that are important in other situations, such as family composition, level of housing, lose their importance.

4. CURRENT SITUATION IN THE MORTGAGE MARKET

The general trend in the development of the mortgage market of the Russian Federation and Novosibirsk region is the growth of mortgage loans volume over the whole period considered. The Russian financial market has not yet faced mortgage crises, although the crisis situation was observed in 2009-2010. This is evidenced by the following factors: the decrease in the volume of mortgage lending; increase in the mortgage interest rate; increase in the volume of overdue debt and its share in the total debt on mortgage lending; decrease in the volume of refinanced mortgage lending due to increased risks, etc. However, it was caused by external factors – the global financial crisis that began in the US mortgage market []. Some signs of a crisis situation were observed after 2014 in connection with economic sanctions against the Russian Federation. However, this situation did not change the overall positive dynamics in the development of the Russian mortgage market. The growth of mortgage lending has been particularly noticeable since 2013. In 2013-2019, the volume of the mortgage loan portfolio increased by 3.65 times – from 2.0 to 7.3 million roubles. The share of mortgage loans in the total portfolio of loans to individuals increased from 27.8% to 42.8% [8]. And there is a significant potential for further growth of the mortgage lending. Despite the growth in the volume of housing and communal services, their share in 2019 was less than 7% of Russia's GDP. While in emerging markets this share is 10-30% of GDP, and in developed countries it is more than 100%. The activities of the Russian Federation Central Bank and the state, which considers mortgages as a priority way to improve the living conditions of the population contributes to the growth of the mortgage market and ensure its balance.

Thus, the Central Bank's policy is directed against the massive reduction of requirements for borrowers by banks: providing loans with a low down payment and a high debt load. Weak lending standards increase risks, lead to significant losses in the banking sector, and severe social consequences if the borrower loses their home. In this regard, the Russian Federation Central Bank is already applying macroprudential regulations aimed at reducing the share of mortgage loans with a down payment of 10 to 20%. This includes an increased risk ratio that affects the capital adequacy of a credit institution. The higher the risk ratio, the more capital is to be reserved for the provision of credit and the less profitable such lending is. This activity during 2019 led to a decrease in the share of loans with a down payment of 10-20% down to 35.7%, but it is still high [8]. The Central Bank's policy is aimed at reducing the share of borrowers who have simultaneous debts on loans. The higher the borrower's debt load, the more likely it is that over the long term of the mortgage loan, they will face a temporary decrease in income and will experience difficulties with servicing the loan. As of 01.09.2019, the share of mortgage borrowers having other outstanding debts was 46%. Among them are those who take out a consumer loan as a down payment on a mortgage. A consumer loan taken three months prior to the mortgage loan may indirectly prove it. However, the share of such borrowers is insignificant and it does not exceed several percent of the loan [11]. In this regard, the Central Bank instructed the banks to calculate the indexes of the individual's debt load for all newly granted loans in accordance with a more conservative approach from 01.10.2019. It macroprudential regulations may be applied to limit the debt load. The state's activities are primarily aimed at creating general conditions for economic stabilization: to decrease the level of inflation to the target numbers; to lower unemployment, etc. This should lead to an increase in the real income of the population, which have not grown much over the past few years. Great hopes are placed on the Housing and Urban Environment national projects, availability and massification of the mortgage loans being one of their priorities; on the Demographics project, the implementation of which also creates the possibility of further improvement of housing conditions for young families and families with children. So, from 01.01.2020, the "maternity" capital programme provides for payments of 466 thousand roubles for the birth of the first child; an increase in the "maternity capital", allowance paid by the state for the birth of the second child. It can be used as a down payment when taking a mortgage loan. In addition, a part of the mortgage loan is written off with the birth of the third child and subsequent children; a part of the down payment can be subsidized at the expense of the budget funds. The state should promote competition in the mortgage market. The mortgage market in Russia is highly concentrated. So, in 2018, 85% of all mortgage loans and 87% of mortgage debt accounted were granted by 5 banks: Sberbank, VTB, Gazprombank, Rosselkhozbank, DeltaCredit. DeltaCredit is the only private bank in this list, and the state owns a part of the capital of the other 4 [10]. It seems that these and other measures will increase the availability of mortgage loans and increase the demand for them.

5. CONCLUSION

The sustainable development of the economy, accompanied by an increase in real income and a decrease in the mortgage interest rate, will certainly contribute to the growth in the demand for mortgage loans. The state, recognizing the housing market as the main financial instrument for providing housing for the population, deliberately stimulates the demand for mortgage loans even for those whose income does not allow them to do so, meaning low-income citizens and large families. However, "excessive" demand for housing and communal services can have a significant negative impact not only on the financial sector, but also on construction, on industries that depend on consumer demand, and as a result – on the economy as a whole and will lead to severe social consequences.

Therefore, both the Central Bank of the Russian Federation and government agencies must ensure a balanced development of the mortgage market.

LITERATURE:

1. Average nominal wage for 10 percent groups of employees by type of economic activity. (2019). *Federal state statistics service*. In Russian. Retrieved 20.01.2020 from https://www.gks.ru/bgd/regl/b11_36/IssWWW.exe/Stg/d2/08-26.htm
2. Average price of 1 square meter of the total apartment area in the housing market, rouble, secondary housing market, Novosibirsk region. (2019). *Federal state statistics service*. In Russian. Retrieved 31.01.2020 from <https://www.gks.ru/dbscripts/cbsd/DBInet.cgi>
3. Average prices and price changes for 1 square meter of total apartment area in the Novosibirsk region (2019). *Federal state statistics service*. In Russian. Retrieved 31.01.2020 from <https://gks.ru/region/doc1150/IssWWW.exe/Stg/d010/i011730r.htm>
4. EMISS. (2019). *State statistics*. In Russian. Retrieved 31.01.2020 from <https://fedstat.ru/indicator/33999>
5. Housing affordability in Russia's largest urban agglomerations in 2019 [Dostupnost' zhil'ja v krupnejshih gorodskih aglomeracijah Rossii v 2019 godu]. (2019). *Fond Institut jekonomiki goroda (City economics Institute)* Moscow. In Russian. Retrieved 20.01.2020 from http://www.urbanecomomics.ru/sites/default/files/dostupnost_zhilya_v_17_gorodskih_aglomeracijah_v_rossii_v_2019_g.pdf
6. Indicators of the mortgage housing market. Weighted average rate on housing loans in the Novosibirsk region, in roubles, provided to resident individuals, % (by the 30 largest banks). (2019). *Central Bank of the Russian Federation. The region statistics*. In Russian. Retrieved 31.01.2020 from <https://www.cbr.ru/statistics/pdco/Mortgage/>
7. Information about the housing (mortgage) lending market in Russia.(2016). *Statistical digest (online version)*. *Central Bank of the Russian Federation*. (No. 3. 2011-2015). In Russian. Moscow Retrieved 31.01.2020 from https://www.cbr.ru/Collection/Collection/File/15725/Stat_digest_mortgage_03.pdf
8. File/15725/Stat_digest_mortgage_03.pdf
9. Measures taken by the Bank of Russia to ensure a balanced development of mortgage lending. Report for public consultation. (2019). *Central Bank of the Russian Federation*. In Russian. Moscow. Retrieved 31.01.2020 from http://www.cbr.ru/content/document/file/94935/consultation_paper_191217.pdf
10. Monitoring and evaluating the situation on the housing market and mortgage lending, building target forecast indicators for the development of the housing sector [Monitoring i ocenka situacii na rynke zhil'ja i ipotechnogo zhilishhnogo kreditovaniya, postroenie celevyh prognoznyh pokazatelej razvitiya zhilishhnoj sfery]. (2018). *Fond Institut jekonomiki goroda (City economics Institute)* Moscow. In Russian. Retrieved 20.01.2020 from http://www.urbanecomomics.ru/sites/default/files/dostupnost_zhilya_i_zhilishchnye_balansy.pdf
11. Mortgage lending in 2018: hold on to the maximum (2019). *Analytical data. International Group of Agencies RAEX. RAEX-Analytics LLC*. (April 17, 2019). Moscow. In Russian. Retrieved 31.01.2020 from https://raex-a.ru/media/uploads/bulletins/pdf/2019_ipoteka_bul.pdf
12. Review of financial stability. Information and analytical material. (2019). *Bank of Russia. No. 2*. Moscow. In Russian. Retrieved 31.01.2020 from http://www.cbr.ru/collection/collection/file/25489/ofs_19-02.pdf
13. Rudi Lyudmila, Tatyana Tropnikova. (2019). HOUSING AFFORDABILITY AS THE MOST SIGNIFICANT SOCIAL-ECONOMIC INDICATOR. *49th International Scientific Conference on Economic and Social Development – "Building Resilient Society". Book of Proceedings*. Zagreb, pp. 359-370.

14. Rudy L. Yu., Klyueva I. S. (2019). Qualitative characteristics of the housing stock of the Novosibirsk region: trends of changes [Kachestvennye harakteristiki zhilishhnogo fonda Novosibirskoj oblasti: tendencii izmenenij]. *Vestnik of NSUEM (Bulletin of NSUEM)*. (No. 4), pp. 220-232.
15. Rudy L. Yu., Tropnikova T. A. (2014). Assessment of housing affordability for the population of the Novosibirsk region [Ocenka dostupnosti zhil'ja dlja naselenija Novosibirskoj oblasti]. *Vestnik Tomskogo gosudarstvennogo universiteta (Bulletin of Tomsk State University)*. (No. 388). pp. 188-193.
16. Rudy, L. Yu., Tropnikova, T. A. (2019). Creating demand in the residential real estate market in Canada: modern trend [Formirovanie sprosa na rynke zhiloj nedvizhimosti Kanady: sovremennye tendencii] *Vestnik of NSUEM (Bulletin of NSUEM)*. (No. 4), pp. 320-331.
17. Social status and standard of living of the Russian population - 2015. (2015). *Federal state statistics service*. In Russian. Retrieved 31.01.2020 from https://www.gks.ru/bgd/regl/b15_44/Main.htm
18. Socio-economic situation of the Novosibirsk region (January - July 2019). (2019). *Territorial body of the Federal state statistics service for the Novosibirsk region*. In Russian. Retrieved 20.01.2020 from <https://novosibstat.gks.ru>

ENTERPRISE INTEGRATION AND MARKET PERFORMANCE RESULTS

Sofia Lyubyashenko

*Novosibirsk State University of Economics and Management, Russia
lubsofia@yandex.ru*

ABSTRACT

The ongoing integration processes in industry markets are the basis for their transformation in the direction of rigid oligopolistic structures. The growth of concentration in industries in Russia and other countries is dictated by the need to find ways to improve the competitiveness of enterprises. The article describes the processes of concentration of production as a result of grouping of enterprises in industry and international markets; formation of coalitions to coordinate activities in the market. The regularities of combining firms into strategic groups are revealed. The article presents the results of analysis of the relationship between the level of concentration and profitability of the industry in different ways of grouping enterprises. It is proved that the best performance of the industry can be achieved within the framework of a structure with a higher level of concentration.

Keywords: *Concentration, oligopoly, efficiency, strategic group, cartel*

1. INTRODUCTION

The patterns of development of material production sectors in the Russian economy based on market principles are almost identical to trends in developed countries. A number of objective factors (the desire to enter international markets, take a leading position and others) have led to a revision of the paradigm of general downsizing of enterprises and the thesis about the necessity of competitive "struggle", as an attribute of the market, between manufacturers. The empirical reality is that the institutional organization of the economy is increasingly being modified in the direction of forming large corporate structures, associations, financial and industrial associations, including interstate ones, by integration and coordination of the activities of market participants on the supply side. The concentration of Russian industry exceeded not only the European level, but also the level of the USA and South Korea. For comparison, in Germany, ten integrated business groups (IBG) account for 15% of industrial output, in the USA - 27%, in South Korea - 32%. The thesis that the market structure determines the behavior of enterprises, and in turn the results of the functioning of the market, has been repeatedly tested by Russian and foreign economists. The theory of industrial organization focuses on identifying the relationship between the level of structural concentration and the profitability of the industry. Most theorists agree that increasing concentration, as a rule, leads to the monopoly power of enterprises and the loss of public welfare. However, the transformation of a highly concentrated market into a monopoly is possible only under certain conditions, such as high entry barriers. Therefore, the problem of the result of market activity is more complex than it appears in the framework of microeconomic theory.

2. GLOBALIZATION AND TRENDS OF TRANSFORMATION OF RUSSIAN AND FOREIGN MARKETS

The concentration growth trend in the industries of Russia and other countries is explained by the need to increase the competitiveness of enterprises. Large corporations that have the ability to use economies of scale, flexibility of the production base, introduce innovations and carry out investment processes, including innovations, usually operate successfully in world markets. The desire to maximize profits leads to the formation of various kinds of coalitions and indicates a continuous restructuring of Russian industry.

Currently, even large companies do not remain completely independent. In this regard, there is a growing tendency to conclude strategic alliances, to move to “organized” markets, which are a higher form of evolutionary development of markets. Determining the level of concentration in the context of coordination remains a difficult task in Russia and other European countries. Official concentration indices do not reflect the real level, since they do not allow fixing the informal relations of rivals. An interesting task is to determine the relationship between the level of concentration and industry performance [10]. What are the reasons for the growth of concentration and integration of enterprises in the industry of Russia and other countries? In recent decades, the economies of industrialized countries have changed a lot since the modern world is undergoing a process of profound transformation. Among scholars of various fields, the concepts of creating a new “information society”, “mass consumer society”, “new industrial society”, etc., are put forward, and each of them affects the process of globalization. This concept is used to characterize various processes, such as global economic, political and cultural integration, the unification of the world economy into a single market. On this basis, a single global network market economy is formed [8, 15]. The views on the causes of globalization are debatable. Historians connect this process with the development of capitalism. Economists see the cause of globalization in the transnationalization of financial markets and the rapid growth of international trade. Political scientists emphasize the spread of democratic organizations. There are information technology approaches to explain the processes of globalization. The development of information technologies contributes to the acceleration of this phenomenon [8]. The rapid transformation of the economic systems of different countries requires modern firms to review management concepts and methods. The large role of concentration of production and integration of enterprises is not only preserved, but also acquires a qualitatively new significance. A previous understanding of these processes seems limited in the new changing environment. Improving the competitiveness of enterprises is the main factor in the transformation of markets in the direction of increasing concentration [13, 14, 16]. Mergers and acquisitions of firms by combining assets are not always successful and often lead to lower economic performance of organizations and markets. Therefore, the issue of finding the most optimal form of enterprise integration that can improve the performance of enterprises and markets remains relevant. Numerous results of empirical studies indicate that the concentration level of a large number of traditional industry markets has reached its critical value. New markets associated with high technology require new approaches. Concentration research remains an important task when trying to answer the question - which market structure is the best? In the modern theory of management, researchers are interested in market structures that contain elements of competition and cooperation. As a rule, these are oligopolistic markets [3, 4]. A modern form of enterprise integration is the formation of strategic groups on an informal basis with the aim of coordinating activities on the market. The coalition (strategic groups) combines enterprises on the basis of the similarity of strategies: the same areas of product diversification, the number and types of distribution channels, product quality, volume and direction of investment, level of fixed costs and dynamics of changes in marginal costs. The fundamental motive for grouping enterprises is the desire to maximize profits. The formation of coalitions requires certain market conditions, namely a high level of concentration. Such a combination allows firms to achieve greater stability in the market than in autonomous functioning, while maintaining legal independence. Obviously, this method of integration is not traditional and requires new approaches to management, both from the state and from the managerial staff of firms. Full control over the activities of integrated firms without legal registration of mergers and acquisitions can be achieved with the help of thoughtful management. At Sheresheva M.Yu. such a phenomenon is called “quasi-integration”, “when there is control over the management of assets of legally independent companies in the absence of control over property” [19, p. 63].

We are interested in the integration of this kind from the standpoint of the efficiency of enterprises and industries, their sustainability, as well as the application of antitrust regulation measures. It is important to determine the principles for combining firms in a coalition. While maintaining a legally autonomous position, the key prerequisite for the sustainability of strategic groups is the motivation of each participant to act in a coordinated manner in order to achieve greater profitability. The stability of coalitions is also determined by the stability of demand, the height of entry barriers to the market, the number of sellers, and the fear of punishment for violating the agreement. The ongoing integration processes in industry markets are the basis for their quality transformations. Intercompany interaction in a coalition should be considered as cooperation of partners based on trust. However, cases are not excluded when cooperation involves a certain restriction on the autonomy of partners and is associated with an unequal distribution of costs and benefits. That is, oligopolistic cooperation does not exclude conflicts related to power, control, dependence, competition and unequal exchange. The opportunistic behavior of firms entails large costs of organizing penalties for breach of agreements. The probability of violation of agreements will be low if the benefits of cooperation in the coalition are higher than from autonomous functioning. Therefore, to achieve the stability of the coalition, it is necessary to find ways and mechanisms of the optimal distribution of production volumes, profits and costs [3, 5, 7].

3. EMPIRICAL EVIDENCE. PRINCIPLES OF ASSOCIATION OF FIRMS IN THE COALITION

A study of the relationship between the level of concentration and the results of market functioning, the determination of the laws governing the formation of strategic groups, was carried out in the building bricks market of Novosibirsk. Cost data and demand functions were used. According to the methodology for calculating the concentration level described in

previous publications, an analysis of the industry profit $\Pi(Q) = \sum_{k=1}^{k_0} \Pi_k(Q_k)$ indicator was

carried out on the building brick market in the Novosibirsk Region for all values of the coalitions number (k_0 is a variable) and for different composition of enterprises forming a group (the set is $I_k(k_0)$, $k=1(1)k_0$) [8]. If the industry is represented by 7 enterprises, the number of coalitions is 6. The number of options for grouping enterprises into a coalition, even taking into account the restrictions imposed by the permissible level of market concentration, can be quite substantial. The analysis of the maximum values of industry profit depending on these parameters allows us to interpret the patterns of the coalition formation [1, 2]. Industry output and product price were taken as constant values (200 million units, 2200 rubles). Table 1 shows the results of the industry operation (profit, \overline{ATC} , HHI), depending on the number of coalitions and the composition of enterprises in them.

Table following on the next page

Number of coalitions (k_0)	1 Cartel	2	3	4	5	6	7 The Cournot Model
Number of the company that is part of the coalition	(1, 2, 3, 4, 5, 6, 7)	(1,2), (3,4,5,6,7)	(1), (3), (2,4,5,6,7)	(1), (2),(3), (4,5,6,7)	(1),(2), (3,7), (4), (5,6)	(1),(3), (2,4), (5),(6),(7)	(1),(2), (3),(4), (5), (6) (7)
1	89660	79350	74300	64410	62950	67400	60370
2	29780	25650	32510	41540	40600	32410	38800
3	50800	59500	60770	52710	49070	55160	49400
4	21280	25200	23130	29410	33270	23080	31850
5	2630	3150	2880	3720	6240	7030	6250
6	1550	1900	1720	2230	3740	4370	3880
7	4300	5250	4690	5980	4130	10550	9450
Profit, thousand rubles	144077	142418	142075	137950	134332	134163	132306

Table 1: Output indicator Values for different number of coalitions in the industry that provide the highest industry profit, thousand rubles.

Consideration of the coalition, including enterprises with high costs and lowest market shares, allowed the following conclusions. When the weakest market participants unite in a strategic group, their output will depend on the competitive environment - the number of coalitions operating in the market and the composition of enterprises in them. The volume of production and profits of such a coalition will be the less, the more on the market of autonomous competitors. The market share of this coalition is growing as the remaining firms group more and more. Therefore, less competitive participants often come together in strategic groups to increase their effectiveness. In the formation of coalitions consisting of leading enterprises and less efficient producers, there is an effect of suppressing the capacity of enterprises with high marginal costs. The more marginal costs differ, the lower is the economic motivation to form a coalition on the part of a less efficient producer. Thus, maximum profitability is achieved when a group of enterprises is formed on the basis of the principle of similarity in the dynamics of changes in marginal costs. When the enterprise has a significant competitive advantage, expressed in the lowest marginal costs and a significant market share, the alternative to the formation of coalitions is the desire of the enterprise to dominate the market [8]. The essence of coordinating the activities of leading enterprises in the building brick market is to observe price discipline in the supply of brick to its largest consumers. A cooperative policy is seen by most enterprises in oligopolistic markets as the most preferred behavior strategy. The conclusion of agreements on the division of the market by consumers allows us to avoid price competition and ensure a stable position in the future.

4. EMPIRICAL ASSESSMENT OF THE RELATIONSHIP BETWEEN CONCENTRATION LEVEL AND MARKET PERFORMANCE

A study of the relationship between the concentration level and industry profitability was carried out for the building brick market in the Novosibirsk Region on the basis of multivariate calculations. All market participants (seven firms) were grouped in coalitions from one to seven with different composition. Further, calculations were made of such indicators as profit, average costs, Lerner index, production volume for each company and coalition. Based on the calculation results, a graph was built. The figure 1 shows the relationship between the level of concentration of production and the profitability of the industry.

The horizontal axis shows the number of coalitions from one (this is an option to create a full cartel) to seven (where 7 is the original Cournot option) [1, 2, 6].

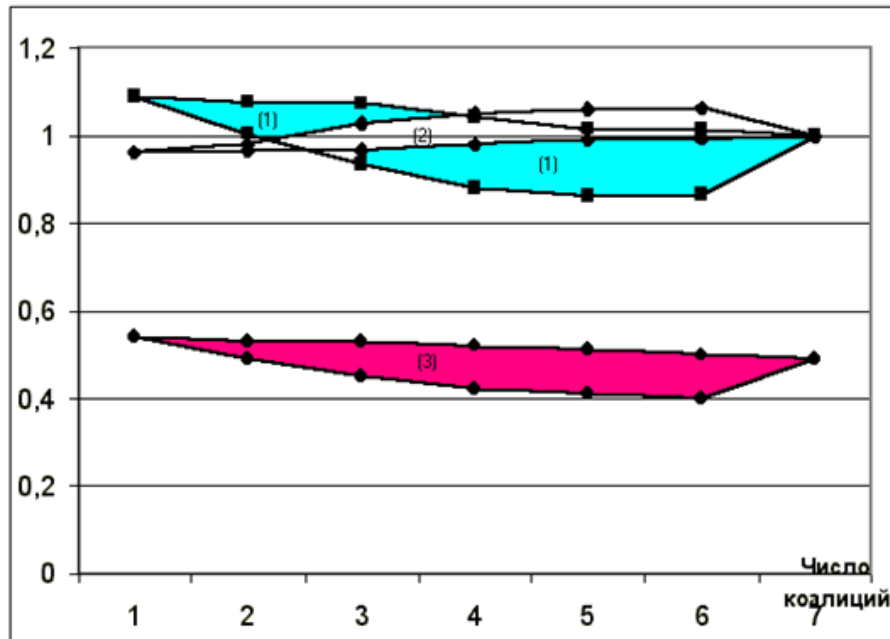


Figure 1: Change in the largest and smallest values of relative indicators depending on the number of coalitions k_0 : (Chepunova, S., 2004, p.24)

$$(1) - \left(\min \frac{\pi(Q_{k_0})}{\pi(Q_7)}, \max \frac{\pi(Q_{k_0})}{\pi(Q_7)} \right),$$

$$(2) - \left(\min \frac{\overline{ATC}_{k_0}}{\overline{ATC}_7}, \max \frac{\overline{ATC}_{k_0}}{\overline{ATC}_7} \right),$$

$$(3) - \left(\min \frac{P - \overline{MC}_{k_0}}{P}, \max \frac{P - \overline{MC}_{k_0}}{P} \right),$$

Moreover, a different number of coalitions provides industry output equal to 200,000 thousand pieces. The intersection of two areas (1) and (2) shows that the same industry performance (profit, \overline{ATC}) is achieved through cooperative interaction, when enterprises are combined into three, four, five coalitions with different composition of participants, and non-cooperative behavior according to the Cournot model. The functional causal relationship between concentration and industry profitability is true on average. There are gaps in the concentration-profitability relationship. Market results (profit and \overline{ATC}) remain virtually unchanged, with a threefold increase in the concentration level (from $HHI = 3357$ to $HHI = 10000$). Thus, as a result of a study of concentration in the building brick market in the Novosibirsk Region, in terms of group coordination of actions, it was found that market efficiency can be almost equal for a different number of coalitions in the industry, but with a different composition of enterprises forming these coalitions. Accordingly, the concentration level can be significantly different for similar market parameters, which is confirmed by the presence of zones in Figure 1: different numbers of coalitions with different structure of enterprises in them correspond to

the same values of relative indicators. It is established that the equal level of concentration in the industry with a varying number of coalitions and the composition of enterprises in them demonstrate varying market activity results. An analysis of the results of the calculations allows us to state that an industry structure with a higher concentration level may be more effective than a structure with a lower concentration level. In the context of the organizational cartel, the volume of output is distributed among the participants most effectively (the lowest level of average costs per unit of goods produced is ensured). In addition, an increase in costs at one of the enterprises (or several) leads to a redistribution of output in favor of enterprises with the lowest marginal costs. However, with the full integration of participants into the cartel, full compensation for the reduction in industry output is not carried out, but only a part of it. The conclusions are identical with regard to the mechanism of interaction within coalitions [11, 13]. Thus, a positive aspect of the cooperative strategy of enterprise behavior is the focus on minimizing costs, which leads to resource savings. In addition, the greatest stability of the enterprise and the market structure is achieved. Without government intervention, a high level of industry profitability is ensured. A negative effect could be the threat of supply restriction and price inflation. However, as Leibenstein noted in his work, relying on empirical studies of other authors, the losses from monopolization for a country do not exceed several percent of GNP, and in most cases less than 1 percent [18, p. 478-481]. That is, if the costs of the monopoly are lower than those of competitors, the effect of cost savings may be higher than the effect of overpricing. In addition, the positive effect of coordination of actions can be kept with the help of state regulation, for example, through taxation of excess profits. This mechanism is able to restrain price growth and ensure production volumes at a level that meets the interests of not only firms, but also consumers.

5. CONCLUSION

Thus, an analysis of the relationship between the level of concentration and the profitability of the industry for various options for grouping enterprises (subject to the effect of identity) allowed us to conclude that the best performance of the industry can be achieved within a structure with a higher level of concentration. Consequently, the classification of markets, including “dangerously concentrated,” on the basis of such a legal guideline as the level of concentration can lead to undesirable economic consequences [17]. This provision should be taken into account in antitrust practices so that the rule of competition law would not contradict the objective processes of the concentration growth and would not interfere with the required competitiveness level of domestic enterprises and especially in world markets [9, 12]. Thus, it is necessary to change priorities in antitrust policy. A more important task than assessing the real level of concentration is to evaluate the performance of the industry at the appropriate level of concentration. The aim of regulation should be precisely to increase the efficiency of the industry, and not to maintain concentration at a level not related to the effectiveness of its work. Therefore, it is necessary to revise the norms of antitrust legislation regarding the establishment of the boundaries of the concentration level. They should be differentiated by industry, type of market, take into account the size of production, the nature of the technology, type of product.

LITERATURE:

1. Chepunova, S. N. (Lyubyashenko S. N.) (2004). *Assessment of structural concentration and market performance*: Abstract. dis. ... the economy. sciences'. Novosibirsk.
2. Chepunova, S. N. (Lyubyashenko S. N.). (2004). *Assessment of the level of structural concentration and the results of market functioning*. The dissertation of the candidate of economic sciences. Novosibirsk.
3. Lyubyashenko, S. N. & Mamonov, V. I. (2013). *Market concentration in the conditions of grouping of enterprises and economic efficiency*. *Vestnik of NSUEM*. Novosibirsk.

4. Lyubyashenko, S.N. & Mamonov, V.I. (2015) *Regional development trends and dynamics of production concentration*. Antitrust and competition protection in the Russian Federation: the economic content and essence of public law regulation Collection of articles of the III All-Russian Scientific and Practical Conference. Penza.
5. Lyubyashenko, S.N. & Mamonov, V.I. (2015). *The relevance of applying the grouping method in assessing the effectiveness of enterprises and markets*. In the book: We continue the traditions of Russian statistics. Russian Statistical Congress. 2015. P. 39-40.
6. Lyubyashenko, S.N. & Mamonov, V.I. (2013). *Market concentration and economic performance* / Modern research on social problems (electronic scientific journal). 2013. No. 7. Retrieved 19.02.2020 from <https://elibrary.ru/item.asp?id=21156775>
7. Lyubyashenko, S. N. (2006). *Evaluation of the level of economic concentration and the results of market functioning* // Scientific and Technical Gazette of St. Petersburg State Polytechnic University. Economic sciences. St. Petersburg: SPbSPU. № 6. P. 275.
8. Lyubyashenko, S. N. (2019). *Methodological aspects of assessing the market structure: concentration and efficiency*. Economic and Social Development 49th International Scientific Conference on Economic and Social Development. Development – "Building Resilient Society" Book of Proceedings Zagreb, 468-475. Retrieved 20.01.2020 from https://www.esd-conference.com/upload/book_of_proceedings/Book_of_Proceedings_esdZagreb2019_Online.pdf
9. Lyubyashenko, S.N. (2009). *Trends in structural concentration in industries in a crisis* // Science. Industry. Defense. Proceedings of the X All-Russian Scientific and Technical Conference. Edited by: Levina V.E., Mishneva V.I. 2009. P. 244-247.
10. Lyubyashenko, S.N. (2013). *Globalization as a cause of transformation of the structure of Russian industry* // North-East Asia Academic Forum. China, 2013. Harbin University of Commerce.
11. Lyubyashenko, S.N. (2013). *Optimization of the results of enterprises in the context of increased integration in industry markets* // The state of the financial system after an epidemic of moral hazard: monograph / team of authors; edited by A.Y. Rymanova. Novosibirsk: NSTU Publishing House, 2013 . P. 154.
12. Lyubyashenko, S.N. (2013). *Oligopolies and sustainable development in the context of globalization*. In the collection: Challenges of the modern world. Reports of the international scientific-practical conference. 2013. P. 113-118.
13. Lyaskin G.G.(2015). *History of Economic Thought. The module-problem course* / Novosibirsk, 2015.
14. Lyaskin G.G. (2013). *Economy. The module-problem course* / Novosibirsk. 2013.
15. Lyaskin G.G. (2001). *Formation of antitrust policy in the transition economy of Russia: Federal and regional aspects*. The dissertation for the degree of candidate of economic sciences / Kemerovo State University. Kemerovo.
16. Tatarenko V.I., Lyaskin G.G. (2012). *World Economy and International Economic Relations*. Novosibirsk, 2012.
17. Mamonov, V. & Lyubyashenko, S. & Borodin, V. (2012) *Dynamics of structural concentration and its influence on the performance of industrial enterprises*. Vestnik of NSUEM. Novosibirsk. P. 87-93.
18. Scherer, F. & Ross, D. (1997). *Industrial Market Structure and Economic Performance*. [Translated from English] M.: Infra-M. 697 p.
19. Sheresheva, M. (2010) *Forms of network interaction between companies* / Publishing House of the State University Higher School of Economics. - Moscow.

THE BRAIN DRAIN OF PEOPLE FROM SLOVAKIA

Martina Chrancokova

*Institute for Forecasting, Centre of Social and Psychological Sciences, Slovakia
Faculty of National Economy of the University of Economics in Bratislava, Slovakia
martina.chrancokova@gmail.com; martina.chrancokova@euba.sk*

Gabriel Weibl

*Faculty of Social and Economic Sciences, Comenius University in Bratislava, Slovakia
gabriel.weibl@fses.uniba.sk*

Dusana Dokupilova

*Institute for Forecasting, Centre of Social and Psychological Sciences, Slovakia
progdusa@savba.sk*

ABSTRACT

The word 'migration', is used frequently at the present. Unfortunately, many people relate to this word negatively. This paper will portray the voluntary and legal migration of Slovaks, from their smaller and landlocked Central European EU member state. It borders Poland, Ukraine, Hungary, Austria, and Czechia. The mobility habits of Slovak citizens has changed since the accession of the country to the EU in 2004. This paper will explore the reasons why so many Slovaks choose to leave their home country with the vision to study and later live abroad. Despite serious economic repercussions, the Slovak government has yet to address this recurring trend, although recently some initiatives sprang out with the aim of encouraging Slovaks to return. At the same time, most recently, the Slovak diaspora became an unsuspected target for the highest Slovak government officials, who referred to them as second class citizens and questioned their right to vote in the February 2020 elections. Data collected for this study originates predominantly from Eurostat and OECD reports as well as from a case study of Slovak undergraduate students enrolled in a social science programme between 2016 – 2018 at the Comenius University in Bratislava in terms of their possible future employment abroad. Although students are rather conservative in terms of their estimates of working abroad after their graduation, one third of them actually wish to work and live abroad indefinitely. Their imagined destinations partly confirm the top ten study destinations abroad, although the scores are clearly higher for the UK, the US and Canada in comparison to the remaining seven countries on the top 10 list.

Keywords: *Slovak migration, brain drain, knowledge management, student mobility EU, Slovakia*

1. INTRODUCTION

The word migration is used commonly today. Most people associate it with illegal migration, hence the word migration gained a negative connotation. Many Slovaks associate this word with illegal crossings and misbehaving migrants or even with criminal activities. However, this article concerns voluntary migration, more precisely the migration of Slovaks, about their voluntary departure abroad. Inter EU migration mobility is not as closely monitored or as widely publicised as migration from developing countries, especially in comparison to migrants crossing the Mediterranean. There is no accurate data, which would record the number of Slovaks migrating to live abroad. Databases such as Eurostat and OECD contain only data on Slovak students studying abroad. Since this article is interested in brain drain from Slovakia, the focus was mainly on student flows, in the study destinations and types of study. The main focus was on the movement of Slovaks to the other V4 countries (Hungary, Poland and the

Czech Republic), but also to other countries. Since the European databases only offered data since 2013, data was analyzed with descriptive statistics and was sufficient to sketch a picture of Slovak migration. Many Slovaks seek academic degrees from abroad, especially from Western European countries or countries where English is the first language (The USA, Canada, Australia and New Zealand), however, the whole degree studies are seldom recorded. This study also offers an insight to Slovak students perceptions of living and working abroad after graduation.

2. THEORIES ABOUT MIGRATION

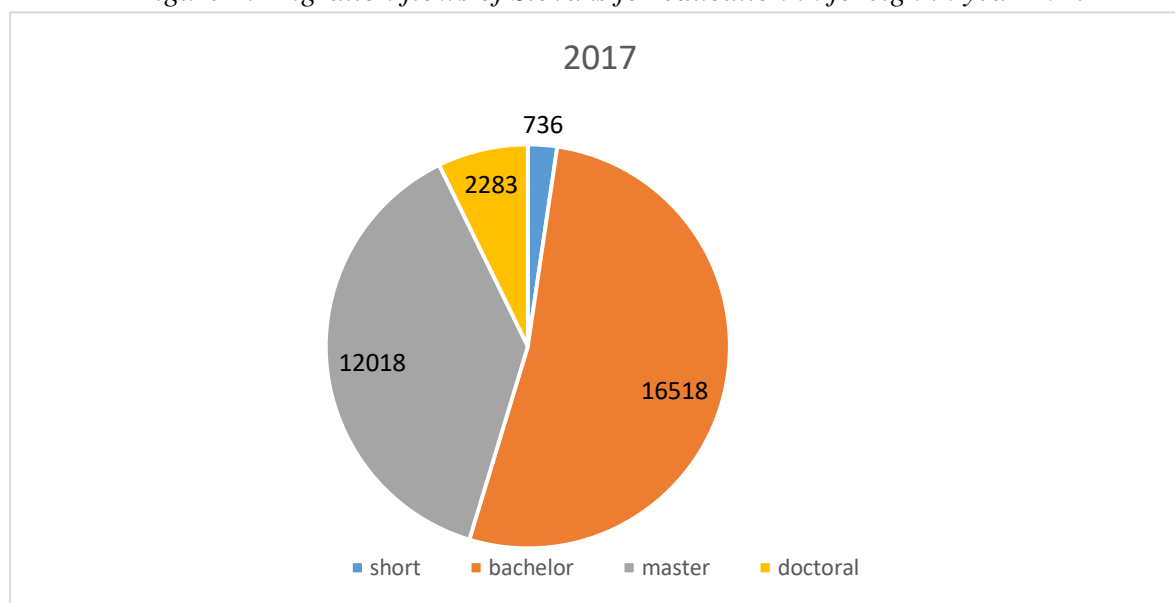
Most of the research on migration focuses on the evaluation of the migration flow, the reasons behind and the factors determining the scale of the migration. Research on international migration has increased since the mid 1990s. Russell King termed this era as the era of migration (King, 2008). The causes of increased migration are: developments in transportation and also in information technology and others. The foundations of migration theories were created by neoclassical economists, who regard the move for work as the main reason behind migration (Todaro, 1980). Massey (1993) stated, that the neoclassical theory focuses and is concerned with the income differences, especially in wages. They consider the main reason for migration is to maximize income. On the other hand, the so called neo-economists of migration offer a different view of migration as they don't consider the households, instead the individuals, when it comes to migration (Stark, 1996). Another important theory of migration is the concept of push and pull factors of mobility. It is based on the relationship and interplay between the two principles, which act simultaneously. Lee (1972), is one of the main scholars, who argues that it is especially the push factors which cause people to leave their country of origin. Some of the push factors are: dire economic situations in home countries, low living standards, ethnic unrest, violent conflicts, political discrimination, growing population density and so on. In the case of student migration it is the combination of perception of the scarcity of work opportunities after completing a degree, especially if one wants to remain in the chosen study fields, combined with the low income, scarcity of work opportunities, low living standards and dissatisfaction with the political situation in home countries (Chrančová, 2016; Weibl, 2015). These are matched and reinforced by a plethora of pull factors, such as: higher salaries, higher living conditions, better prospects in terms of new employment, positive experiences with migrants, greater sense of personal and political freedom, or the relative proximity of the migration destination from the home countries. Another concept is the world systems theory. The stronger the institutional systems, the more sought after the individual country as a migration destination. There is also a theory concerning work; the theory of dual labor market. It is based on the idea of Piore (1979), according to which the migration is not caused by push factors but by the pull factors of the receiving countries (scarcity in labor force). We agree with King (2008) and Boris Divinsky (2009) in that in reality there isn't any unifying and systemic theory, which would offer a compact view on the issue of migration, its causes, dynamics nor effects. The preference is to consider the combination of several approaches and theories with the aim of utilising to a greater extent their advantages in order to extract the most relevant and exact conclusions. In this project we will examine the flow of migration: the brain drain and brain circulation. Brain circulation concerns mostly developing countries. In terms of the brain drain, the stress is on the exchange of knowledge and technology between the country of origin and the country of destination, which is further focus of this research. There is a reason why the focus should be on theories about human capital. Currently, the definition by G.S. Becker (1967) is the most favored, which understands human capital as utilisation of one's abilities, knowledge and skills with matching motivations. The focus is on the tacit knowledge, which is un-measurable with quantitative methods. Tacit knowlege is primarily revealed through face-to-face interviews as a thorough examination of experiences, reasons and

reflections and making sense of them all. The well known idea of Polanyi in this regard is that “we know more than we are able to say” (Perraton, Tarrant, 2007: 354). Williams and Baláž (2010) offered another categorization of tacit knowledge as: embrained, embodied, encultured and embedded. This categorization served as a base for this research on the types of tacit knowledge acquired by Slovak migrants and returnees.

3. SLOVAK MIGRATION FLOWS FROM SLOVAKIA FOR EDUCATION

The most up-to-date information published on Slovak migration originates from the Institute of financial policy, which states that Slovakia is facing a significant brain drain alongside the country's demographic deficit. Based on the registrations of compulsory health insurances there was a significant decrease in number of people residing in Slovakia, 300 000 people within the last 15 years, which is approximately 5% of the population. The steepest decline of insured people occurred during the time of joining of the EU. The numbers dropped between 2004 – 2005 by more than 200 000 individuals. The situation has consolidated since then, and annually 15 000 Slovaks leave the country, which accounts for 3% of the population. During the last 15 years half of the Slovak migrants were below the age of 30 (MFSR, 2017). Since obtaining data on legal Slovak migration is unrealistic nowadays, European databases, in particular from Eurostat and OECD was used for data analysis. Between the years 2010 – 2013 according to this, every 10th university graduate left Slovakia, which represented cca. 12 – 14% of the graduates. These were mostly medical graduates and students who had completed technical degrees at Slovak universities. This is considered as a loss in terms of the country's investment in education (MFSR, 2017). According to Eurostat data in 2013, as many as 32 078 Slovak students went abroad to complete their university education. This data also includes the short time study exchanges. For comparison in 2017 it was only 523 fewer Slovak students. Data show that the short study visits have become increasingly attractive as the number of student study visits rose from 409 in 2013 to 736 students in 2017. While the Bachelor degree studies are the most attractive in terms of volume, from 2014 to 2017 the number fell by 1094 students. Both, the MA and the PhD programmes recorded an increase of 102 students in the case of MA and of 142 in the case of PhD studies between 2013 and 2017, see Table 1 for the data and Figure 1, for the visual illustration.

Figure 1: Migration flows of Slovaks for education in foreign in year 2017



Source: Eurostat, 2020

Table 1: Migration flows of Slovaks for education

Type of education	2 013	2 017
Short	409	736
Bachelor	17 612	16 518
Master	11 916	12 018
Doctoral	2 141	2 283
Sum	32 078	31 555

Source: Eurostat, 2020

The further analyzes focuses in particular on studies concerning the Bc, Master and PhD. The top 10 study destination countries of Slovak students were selected for consideration and recorded in the following tables. Trends were followed in terms of country enrolments as well as the top 10 positions of the individual 10 countries. Data for the last 5 years shows that the order of countries has not changed in the bachelor study. The most visited country for the Bc was Czechia where 11 472 students studied in the year 2017. The second most popular country was the United Kingdom, where the number of students is significantly lower at 1 295. The third most popular study destination was Hungary which attracted 1211 students, followed by Austria with 571 students and Poland with 528 students. The remaining top 10 countries are Denmark, the Netherlands, Germany, France and Italy. Interestingly, the top 5, except the UK, were all Slovak neighboring countries. Table 3 shows in detail the top 10 study destination countries for the Bachelor between 2013 -2017 followed by Table 4 which contains the MA degree seekers. Other countries in which Slovak students studied bachelor's degrees were Spain, Switzerland, Belgium, Croatia, Finland, Norway, Ireland, Greece, Sweden and Iceland.

Table 2: Slovak migration flows of students for bachelor education

No.	GEO/TIME	2013	2014	2015	2016	2017
1	Czechia	13 396	12 667	12 015	11 747	11 472
2	United Kingdom	954	976	1 056	1 101	1 295
3	Hungary	1 577	1 519	1 228	1 291	1 211
4	Austria	606	640	628	594	571
5	Poland	63	69	81	375	528
6	Denmark	103	157	273	407	499
7	Netherlands	183	207	255	271	314
8	Germany	251	251	279	274	262
9	France	118	104	102	114	97
10	Italy	:	123	102	80	72

Source: Eurostat, 2020

Similarly to the Bc students, Czechia was the most popular country for the Slovak MA students in 2017 with 9 141 enrollements. The second most popular MA study destination was Hungary, which attracted a significantly lower number of Slovak students, only 583, but the following two countries, Germany and Austria had similar numbers of MA students from Slovakia to Hungary, with 532 and 450 students. The UK was in fifth position with 267 MA students and the remaining countries, positions 6 – 10, were identical with the Bc destinations. They were: Poland, Denmark, France, the Netherlands and Italy, so the top 10 countries have not changed in this case. See Table 3 for more details.

Table 3: Slovak migration flows for master education

No.	GEO/TIME	2013	2014	2015	2016	2017
1	Czechia	9 185	9 216	9 119	8 937	9 141
2	Hungary	711	678	559	616	583
3	Germany	595	631	652	618	532
4	Austria	464	372	426	462	450
5	United Kingdom	280	285	244	212	267
6	Poland	54	57	90	130	215
7	Denmark	76	103	146	183	197
8	France	177	210	190	160	165
9	Netherlands	87	91	118	123	123
10	Italy	82	69	74	72	69

Source: Eurostat, 2020

Czechia, perhaps not surprisingly, is the number one country with 1 842 Slovak doctoral students in 2017 and the trend has been steadily increasing since 2013 with an annual increase of approximately 50 students. The UK was the second most popular study destination for the Slovak PhD students, with a considerably lower number to that of Czechia. There were only 93 enrolments in the UK, followed by 64 students in Austria, then 60 students in Hungary and 59 in Switzerland. The actual numbers are given in Table 4 below.

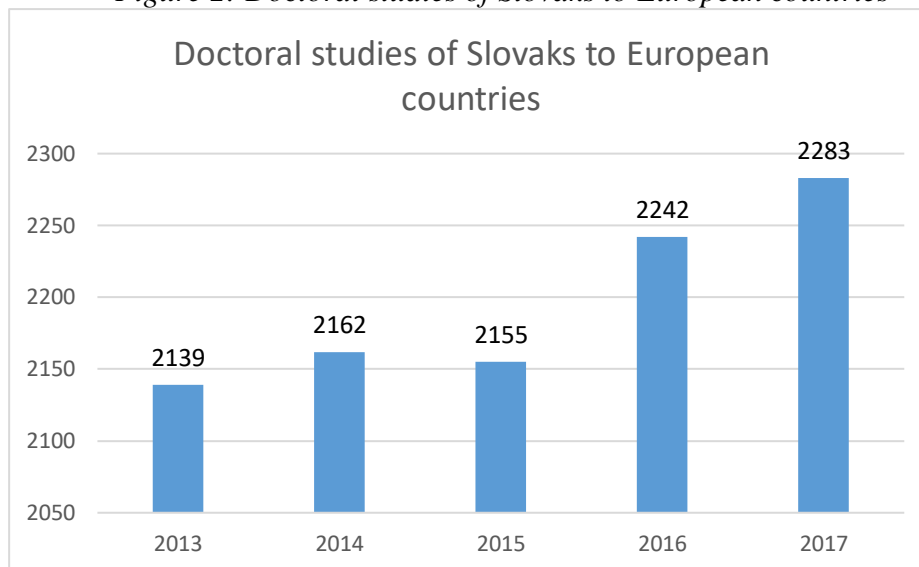
Table 4: Slovak migration flows for doctoral education

No.	GEO/TIME	2012	2013	2014	2015	2016	2017
1	Czechia	:	1 697	1 759	1 766	1 809	1 842
2	United Kingdom	:	87	72	71	82	93
3	Austria	:	95	64	66	61	64
4	Hungary	:	70	86	71	81	60
5	Switzerland	31	36	38	41	48	59
6	France	:	32	36	35	37	35
7	Netherlands	:	19	17	17	18	20
8	Spain	:	4	:	:	10	17
9	Sweden	:	13	15	13	15	15
10	Poland	:	2	10	10	11	14

Source: Eurostat, 2020

Figure 2 shows the number of doctoral studies of Slovaks to European countries. Although in 2015 there was a slight decrease in this amount to the previous year, the study of PhD degree abroad is a growing trend. While in 2013 there were only 2 139 PhD Slovak students, in 2017 it was already 2 283 students.

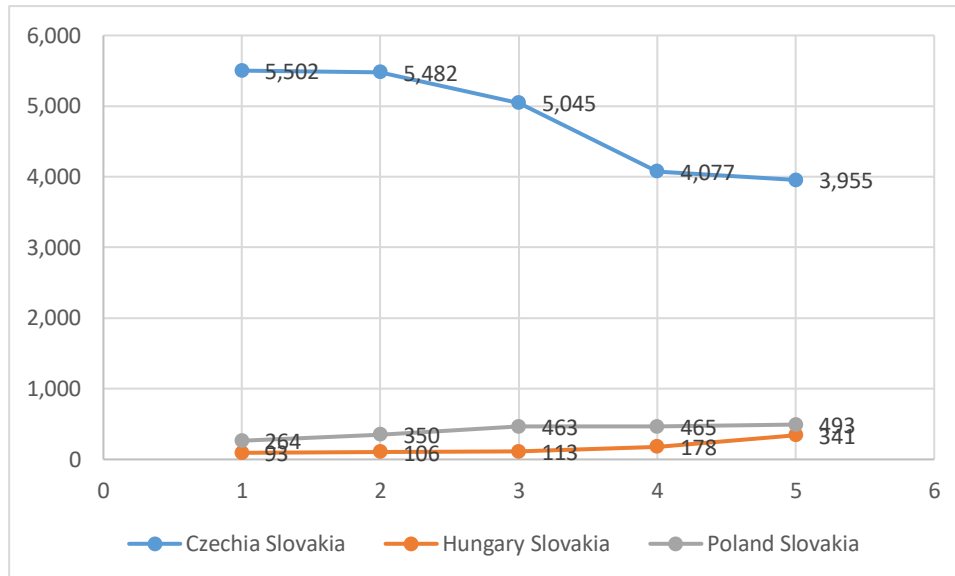
Figure following on the next page

Figure 2: Doctoral studies of Slovaks to European countries

Source: Eurostat, 2020

The goal of this article is to showcase in greater detail trends in the flow of Slovak higher education students abroad between the years 2010 - 2013, in particular to the V4 partners and the other European countries, as they attract the most Slovak youth as study destinations. The data revealed that from those Slovaks who studied in foreign countries, most of them study in Czechia which in future predisposes this country to become a favourite employment destination. Most of these foreign enrolments, 24 300 students, were in 2013 and although this number decreases every year, the rate of decline is very slow as in 2017 22 478 Slovaks still studied there. The second significant study destination within the V4 countries is the flow of students to Hungary. It peaked in 2013 when 2 436 individuals left Slovakia for Hungary and the trend since has been downward, because by 2017 it was down to 1 885 Slovak citizens who emigrated to Hungary. Finally, the third stream of migration of Slovaks within the V4 is that to Poland, While in 2013 it was only 119 emigrants by 2017 this number rose to 757. Thus, Poland is increasingly becoming more attractive to Slovak students. The annual migration data is shown in Figure 3. The attractiveness of the V4 countries as study destinations lies in the close geographical proximity of the V4 countries to Slovakia, good neighborhood relations and the ease of communication due to the language efficiency when it comes to Czechia and to some degree Hungary and Poland also.

Figure following on the next page

Figure 3: Migration flows of Slovaks to countries V4*Source: Eurostat, 2020*

4. QUALITATIVE DATA

This paragraph is based on a narrow sample of Slovak undergraduate social science students in their first study semester, between the years 2016 – 2018 at the Comenius University in Bratislava. Their Bc study programme was mostly delivered in English, so their English language proficiency was at B2 average. Following the earlier mentioned statistical data, information here relates to the likelihood of future migration for work. Data originates from an online surveys and follow up face-to-face interviews. The survey was completed by first year students in 2016, 2017 and 2018 in their first semester of study and the interviews were conducted during the second semester. The topics of the online survey were: the likelihood of students working abroad after they finished their studies in Slovakia; their preferred country of employment abroad; and their preferred time spent working abroad. These questions were then further discussed in the interviews in order to gain greater clarity and understanding of students' rationale, thinking and calculations in regards to their future employment. There were in total 185 responses to the online survey during the three year data collection period and in total 96 interviews were conducted. Not all students agreed to take part in the interview part of the study. Data initially revealed, that there wasn't any clear likelihood of students working abroad (online survey), however the interviews helped to explain, that students were mostly pragmatic and rational in their responses in regards to their likelihood of being able to find work and employment abroad, so the expectations and the likelihood were medium. On the scale of 0 to 10, where 0 meant 'very small', 5 meant 'medium' and 10 equalled 'very big', the average score ended up being 5.7. Students further explained, that if it wasn't the likelihood of the employment questioned, but the wishes, aspirations or dreams in this regard, then they would be more inclined and positive towards this idea. This is because, the likelihood to work abroad would depend on many factors and the perception is, that it is difficult to secure a job in the foreign country, partly because of being foreigner and being less competitive as the degrees from Western universities are worth more. Moreover, for many students the prospect of employment after they finished their university studies seems to be an issue for the far distant future. Students' preferred future employment abroad would be subject of the interplay of a variety of push and pull factors, for example wanting to earn a fair amount of money for their work, which would most likely incline them towards Austria, Germany, Czechia or to the UK as opposed to staying in Slovakia.

Table 5 below records students' country preferences which consisted of 46 countries. The survey had predefined EU Member States as the choices as well as some other popular study and employment destinations, such as the US and Canada and the option to record other countries also. The top three ideal work destinations for respondents were the UK, albeit Brexit wasn't that much of a reality back in 2016, at the same time interviews revealed that Brexit did not raise much of a concern. The UK was followed by the USA and Canada, and by Czechia, Austria, the Netherlands, Belgium, Switzerland and Germany, to close the top 10. The home country, Slovakia scored in the top 15 as most desired working destinations. Some of the students chose only one country while others considered 5 different countries in this regard. Hence, the top work destinations do not entirely correspond with student migration trends.

Table 5: Slovak migration flows for doctoral education

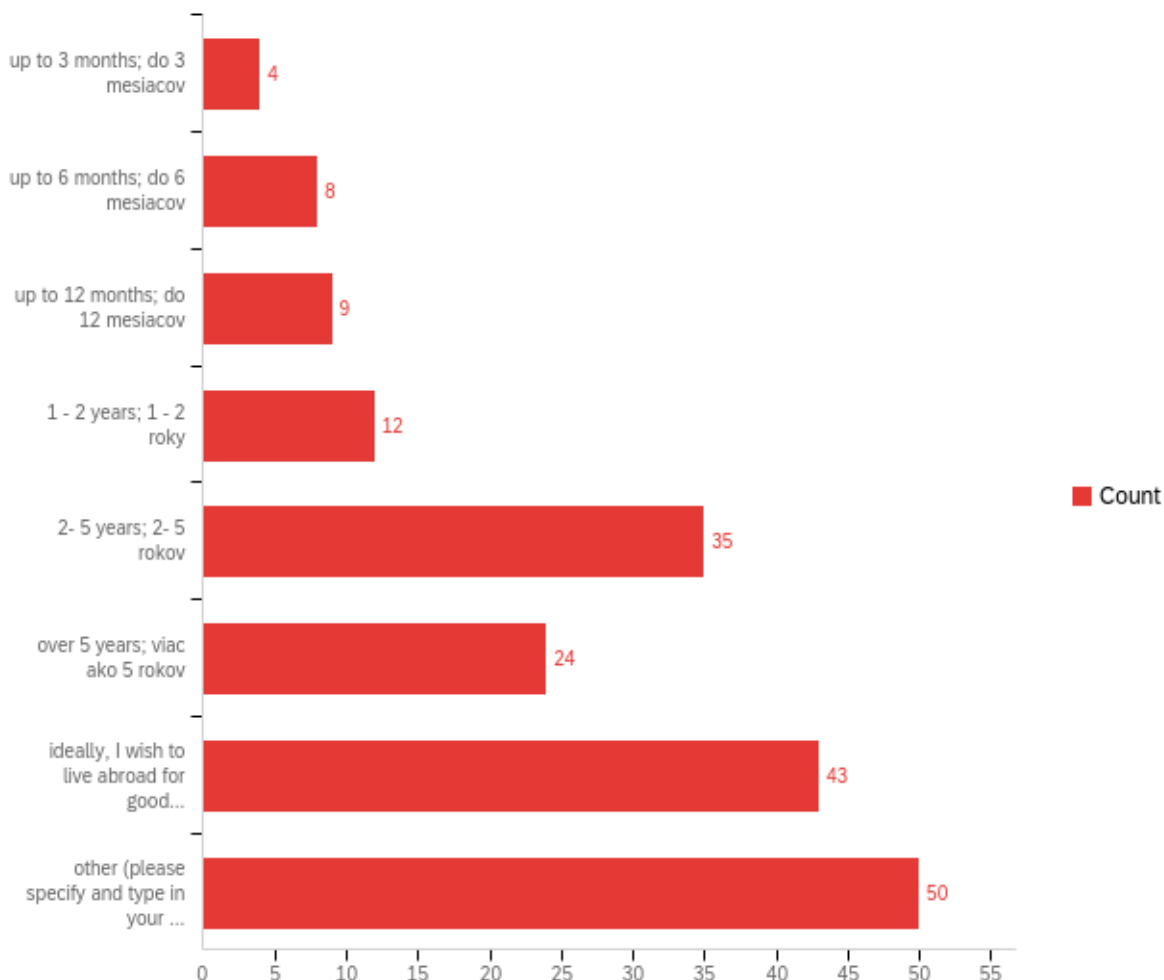
1	The UK (103)	2	The USA (92)	3	Canada (85)	4	Czechia (77)	5	Austria (71)
6	Netherlands (63)	7	Belgium (59)	8	Switzerland (59)	9	Germany (53)	10	Australia (52)
11	Denmark (50)	12	Norway (49)	13	Slovakia (49)	14	Sweden (47)	15	Spain (46)
16	France (40)	17	New Zealand (39)	18	Luxembourg (38)	19	Italy (33)	20	Finland (33)
21	Ireland (26)	22	Russia (17)	23	Iceland (16)	24	Estonia (15)	25	Portugal (15)
26	Slovenia (12)	27	Malta (9)	28	Latvia (8)	29	Lithuania (6)	30	Poland (6)
31	Greece (5)	32	Turkey (5)	33	Cyprus (4)	34	Croatia (3)	35	Romania (3)
36	Serbia (3)	37	Albania (3)	38	Moldova (3)	39	Ukraine (2)	40	Macedonia (2)
41	BosniaHerzegovina (2)	42	Bulgaria (2)	43	Belarus (1)				

Source:author

Data revealed an interesting fact, in regards to the ideal time spent abroad working. 43 out of the 185 students would prefer to work and live abroad permanently, which can be considered as a potential brain drain. 35 students would like to live abroad for the period of 2 – 5 years and 24 students wish to live abroad for more than five years. Students had only one choice in this regard. The responses under the 'other' option consisted of a variety of answers mainly gravitating around the idea that the length of the employment period abroad would depend on the type of job and the job satisfaction. Other students mentioned, that they don't want to live and work abroad for a variety of reasons, on top was the fact that students didn't want to leave their families behind. In the case of working in Austria however, many students could commute daily. Interviews then further identified students who categorically wouldn't want to live abroad, because they have such strong patriotic feelings, they explained in the interviews that they would like to help Slovakia improve politically and economically and they felt that they need to stay in this country for that. Another group of students plan to work abroad for shorter periods of time and would decide based upon that experience about their future plans in this regard and some students wanted to undertake short-term Erasmus study exchanges while studying in Slovakia and decide later. Returning to the first group of students, who firmly stated their desire to live abroad permanently, they explained in the interviews that their first job abroad after graduation does not necessarily need to be in the field of their study, meaning that they would execute any job, for example in the hospitality area or manual work and search of a 'proper' job in the mean time.

Few students mentioned that even though they would like to live abroad for good, their job position would have to be secured while still in Slovakia, they would search for the right job extensively prior to departure. Figure 4 captures students' preferred time spent living abroad after graduation.

Figure 4: Ideal time spent working abroad



5. CONCLUSION

Based on these analyzes, we can say that the study abroad is remaining and becoming an increasingly attractive for Slovak students. The analysis showed that the most popular study destinations are the V4 countries (Czech Republic, Hungary and Poland). The most important flow of Slovak students for education is the Slovak - Czech flow. In 2017, up to 22 478 Slovak students officially left for Czechia. This flow can be considered the most important brain drain, since Czechia was the number one study destination for both, undergraduate and postgraduate students in all types of degrees (Bc., Master, PhD.), who completed their whole degree outside of Slovakia. Czechia came first and was followed by Hungary and Poland. The UK and Austria were often among the top 10 countries and some of the strongest reason for the latter two choices was the wish to improve foreign language skills, however, in the case of Czechia the language factor is different, it is the enabler or is easier integration. Many Slovak citizens speak Czech and vice versa, so study at Czech universities does not require learning an additional foreign language. On top, the joined historical legacy of Czechoslovakia, and the convenient geographical distance of Czechia to Slovakia, similarity of culture which is also to a large extent true in the cases of Poland and Hungary, the V4 student migration.

In terms of the brain drain, it is arguably important to monitor student migration together with the preferences of students in terms of their future career. This should be done for both, students who study abroad and also for those studying in Slovakia. This can offer a more comprehensive picture about the brain drain. Qualitative study on a smaller and isolated sample revealed a firm aspiration of approximately one quarter of students wishing to live abroad permanently. The Slovak government could create more favourable conditions to retain students and to mitigate the large numbers of Slovaks studying abroad as they represent a serious brain drain to Slovakia, which is ongoing and runs the danger of becoming chronic, when paired with the country's demographic deficit.

ACKNOWLEDGEMENT: *This research was supported by the VEGA grants No. 2/0151/19 and 2/0002/18.*

LITERATURE:

1. Becker, G. S. (1967). Human capital and the personal distribution of income: An analytical approach (No. 1). Ann Arbor, Mich.: Institute of Public Administration.
2. Divinský, B. (2009). Migračné trendy v Slovenskej republike po vstupe krajiny do EÚ. IOM-Medzinárodná organizácia pre migráciu. Bratislava.
3. Eurostat (2019). Mobile students from abroad enrolled by education level, sex and country of origin. Retrieved 31.01.2020 from http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ_uoe_mobs02&lang=en.
4. Chrančoková, M. (2016). Gaining Knowledge Through the Migration of Slovak Migrants - Motives, Benefits, and Risks of Their Migration. In: Proceedings of 14th International Scientific Conference, Czech Republic. Silesian University in Opava, School of Business Administration in Karviná, 258-266.
5. King, R. (2008). *Atlas lidské migrace*. Praha: Mladá Fronta. pp. 192. ISBN 8020417060.
6. Lee, E. S. (1972). *Eine Theorie der Wanderung*. In Regionale Mobilität: elf Aufsätze, 115-129.
7. Massey, D. S. et al. (1993). *Theories of international migration: a review and appraisal*. Population and development review, vol. 19, no. 3, pp. 431-466.
8. Perraton, J. a Tarrant, I. 2007. *What does tacit knowledge actually explain?* Journal of economic methodology, vol. 14, no. 3, pp. 353-370.
9. Piore, M. J. (1981). *Birds of Passage: Migrant Labor and Industrial Societies*. Publication and Development Review, vol. 7, no. 3, 527-529.
10. Stark, D. (1996). Recombinant property in East European capitalism. *American journal of sociology*, vol. 101, no. 4, 993-1027.
11. Todaro, M. P. (1980). *International Migration in Developing Countries: A Survey*. Population and Economic Change in Developing Countries. Chicago: University of Chicago Press, 361-402.
12. MFSR. (2017). *Odliv mozgov po slovensky*. Ministry of Finance of the Slovak Republic. Retrieved 09.01.2017 from <https://www.mfsr.sk/sk/media/komentare-ifp-uhp/odliv-mozgov-po-slovensky-januar-2017.html>.
13. Weibl, G. (2015). Cosmopolitan identity and personal growth as an outcome of international student mobility at selected New Zealand, British and Czech universities. *Journal of international Mobility*, Vol. 1, 31-44.
14. Williams, A. M. & V. Baláž (2008). *International Migration and Knowledge*. New York: Routledge.

ECONOMIC THEORY AND THE CONSTRUCTION OF REALITY

Maxim Petrenko

*Novosibirsk State University of Economics and Management
Kamenskaya str., 52/1, Novosibirsk, Russia
petmaxim@yandex.ru*

ABSTRACT

This article is devoted to the adequacy of economic theories of the reality of social and economic development. The author shows the scholastic nature of many scientific constructions, the speculative nature of economic models. Criticism of neoclassical theory and a number of others from the standpoint of the theory of economic constructivism is given. The article discusses the impact of the economic worldview of scientists on the nature and development of social and economic processes. Economic theory is not only a construct in itself, but also capable of constructing an independent reality. The practical activities of economists are always tied to one or another theory. The creation of social and economic reality in accordance with the principles of the vision of theoreticians increases the credibility of economic theory, since it creates the illusion of an objective reflection created by theory.

Keywords: *construct, economic consciousness, economic theory, rationality, social reality*

1. INTRODUCTION

We can't call the current state of economic theory prosperous. And the topic of crisis in economic science is heard from quite often. Main accusations are pushed towards the neoclassical theory because it's considered to be one of the most influential ones. It's no coincidence that the word "mainstream" is associated with neoclassics which stresses on distribution of the limited resources within the competing agents. It is thought to be that the participants of social-economical interaction are aiming towards optimization of their behavior, minimization of the cost and increasing of utility, and that all helps them to mediate economic market. Besides that, a lot of theorists of economy have been criticizing the neoclassical theory for years for its isolation from reality and for its passion to create only the schemes of models. Swedish economist Lars Pålsson Syll said: "Its main result, so far, has been to demonstrate the futility of trying to build a satisfactory bridge between formalistic-axiomatic deductivist models and real world target systems" (Pålsson Syll, 2010).

2. CRITICISM OF NEOCLASSICAL THEORY

Economists grudgingly admit the importance of mental and cultural factors in explanation of economical behavior, because it puts a doubt on the rational model itself as an instrument of explanation of how the market functions. The economy is becoming more broad for interpretation and frequently it's not able to predict the future of economical cataclysms, rises and falls since it all comes from a number of assumptions that are not taken from the real world but from a psychological pursuit of regulations of knowledge. As Alan P. Kirman wrote: "We have wound up in the weird position of developing models that unjustifiably claim to be scientific because they are based on the idea that the economy behaves like a rational individual, when behavioural economics provides a wealth of evidence showing that the rationality in question has little or nothing to do with how people behave" (Kirman, 2009). Severe criticism of neoclassical theory also exists among economists. Representatives of behavioral economics and the institutional theory were particularly successful in this, purporting a more realistic reflection of economic reality. Scientists studying economic behavior, experts in the field of marketing and advertising psychology are much closer to daily practice and quite clearly see the discrepancy between the theoretical design and empirical reality.

According to their opinion, theoretical valuations are used to achieve a spurious streamlining of economic behavior (Kroeber-Riel, 1971). Professional economists become increasingly aware of the need to explore and take into account mental and cultural factors, the impact of which on economic behavior is impossible to deny.

3. ECONOMIC FIELD IN TERMS OF SOCIOLOGY

In his time, P. Bourdieu convincingly showed that economic theory and, above all, neoclassicism in many ways is a typical product of scholastic thought and confuses reality with its model. Economic theory is nothing more than a projection of scientists' practical assumptions into the world of theory, the universalization of their own predispositions to calculation. (Lebaron, 2004). These mind games, as a rule, do not reflect the activities of people or firms, whose behavior is very far from the logic of theoretical reasoning, if only because a person is by nature an irrational being driven by passions, drives, emotions, etc. It would be erroneous to assume that economic behavior and economic structure are radically different from any other type of social action and the rest of the social world. Economic forms of social interaction are just a special case of social contacts observed in public life. At the heart of both the economic and any other field, there are the inherent interests and ideas for people that exist at the level of both physical and mental. Nevertheless, people tend to isolate the economy into something separate, to contrast it with other areas of society. The isolation of the economy is a property and a characteristic of consciousness. The opposition of the economy to politics, law and culture is carried out primarily on the mental level, and therefore exists in the form of subjective representations. The autonomy of the economic field is not characterized by the field itself, but by the consciousness that this field singled out. Moreover, this consciousness, like any other, is basically mythological, which was shown by K. Jung and K. Levi-Strauss. Autonomization of economic reality and endowing it with unique properties of development and functioning are associated with the spread in society of a special kind of faith, specific value orientations that contribute to the construction of a special symbolic space with its own rules of the game and perception rules that are imposed by the "uninitiated". Formed at the level of consciousness and fixed with the help of economic theory, the economic field is propagated as an autonomous and objective reality. The reproduction of theoretical, practical, and ideological ideas that arose on the basis of economic theory only strengthens and supports the fiction of such autonomy. Individuals involved in the process of inclusion in it are brought up on the corresponding perception patterns and begin to think, perceive reality with the basics of economic theory as it was constructed. Under the influence of interpretations and knowledge about money, credit, labor, economic reality is reproduced and more and more begins to seem objective, and economic theory adequately reflective it.

4. CRITICISM OF RATIONALITY AS A PRECONDITION FOR ECONOMIC ANALYSIS

Acting as another construct, economic theory claims to be universal, actively interferes with its research methods, based on the rational behavior of the individual, in related social sciences. Even institutional theories, the theory of bounded rationality, that criticize neoclassic for distortion of reality, construct such a social space in which rationalism, which in economic theory acquires the character of a total context, remains the starting point. Prominent economist, specialist in the field of institutional economics, professor of Behavioural and Institutional Economics Morris Altman does not abandon rationality, as a premise of analysis, and fundamental postulates of neoclassic theory. In his opinion, the evidence demonstrating that individuals do not behave neoclassically does not undermine economic theory (Altman, 2008). The "normal" behavior of an economic subject is seen by economists of different schools in the same way in the context of rationality.

The only difference is the recognition of different degrees of rationality. In any case, rationality serves as a global center of knowledge, a starting point, a standard; the behavior of the subject is judged by the degree of remoteness or approximation to rationality. As emphasized by Herbert Simon, economics, whether normative or positive, is not just a study of the distribution of limited resources, but a study of the rational distribution of limited resources (Simon, 1978). The discourse of economic theory itself necessarily postulates the existence of a total context, a total original meaning, through the involvement of which all sorts of individual events and phenomena can only get their own meaning. Economic theory, as another metanarrative, seeks to pre-enter any economic action or thought in the framework set from the outside. It is obvious that rationality, as a total context that underlies all economic theories, is selective, artificial, and is taken not from the real economic world, but from the inherent propensities of economic scientists to organize the observed reality and the desire to find some hidden regularity in it. What is overlooked is the fact that the so-called laws of social development are nothing more than the connection that our minds make to the observable world of phenomena. Claiming the role of a total context, rationality and other important methodological postulates of economic theory construct such a system of scientific knowledge that initially undermines the idea of the objectivity of knowledge, because it imposes its own matrix, coordinate system, perception scheme, its own vision and division of the world into the studied objects of the economic field. At the same time, theorists are not always aware of this fact, although economists often do not know when their theories are effective. Economic theory is not physics; therefore, it always has a "prescientific" character (Kling, 2020).

5. IDEOLOGICAL ORIENTATION OF ECONOMIC THEORY

Becoming the next metanarrative, economic theory has demonstrated its ideological orientation and began to influence objectively on the formation of human behavior, began to construct a new reality according to external parameters. Marxism has taken a similar path at the time. At the stage of its emergence, it not only reflected the real class structure of society and the state of the class struggle, but rather influenced on the real nature of social relations. Stating the objective nature of class relations, constructing non-existent laws of social development, Marxism exerted a tremendous influence on the consciousness of the lower classes of society, helping to shape the very idea of the working class (Bourdieu, 1984) and the corresponding type of thinking, followed by a vision of reality according to Marxist postulates. As well as Marxism, economic theory, implementing own constructs into the mass consciousness, objectively contributes to the construction of such standards of economic behavior which were initially set by economic theorists as basic and attributed to people as if they had them from the moment of their birth. The economic theory, introducing own designs into mass consciousness, objectively promotes construction of such standards of economic behavior which were initially set by economists-theorists as initial, basic and attributed to people as if they had them from the moment of their birth. It is no accident that attempting to minimize costs on the part of the producer in accordance with the laws of economic behavior led in the late XX - early XXI centuries to a sharp decline in the quality of products in Russia. The legitimization of dishonest forms of competition has occurred. Consumer fraud, hiding information, setting traps have become morally justified by the tasks of the business. However, the construction of economic theory, its sometimes subjective interpretation of reality does not mean that this mental formation does not reflect reality, especially since the theory, like any scheme of perception, is able to generate and reproduce this reality. Approaching the ideal type in Weber's understanding, economic theory, in fact, normalizes its studied space and thereby subordinates the social structure to its own logic. Playing an important role in the construction of modern national economies, economic theory creates a system of preferences, demonstrating and enforcing some economic institutions and judging and rejecting others.

In this regard, the scientific economic Outlook largely develops the economic policy being pursued. "The ideas of economists, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed, the world is ruled by little else than the theories of economists and political philosophers. Practical men who believe themselves to be quite exempt from any intellectual influences are usually the slaves of some defunct economist" - wrote the famous economist John Keynes (Keynes, 1936). It is not by chance that in Russia E. Gaidar acted in two qualities at once: as a scientist-expert and as a politician-reformer at the same time. Therefore, economic theory does not so much explain reality as it constructs it, justifies it, legitimizes it, and along with it legitimizes the policy pursued in accordance with this theory, and therefore anticipates it, demonstrating brilliant heuristic abilities, which contributes to its spread and popularity. Arnold Kling writes: "Economists have always had their biases about which sorts of theories seemed reasonable; some of these biases are idiosyncratic, as when one economist is inclined to believe that labor demand responds very little to a change in wage rates and another is inclined to believe that labor demand responds a great deal. But going forward, biases are likely to increasingly be driven by political viewpoints rather than by other considerations" (Kling, 2020). The nature and the direction of economic decisions made by the government always depends on the perception of the state of affairs in the economy, the identification of the most significant variables that are placed in an abstract model. Depending on which theoretical scheme will include what is seen there will be made a specific decision. Russia's dominant ideology of economic liberalism sets the tone to the policy of the government. As a result, there is a refusal to introduce a vertical scale of taxation, hard monetary policy, etc., with all the ensuing social consequences. In modern science, an understanding of constructivism is gradually revealing the nature of the economic theory. V. Popkov, actively working in this direction, defines the economic constructivism as "a deliberate construction of economic reality in accordance with axiological preferences of a social subject (individual or collective) that considers a structural and parametric interaction of a subject and an object based on the principles of self-comprehension, ambivalence, circularity and cyclic causality" (Popkov, 2017). While supporting the overall direction of this kind of research, it should be noted that the choice in favor of a particular economic theory is not accidental, but depends on many factors, among which values and intellectual aesthetics should be highlighted. Only with a change in the system of preferences do scientists-economists begin to lean towards other scientific theories, which in turn determine the fashion for a particular doctrine and, having spread in a wide intellectual environment, stimulate the types of social and economic activities corresponding to the chosen theory. It was economic theory and its neoclassic that played an important role in the victory of the values of neoliberalism, which were the result of work on the production and distribution of intellectual products of a predominantly economic nature. By imposing on society the principles of the vision of the economic field, economic theory has awakened a corresponding belief in the scientific and objective nature of its own postulates. By convincing people that they are constantly thinking about maximizing their own utility, and money is the main guide in the pursuit of winning, economic theory, first of all neoclassical, has achieved a significant approximation of man to the type of homo economicus, as the initial postulate of its theory, thus providing the necessary correspondence to the theory of empirical reality. People were offered, and later they adopted the type of personality that was declared as the original. People convinced themselves that they were rational economic utility maximizers and they perceived the economic theory as an adequate reflection of the reality of the economic field. The appeal of the economic theory and the belief in its science are due to attempts to explain some moments of life. These moments of life can be significant enough for an individual or become significant in the transition to bourgeois society. It is not a coincidence that the appearance of economic theory in its modern form overlapped chronically with the period of the emergence and establishment of capitalism.

In the Middle Ages, collective consciousness prioritized the thought of God and other entities. And money was not perceived as a value that it is perceived now. At that time such constructions like the economic theory never occurred to thinkers. Speculative philosophy developed in a completely different direction. We can observe the same in the ancient world where the level of development of money relationships was very high, but the pursuit for personal enrichment was not a basic value. Therefore, in social thought, there was a clear demarcation of the types of activity depending on what it was directed at: for itself or for the public good. Aristotle considered economics as a goal-oriented activity for creating wealth contrasting economics with chrematistics and the art of enrichment. And wealth accumulation is an end in itself. Aristotle said that chrematistics was related to economics, but it was not economics: the main difference is that chrematistics aimed at exploitation (Aristotle, 1983). The ancient philosopher also noted the influence that the vision of the world had an impact on economic activity. According to Aristotle, chrematistics contributed to the emergent of these ideas about unlimited wealth. Protestant morality, changing attitudes towards work, the rationality of consciousness and new types of thinking of people became decisive factors of constructing a new scientific theory that complied with the way people thought in the New Age. In that way, Max Weber was right connecting the origin and development of modern society with Reformation, the emergent of the Protestant ethic and the spirit of capitalism (Weber, 2001). Economic theory, as a product of the New Age, has absorbed the basic values and aspirations of the bourgeoisie. It was a reflection of new life principles, with a new emphasis. It was not a reflection of empirical reality. But the principles of knowledge, which should ensure the impartiality of scientific research, were taken from the real world. In this respect, economic theory could look like a reflection of reality.

6. CONCLUSION

The economic theory was the product of the era and reflected the principles of vision and division of the world. And therefore, the theory found the strength to construct reality with its subsequent reflection. That's the reason why the economic theory, considering its quality of being a basic principle of construction for economic relationships and society in general, never had an irrational side to it. It occurred in particular historical circumstances and certain conditions. In that case, the theory can reflect and interpret reality created by itself. It can replicate a belief and that mental attitudes constructed by itself. As a regular construct, the economic theory can claim the role of an objective interpreter of reality. That's the reason why the theory can predict a lot being strengthening its position in the world. However, the predictive, explanation and interpretation abilities are not equated. So, let the economic theory be sort of metaphysical creation which is accumulated by its own creation of well-organized habitual rituals and capable of such abilities as self-reflection and prediction.

LITERATURE:

1. Altman, M. (2008). Behavioral Economics, Economic Theory and Public Policy. *SSRN Electronic Journal*, 5(1). Retrieved 29.02.2020 from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1152105
2. Aristotle (1983). Politics. *Works*. vol. 4. Moscow, Thought [Mysl] Publ. pp. 376-644. (In Russian).
3. Bourdieu, P. (1984). Espace social et genèse des "classes". *Actes de la Recherche en Sciences Sociales*. 52/53. pp. 3-14. Retrieved 29.02.2020 from https://www.persee.fr/doc/arss_0335-5322_1984_num_52_1_3327
4. Keynes, J.M. (1936). *The General Theory of Employment, Interest and Money*. London: Macmillan (reprinted 2007).

5. Kirman, A. (2009). Economic theory and the crisis. *VOX CEPR Policy Portal*. 14 November. Retrieved 29.02.2020 from <https://voxeu.org/article/economic-theory-and-crisis>
6. Kling, A. (2020). How Effective is Economic Theory? *National Affairs*, 42. Retrieved 29.02.2020 from <https://www.nationalaffairs.com/publications/detail/how-effective-is-economic-theory>
7. Kroeber-Riel, W. (1971). Constructs and empirical basis in theories of economic behavior. *Theory and Decision*, 1. pp. 337–349.
8. Lebaron, F. (2004). Sociology of Pierre Bourdieu and economic sciences. *Journal of Sociology and Social Anthropology*. vol. 7. no. 5. pp. 144-152. Retrieved 29.02.2020 from <http://www.lebaron-frederic.fr/medias/files/moscou.pdf>
9. Pålsson Syll L. (2010). What is (wrong with) economic theory? *Real-world economics review*. issue 55. pp. 23-57. Retrieved 29.02.2020 from <http://www.paecon.net/PAERReview/issue55/Syll55.pdf>
10. Popkov, V. (2017). Theory of Economic Constructivism. *Economic thought. History, Philosophy, and Methodology*. (In Russian). Retrieved 29.02.2020 from <http://etdiscussion.worldeconomicsassociation.org/wp-content/uploads/2017/10/Popkov-09-Oct-17.pdf>
11. Simon, H.A. (1978). Rationality as Process and as Product of Thought. *American Economic Review*. vol. 68, issue 2, pp. 1-16.
12. Weber, M. (2001). *The Protestant ethic and the spirit of capitalism*. London; New York: Routledge.

GLOBAL FINANCIAL CRISIS AND ITS IMPACT ON NIGERIAN ECONOMY

Ayuba A. Aminu

*Department of Business Administration, University of Maiduguri, Nigeria
ayubaaminu6@gmail.com*

Yahaya Yunusa Malgwi

Bursary Department, University of Maiduguri, Nigeria

ABSTRACT

The paper examined the impact of global economic crisis on the Nigerian economy and traced the causes of global financial meltdown not only to the United States but spread to all parts of the world. The Nigerian policy makers said that, there is no problem in the Nigerian capital market as shareholders are getting dividends and bonuses until capital market was badly affected when it witnessed the lowest level of shares deals as against a remarkable drop in the volume transactions and value in 2008 and again when market capitalization had dropped drastically was time when the government finally accepted there was a financial crisis. The paper also identifies the causes of Global financial Crisis, impact of Global Financial Meltdown on Nigerian Capital Market and the impact of financial meltdown on Nigerian Economy. Based on the existing findings, the study recommend that Nigeria need to adjust government spending to the reality of time and should go back to backward integration through agriculture to encourage export rather than depending on import.

Keywords: *Global Financial crisis, Global Financial meltdown, Capital market, Economy*

1. INTRODUCTION

Global financial meltdown is said to have originated from US and the crises is not restricted to the United States Financial markets only but spread all over the world from London to Tokyo, Seoul to Sydney, Sao Paulo to Moscow, Bombay to Frankfurt, and generally from Europe to Africa. Capital market all over the world has been experiencing some level of economic depression since the global recession started. However, the origin of the problem was said to be credit crunch that started globally and institutional investors were then pulling out in order to service their facilities elsewhere and then stock price went down and even developed capital markets began to experience global financial meltdown. But Nigerian policy makers went to extent of saying that it will not affect our economy because of their myopic thinking or either they did not understand the global financial crises or they underestimated its magnitude and thought that the financial crisis is only in the developed nations. The Policy makers said that there is no problem in the Nigerian capital market as shareholders are getting dividends and bonuses until capital market was badly affected when it witnessed the lowest level of 10.65 billion shares worth N134.4 billion in 197,213 deals as against the preceding a total of 17.4 billion shares valued at N169.64 billion in 249,937 deals indicating a remarkable drop in the volume transactions and value in 2008 and again when market capitalization had dropped from N12 trillion to less than N9 trillion that was time when the government finally accepted there was a financial crisis. The Nigerian Stock Exchange, the regulator of the Nigerian Capital Market has witnessed unprecedented turbulence since April, 2008 with a downward slide of the stocks on the market which affected the banking sector extremely making capital market experts and regulatory authorities to be worried of the situation. Such turbulence has never been experienced in the history of the Nigerian capital market operations. The global financial crises brought about the liquidity squeeze in the capital market and if allowed to continue the Nigerian economy will suffer which can lead to inability of people investing in the capital market.

The other crisis which has not manifested yet is on currency crisis and hope that currency crisis will not happen. But in a situation where major currencies begin to lose confidence in the Dollar as a reserve currency then we might have another new historic era global currency crisis. It is in view of the above, this paper addresses the causes and impact of global financial crisis associated with Nigerian capital market and the economy.

2. GLOBAL FINANCIAL MELTDOWN

The phenomenon called financial meltdown as it is sometimes referred to as credit crunch or financial crises has different meanings. Financial crises according to (Kindleberger and Aliber, 2005, Laeven and Valencia, 2008) include stock market crashes and the bursting of other financial bubbles, currency crises, and sovereign defaults. However, there are some economic theories that explained financial crises to include; World systems theory which explained the dangers and perils which industrial nations faces at the end oil crisis of 1973 while Coordination games is a mathematical approach to modelling financial crises that emphasized that positive feedback on dramatic changes in asset values in response to small changes in economic fundamentals between market participants' decisions (Krugman, 2008). Minsky's theorised that financial fragility levels move together with the business cycle while Herding and Learning models explained that asset purchases by a few agents encourage others to buy too, not because the true value of the asset increases when many buy (which is called "strategic complementarity"), but because investors come to believe the true asset value is high when they observe others buying (Avery and Zemsky, 1998, Chari and Kehoe, 2004, Cipriani and Guarino, 2008). This financial crisis had its roots from United States has put many countries into financial mess. No economy is really totally immune to the state of flux that became the lot of the global economy by the closed of the third quarter of 2008. Since then, economic managers, financial experts and economists, especially those in the worst hit, have been characterizing the phenomenon in various ways. The argument is that many scholars, public policy analysts and financial experts are confused as to who between the industrialized nations and the emerging developing economies, will bear the brunt of the global phenomenon. The world economy has suffered and is still suffering because of the global financial meltdown. The major sectors of the economy mostly hit by the crunch are: capital market, financial institutions and employment. These are all essential factors that need attention. The issue of concern here is that, the credit crunch has lead to the collapse of the world stock markets. This is because according the global stock market Fact book released in 2008, non of the developed market exchange featured on the list of the world's top 25 performing exchanges as at the end of 2007 (Ekungayo; 2008). World financial firms had, towards the end of October 2008, lost about \$2.8 trillion as a result of the crisis (Shah, 2008). In a similar development, global tax payers have spent about \$8 trillion in order to revamp the worlds ailing banks. These amounts will increase as the crisis spreads into the real economy. The supreme mortgage in the US has equally suffered similar damages. Some of them had to be bought out by the government of US this could be explained by the US treasury's takeover of Fannie Mac and Freddie Mac in September, 2008 in the employment sub-sector, one hundred and fifty nine thousand (159,000) jobs were lost as a result of the crisis. This is because the lay offs resorted to by the banks in the US and Europe City group, for example, announced 900 jobs cuts globally in the middle of April 2008, UBS also revealed a job cut of 900 banking staff in London and Wachovia the 4th largest bank in the United States dropped 500 workers following the financial meltdown (Uzor, 2008). These actions have led to an increase in unemployment rate. For instance, the rate of unemployment in the US rose from 5.7% in July to 6.1% in August, 2008 (October Economic Report, 2008). As the credit crunch continues to take its toils, government of the affected countries saw the need to work out bail out packages that could cushion the effects. According to George W. Bush of the United States initiated a \$700 billion bail out plan.

The package is for combined purposes such as direct equity investment, bank debt guarantee and purchases of troubled assets. The intention is to revamp the economy after the collapse of its banking and insurance sub-sectors. The US government is of the belief that the plan will not only minimize the effect of the crisis but will also serve as a means to protect the interest of the depositors and other US tax payers. It was estimated that in US alone, investors lost about one trillion dollars and stock market across Asia fell sharply with some of them losing over 4% of their values, (BBC News, 2008). In further attempts to bail out financial institutions globally, governments of the countries in the European Union (EU) have pledged a total of \$2.5 trillion to guarantee bank debts and purchase equity states. Some of the specific national policies of the affected countries according to October Economic Report (2008) was guarantee bank debt and inject money into financial institution. Of these countries include UK, Germany, Spain and France. These plans according to the report became necessary because of the growing fear that the effects of the crunch are fast and degenerating to all other countries of the world. Since it is growing and degenerating to Nigeria among other developing world, what plan and or provision do we have to either avoid it or take advantage of the crisis when possible?

3. CAUSES OF GLOBAL FINANCIAL CRISIS

Avgouleas (2008) enumerated the causes of the financial crisis as: breakdown in underwriting standards for subprime mortgages; flaws in credit rating agencies' assessments of subprime Residential Mortgage Backed Securities (RMBS) and other complex structured credit products especially Collateralized Debt Obligations (CDOs) and other Asset-Backed Securities (ABS); risk management weaknesses at some large at US and European financial institutions; and regulatory policies, including capital and disclosure requirements that failed to mitigate risk management weaknesses. While Soludo (2008) enumerated the causes of the financial crisis as follows:

- False assumption of ever increasing housing prices, leading to sub-prime mortgage lending
- Continued fall in house prices and borrowers inability to refinance, thus leading to defaults
- Investment banks exposure through leveraging
- With crash of structured products and mortgage market, consumer loans and mortgage market distress, led to counter- party risk
- Rising illiquidity
- Banks stopped lending and recalled some of their loans; potential financial instability
- Stock markets burst
- Pressure on banks to raise capital
- Huge write-downs
- Ratings downgraded

Other causes are:

- Poor economic management
- Mortgage burst in the USA
- Corruption
- Inflation

4. IMPACT OF GLOBAL FINANCIAL MELTDOWN ON NIGERIAN CAPITAL MARKET

The effects of the financial meltdown could be seen from different sectors of the economy. One of the major segments of the economy hit by the credit crunch is the Nigerian Stock Exchange (NSE). The Nigerian Stock Exchange Index has suffered persistent decline in share values over the past years due to over supply by those divesting and lack of demand.

Although its performance was rated as excellent, and ranked number II out of the 106 stock market world wide in 2007 (Ekundayo, 2008), the market faced significant meltdown in 2008. That is, it suffered and is still suffering losses as a result of the financial melt down that hit the economy. At the end of the second quarter of 2008 for example, the market's losses were put at about N4 trillion (Simojo and Agada, 2008) in fact, up till this moment the market has not been stabilized because it recorded additional losses amounting to N42 billion just at the beginning of the last quarter of 2008 (Ekundayo, 2008). One of the reasons for this crasing according to Ekundayo (2008) is because of diminishing interest of investors in investing in stocks. This could further be explained by the growing fears among investors that the global crisis could degenerate into Africa and Nigeria in particular. The successive losses suffered by the market have placed it into liquidity problems. Meaning the ability to settle liabilities on the due date becomes a problem.



Figure 1: The impact of the global financial meltdown on the Nigerian capital market

The impact of the global financial meltdown on the Nigerian capital market, since from March 5, 2008 seems to be an overlap of distress periods? Bearing in mind that there is virtually no cross ownership of banks (investment or otherwise) between Nigeria and foreign countries, and there is hardly any domestic mortgage market as sub-prime problem as found particularly in the UK and the USA, it is difficult to pronounce any direct impact. Nevertheless, three factors on which global situation may direct or indirect impact are as follows:

- Foreign portfolio investments withdrawals and withholding (in order to service financial problems at home), as well as prospect of reduced direct foreign investment, are bound to affect investor's confidence in and the economic health of Nigeria especially now that Nigerian Government is encouraging public private partnership (PPP).
- Parallel to the concept of sub-prime mortgage problem abroad is the rife phenomenon of marginal borrowing/lending in Nigeria, whereby investors borrow money from banks to invest in other financial instruments (particular IPO's of banks) with the hope of making profit all around. This may have been Nigeria's own "sub-prime" problem version.
- Nigeria being an oil producing country has to think very well on the declining crude oil prices and prospects for economic recession in the developed world with its attendant reduced energy needs, coupled with interests in innovative energy resources, are bound to give a pause to confidence in Nigeria's economy. For example, during the period of this financial crisis, Nigerian bonny light crude oil spot price in January 2008 was \$95.16 per

barrel and rose to \$146.15 in the first week of July 2008 before closing in October 17, 2008 at \$76.24 per barrel. On October 21, 2008 the NYMEX West Texas intermediate crude oil for November delivery closed down \$3.36 at \$70.89 per barrel. In this respect, it will look as if Nigerian capital market began to see decline in oil prices.

The labour and employment sector of the economy is also one of the sectors that have impacted by the financial crisis. The old saying that, if the mother is sick, the child is also sick, there are fears that the lay offs and other related jobs cuts in the US and UK as a result of the credit failure would escalate into Africa and Nigeria in particular. The job cuts announced by some major companies in US and UK constitute a threat to Nigerian workers.

5. IMPACT OF FINANCIAL MELTDOWN ON NIGERIAN ECONOMY

- Commodity prices collapse (especially oil price)
- Revenue contraction (possible burst syndrome)
- Declining capital inflows in the economy
- De-accumulation of foreign reserves and pressure on exchange rate
- Limited foreign trade finances for banks—credit lines may dry-up for some banks.
- Capital market downturn, divestment by foreign investors with attendant tightness and possible second round effects on the balance sheet of banks by increasing provision for bad debt and decrease in profitability
- Counter party risks vis-à-vis external reserves but CBN has taken measures to safeguard the reserves.

However, impact of financial meltdown has been felt by Nigerian populace in terms of:

- Increasing prices of basic commodities - foodstuffs
- Raising transport cost
- Nigerian banks cannot provide even soft loans to companies to enhance production neither has the ability to finance SME's
- Increase rate of unemployment through retrenchment and downsizing
- Reduce fixed deposit interest rate from 13% in January 2009 to about 5% in March 2009 not commensurate with leading rate,
- Crude Oil prices falling (Affecting Federal Government revenue)
- Currency devaluation (Naira losing heavily against major currencies)

The financial crisis forced some organizations and companies in Nigeria to take negative measures to ensure sustainability by reducing the workforce through down sizing, retrenchment or sacked which led to unemployment.

6. MEASURES TAKEN BY NIGERIAN GOVERNMENT TO CURTAIL GLOBAL FINANCIAL CRISIS

All over the world stock markets have fallen beyond expectation, large financial institutions have collapsed and many more are at the point of collapse and various governments in even developed countries have had to come up with one rescue measures or packages that can bail out the financial mess in the world economy. Ajakaiye and Fakiyesi (2009) stated that some of the policy measures already in place to reduce the problem of the global financial crisis in Nigeria are as follows:

- 1) reduction in the monetary policy rate (MPR) from 10.25% to 9.75%;
- 2) reduction in the cash reserve requirement (CRR) for banks from 4% to 2%; and

- 3) cutting the liquidity ratio from 40% to 30%. In addition, the CBN has given a directive to banks that they have the option to restructure the already crystallised margin loans up to 2009; inter-bank lending facilities to banks are expanded and extended up to 360 days. The same goes for discount window facilities, which have been expanded as well.

Other measures by Nigerian Government according to Soludo (2008) as policy adjustments taken to forestall any unforeseen or uncertain circumstances that may arise from the international financial markets:

- Presidential Steering Committee on Global Economic Crisis January 16, 2009
- Presidential Advisory Team on capital market set up (Aug. 2008) to deliberate on measures to reverse the declining fortunes of the Nigerian capital market.
- SEC, NSE and all capital market operators reduced fees by 50%.
- NSE reviewed trading rules and regulations.
- 1.0 per cent maximum downward limit on daily price
- movement and 5.0 per cent on upward movement. This has been harmonized to 5 % either way from end-October 2008.
- SEC released guidelines/rules on market makers.
- Strict enforcement of NSE's listing requirement with zero tolerance for infractions.
- NSE de-listed 19 moribund companies.
- Rules on share buy-back have been released, with a limit of 15.0%.
- Central Bank has reacted by the following measures:
 - Reduction of the MPR from 10.25 per cent to 9.75 per cent
 - Reduction in Cash Reserve Requirement (CRR) from 4.0per cent to 2.0 per cent
 - Reduction of Liquidity Ratio from 40 .0 per cent to 30.0 percent
 - Directive to banks that they have the option to restructure margin loans up to 2009
 - Expanded lending facilities to banks up to 360 days
 - Introduced expanded discount window facility
 - Stopped Liquidity Mopping-up since September 2008

7. CONCLUSION

The global financial crisis is causing a serious set back in the world economy and many speculators are saying that worst is yet to come. One can conclude that Nigerian Capital Market is in uncertain economic condition as a result of the domestic financial crisis. Our capital market is in an unprecedented situation as shareholders and prospective investors have lost confidence in the market, our banks and other financial institutions are under difficult conditions struggling to survive while Oil and Gas sector continues to live in confusion about the fluctuating world oil prices and foreign reserve situations remains in a glimpse and the exchange rate of dollar to Naira is unpredictable. What is left for Nigeria is to adjust government spending to the reality of time and should go back to backward integration through agriculture to encourage export rather than depending on import.

LITERATURE:

1. Ajakaiye, O and Fakiyesi, T (2009). Global Financial Crisis Discussion Series Paper 8: Nigeria. Overseas Development Institute. London
2. Avgouleas, E. (2008) 'Financial Regulation, Behavior Finance, and the Financial Credit Crisis in Search of a New Regulatory Model' Retrieved from <http://papers.ssrn.com> on 20/11/08.
3. Bazza M. I. (2009) "Global financial crises causes, effect and remedies for sustainable growth and development" COE AZARE.

4. Crotty, J. (2008) “Structural Causes of the Global Financial Crisis: A Critical Assessment of the ‘New Financial Architecture’” *Political Economy Research Institute (PERI) University of Massachusetts Amherst* Working paper no. 180 September.
5. Davies, E. P. (1992) *Debt, Financial Fragility and Systemic Developing Countries*, Colorado West View press, USA.
6. Ekundayo, K. (2008) “World Financial Crisis” WFE holds Financial Standard, Wednesday, October 22, 2008.
7. Global Financial Crisis: [www.http://brooking.edu/media/files/re/papers/2008/11](http://brooking.edu/media/files/re/papers/2008/11).
8. Handbook, Global money publication. [Http://mews.bbc.co.uk](http://mews.bbc.co.uk).
9. Global Financial Crisis. RMS International. Search Take – Home - Value 3/3 internet materials
10. <http://www.cnn.com/2008/POLITICS/09/17/stiglitz.crisis/index.html>
11. <http://www.odi.org.uk/>
12. <http://www.bbc.co.uk/>
13. Kindleberger.C.P., and Aliber, R. (2005), *Manias, Panics, and Crashes: A History of Financial Crises*, 5th ed. Wiley,
14. Mtango, E. E. E. (2008) “African Growth, Financial Crisis and Implications for TICAD IV” GRIPS-ODI-JICA joint seminar: *African Growth In The Changing Global Economy* paper presented by Ambassador of Tanzania and Dean of the African Diplomatic Corps in Japan retrieved from www.google.com on 24/11/08.
15. NES (1999). Globalization and Nigeria’s Economic Development, Proceedings of one Day seminar, Lagos.
16. Omoh, G. (2008) *Credit Crunch Nigeria’s foreign reserves Risk*; New York Oxford University Press.
17. Schifferes, S. (2008) “Credit Crunch costs \$1 trillion” BBC Science Monograph Series No.1.
18. Soludo, C.C. (2006). Can Nigeria be China of Africa? Lecture at Founder’s Day.
19. Soludo, C. C. (2006). Law Institutions and Nigeria’s Quest to join the first World Talks in Italy. Daily Trust, Monday, October 13, 2008.
20. Uzor, E. S. (2008) “Global Financial Crisis: Emerging value declines”. The Guardian, Thursday October 2, 2008.
21. Wikipedia (2006). G-20 Major Economies, free encyclopedia.
22. Wikipedia (2008) ‘Subprime Mortgage Crisis’ retrieved from <http://en.wikipedia.org/wiki/subprimemortgage.crisis> on 20/10/08.
23. World Bank 1994. *Adjustment in Africa, Reforms, Results and Road Ahead*, Oxford University Press.
24. Wray, Randall (2007) “Lessons from the Subprime Meltdown,” *Levy Institute Working Paper* No. 522.

AXIOLOGICAL BASIS OF ENTREPRENEURIAL ACTIVITY

Natalya Rubtsova

Novosibirsk State University of Economics and Management, Novosibirsk, Russia
rubtsova@yandex.ru

ABSTRACT

Currently, business activities are most often studied in economic and legal aspects. At the same time, the axiological analysis provides an analysis of the social features of entrepreneurial activity, which allows us to show the importance of this activity for the development of society in a market economy. In addition, through the prism of axiological analysis, it is possible to study the basic legal principles of business activities and, above all, the freedom of its implementation, which can be understood not only as a principle, but also as an independent value, a public good. Moreover, the very concept of law as freedom in the framework of the libertarian approach corresponds to the special emphasis of the principle of business freedom in the system of business law principles. In addition, the axiological analysis will be incomplete without mentioning the social responsibility of business, which can be considered as a special type of legal responsibility. Social responsibility of business is understood as voluntary social obligations imposed on an entrepreneur in relation to a certain social assistance and participation in social support programmes by the state and society.

Keywords: *axiology, business activities, freedom, responsibility*

1. INTRODUCTION

Traditionally, business activities are studied from the standpoint of economic and legal analysis. In recent years, the analysis of the business activities concept and characteristics has not lost its popularity in the legal literature, which is due to the great importance of this category both in science and in practice. At the same time, the debatable nature of the study of particular features of business activities has not changed, since the position of the legislator in this issue remains largely unchanged, which means that the scientific analysis being conducted and the proposals being made to amend the current legislation regulating business activities are still relevant. At the same time the harmonious development of society as a coherent integrated system is impossible without the development of social relationships and entrepreneurial activities, since social activities contribute to the development of the welfare state. The axiological approach to business activities became possible when business activity was considered as a public good. The economic analysis of law proposed by R. Posner [32] makes it possible to justify the value of business activities not only for entrepreneurs themselves, but also for the entire society, as it contributes to the development of market relations. In addition, business activities is the basis for balancing public and private interests.

2. THE PROBLEM OF ECONOMIC AND LEGAL DEFINITION OF BUSINESS ACTIVITIES

In Russia, the legal definition of business activities is fixed, which is abstract from the legal viewpoint, since it lists the principle features of business activities. According to article 2 of the Russian Federation Civil Code, the business activity shall be an independent activity, performed at one's own risk, aimed at systematically deriving a profit from the use of the property, the sale of commodities, the performance of work or the rendering of services. Persons engaged in business activities shall be registered in this capacity in conformity with the law-established procedure, unless otherwise stipulated by the Civil code of the Russian Federation [9]. However, most of these features require the application of special regulations that regard or do not regard a particular type of activity as entrepreneurship.

The norms, defining business activities in the legislation of the CIS countries, in particular, Kazakhstan, Kyrgyzstan [23], Belarus, [22] also have abstract character. For example, in Kazakhstan, entrepreneurship is defined as an independent, initiative activity of citizens, oralmans and legal entities aimed at obtaining net income through the use of property, production, sale of goods, performance of works, provision of services, based on the right of private property (private entrepreneurship) or on the right of economic management or operational management of a state enterprise (state entrepreneurship). Entrepreneurial activity is carried out on behalf of, for the risk and under the property responsibility of the entrepreneur [8]. However, in most European countries, there is usually no legal definition of business activity, and casuistic methods are used to determine the characteristics of entrepreneurship. Accordingly, the features of this type of activities are characterized through the analysis of the entity that carries out this activity - the business person. Thus, the Commercial code of France defines the subjects of commercial activities - business people - and establishes a list of certain types of business activities (article L110-1) [10]. Also, the business entity is defined casually in the Uniform commercial code of the United States [34]. German legislation uses a broader approach in determining the nature of business activities, since it both establishes a list of the types of business activities and gives the definition of a business person [7]. All of the above definitions contain, first of all, economic features of entrepreneurship, which, being stipulated by the legal definition, become legal features. However, abstract definitions also contain formal legal features, such as the need to register business entities. Such registration is required in Russia, Kazakhstan, Kyrgyzstan, and Belarus.

3. THE NECESSITY OF BUSINESS ACTIVITIES AXIOLOGICAL ANALYSIS

All the definitions of entrepreneurial activity analyzed above do not contain norms that define the meaning of this activity. Meanwhile business activity can be understood in broader terms: as part of the culture, a particular kind of a manufacturing business. And from this perspective, the axiological approach to business activities becomes mostly significant. Axiology as a theory of values (from others-Greek. ἀξία — value; ancient Greek. λογος — the word) has been known since ancient times. So, it was Socrates who formulated a value approach by asking the question "What is good?": "The value of a man is not in his strength and capacity for violence in the name of power, but in his mind, in his understanding of the good for the Polis and the possession of political virtue" [27]. First of all, axiological analysis is associated with the study of evaluative concepts [15]. For example, in private law relations, such concepts are reasonableness, conscientiousness, and materiality, which are the subject of numerous studies. Thus, good faith is considered as the main evaluation category in English [17] and American law [20]. It is difficult to overestimate the significance of evaluation concepts. Such concepts ensure the completeness and dynamism of civil legislation, cover ethical phenomena in law, "guide the judicial bodies to assess the actual situation specifically, taking into account the peculiarities of a each situation, and elaborate the general formula of the law" [1]. When analyzing certain legal aspects regulating business activities, researchers also turn to the analysis of the main evaluation categories of private law. At the same time, the essence of business activity itself has an axiological basis and, first of all, is determined by the special significance of business activity. Therefore, the value approach to business activity can be reduced to the analysis of moral and ethical qualities, as well as the general personal values of a businessperson. Thus, in 1912, the Russian Union of Industrialists and Entrepreneurs approved 7 principles of doing business in Russia, based on ethical requirements aimed at achieving the public good, and not only the narrow goals of entrepreneurs themselves ("be honest and truthful", "love and respect the person", "be purposeful", etc.) [10], and in 2004, at the final plenary session of the VIII World Russian People's Council, the "Code Of Moral Principles And Rules Of Management" was adopted, which emphasizes that "management is a

socially responsible activity" [11]. However, the importance of entrepreneurial activities for society on a broader scale does not depend solely on the subjective qualities of the entrepreneurs themselves. Accordingly, the axiological approach to understanding the essence of business activities became possible just when business activities were regarded not just as a profit-generating activity, but as an activity that carries the public good. This, in turn, is related to the attitude of the state to the individual's free economic activity.

3.1. Elements of axiological analysis of business activities

As N. Nenovsky emphasizes, the lack of a value approach does not allow us to identify the true role of law in the socio-cultural process, "purely human, personal aspects of the law" [26, p. 34]. According to the theory of value pluralism by I. Berlin, society is constantly confronted with a values conflict, because values are not only incompatible, but also incommensurable [5, p. 2-3], which means that values can not be generalized and are incomparable in their significance. Indeed, the values of individual entrepreneurs can be understood in a utilitarian way, as a direction of business activity, and can be reduced to making a profit. However, even in this case such private utilitarianism has a positive impact on the achievement of a public good: increase in employment, increase in production, and others. At the same time, another American philosopher R. Dworkin emphasizes that the majority of the central normative concepts (such as duty, responsibility, and justice) are interpretative concepts, and R. Dworkin refers to the concepts, that are opposite to interpretative ones, as "critical concepts" [14, p. 166]. According to R. Dworkin, any value categories are subject to additional interpretation. The objectives of entrepreneurial activities are diverse: from the utilitarian objective of making a profit to the public objective of generating a social good, which can cause competition and even create a conflict of social objectives, given the high stratification of society and the role of business entities in this society. As N. S. Bondar notes, social contradictions themselves are "normal", and, recognizing the fact of their existence, it is necessary not to absorb them, but to offer "effective legal means of resolving them" [6, p. 33-34]. In particular, the Constitutional Court of the Russian Federation has repeatedly given a judicial and legal assessment of the necessity to find a balance between public and private interests. The conflict of social objectives in the context of entrepreneurial activities is particularly evident in the need to maintain social justice declared by the state. If we understand the purpose of entrepreneurial activities only as a profit making, then it is difficult to imagine entrepreneurship in a social context. The concept of social entrepreneurship has appeared in science and practice relatively recently. The development of social entrepreneurship is associated with the creation of the Ashoka international non-profit organization in the United States in 1980 [32, p. 7], which is aimed at promoting social entrepreneurship. The main activities of the organization are to provide financial and professional assistance, to unite the community of social entrepreneurs so that they interact, help each other and bring their ideas to a higher level, to promote the creation of infrastructure and financial systems necessary to support and expand the private sector and to spread social innovation on a global scale [13]. The following criteria for the definition of social entrepreneurship can be listed: the social objective of the activity, the focus on addressing the social issues, the existence of a business model and economic stability [32, p. 17]. Ya. S. Grishina defines social entrepreneurship as the activities of business entities, regardless of ownership and legal form, aimed at integrating the social and economic effect in order to address the social and property needs of citizens in socially-required goods, contributing to the solution or smoothing of critical social problems [18, p. 389]. The term itself, at the first glance, is paradoxical, since entrepreneurship is associated with profit-making, which usually excludes participation in the implementation of social projects that are not aimed at obtaining material benefits. However, eventually, any business initiative is connected in one way or another to the solution of social problems.

The social objective by itself indicates the well-being of entrepreneurs and the usefulness of their activities in general for society. Therefore, it is impossible to oppose the well-being of an entrepreneur to the social goals of their activities. Entrepreneurial activity is a priori useful for society, i.e. it is simultaneously social and pursues not only the private interests of individuals, but also the interests of the whole society (in fact, public interests). As R. Posner notes, eventually, the principle of wealth maximization rewards and encourages traditional benefactors and abilities associated with economic progress [30, p. 69]. The interpretation of the "public interest" category has been repeatedly given by the Constitutional Court of the Russian Federation. Most often, this interest is equated with the state interest based on the implementation of public functions, but in some cases, the general social nature of the public interest is also emphasized.

3.2. Features of social entrepreneurship

Social tasks of an entrepreneur are manifested in various aspects of entrepreneurial activities, in particular, in the framework of public-private partnership, which is aimed primarily at solving problems of public importance. A lot of countries have adopted special legislation on social entrepreneurship [21]. For example, in 2011, Spain, Greece and Ecuador, which committed themselves to a social economy, adopted laws on social economy and social entrepreneurship. In 2012, similar laws were adopted in Mexico and Slovenia, and in 2013 – in the UK and Portugal [18, p. 7]. The United States demonstrate a broad approach to understanding social entrepreneurship. In particular, the Social Enterprise Alliance defines social enterprise as an activity or strategy that creates decent jobs for the most needy [29]. Moreover, social enterprises are not limited to organizations that serve the disabled, or even social service organizations. A lot of environmental organizations are social enterprises. At the national level, the Nature protection service can be an example of cause related marketing, when it approves and licenses the use of its name on products [12]. Furthermore, a number of studies emphasize the innovative component of social entrepreneurship [2, p. 11]. The social policy of EU states, which is primarily targeted to support socially vulnerable segments of the population, requires the understanding of the special status of social entrepreneurship, which traditionally includes the protection and support of socially vulnerable citizens within a narrower framework. Thus, if in the United States social entrepreneurship is included in the market economy and is an integral part of it, in European countries such entrepreneurship is associated with the support of certain segments of the population – socially unprotected citizens, and is a part of the "social economy" theory [25, p. 23-24]. It is the European approach to understanding social entrepreneurship that has been developed in Russia, where there is no special legislation on social entrepreneurship. Only the Federal law of 26.07.2019 No. 245-FZ "On Amendments To The Federal Law" on the development of small and medium businesses in the Russian Federation" legally established the concept of social entrepreneurship, which is understood as entrepreneurial activity aimed at achieving socially useful goals, contributing to the solution of social problems of citizens and society and carried out in accordance with the conditions provided for in part 1 of article 24.1 of the Federal law "On The Development Of Small And Medium Businesses In The Russian Federation". Among these conditions there is an employment of some categories of population (disabled, pensioners, children from orphanages, large families, the poor and some other less socially protected layers of the population), ensuring the implementation produced by the citizens from among the above categories of goods (works, services), implementation of activities for production of goods (works, services) intended for the above-mentioned citizens, providing conditions helping them to overcome or compensate limitations of their activity, as well as opportunities to participate on an equal basis with other citizens in society. The above-mentioned Law clearly defines the scope of social entrepreneurship, since these acts are aimed at implementing certain objectives

– providing subsidies and other state support measures. Meanwhile, the area of social entrepreneurship should cover all areas of public activities. In fact, any business should address social problems. Any business activity, stipulated by article 2 of the Russian Federation Civil Code, is socially oriented, since it is associated with the achievement of socially significant goals (production, performance of works, provision of services). In general, such activities contribute to the development of a market economy and the creation of jobs. In our opinion, there is no contradiction between the social attitude and the main goal of business activity – profit-making.

3.3. Features of business's social responsibility

Modern axiological analysis of business activity is unimaginable without studying the features of business's social responsibility, which is expressed in voluntary and conscious acceptance by entrepreneurs of increased obligations in the social sphere and participation in the implementation of social support programmes [4, p.69]. The main argument to justify the need for social responsibility of business is the fact that the business under the conditions of market economy is an integral part of public life, so the very existence of business is impossible without the support of society [3]. This means that the economic interests of business and the social interests of society do not confront each other, but are consistent with each other, even interdependent. Accordingly, business, in addition to generating wealth, is also responsible for social issues, in addition to its economic and legal responsibilities. This includes businesses' ethical requirements and discretionary or philanthropic activities benefiting society. In other words, increasing corporate social responsibility "means changing corporate behavior in order to reduce harm and increase benefits for society" [24, p. 2]. Such responsibility is often referred to as a special type of social responsibility, emphasizing that positive responsibility is ensured exclusively by moral standards adopted in society [4, p. 52]. Indeed, first of all, business social responsibility is not based on state coercion. However, in our opinion, the main argument proving special nature of such responsibility should be based on a broader understanding of responsibility, since in the context of business' social responsibility, it is an issue of positive responsibility. The concept of positive responsibility in law is disputed by some authors. And even supporters of such responsibility see its place in the system of legal responsibility in different ways. Let us turn to the analysis of positive responsibility in the context of entrepreneurial activities. Carrying out business activities in compliance with the legal requirements implies positive responsibility of the entrepreneur, since legal responsibility can be positive when it is provided for by regulatory legal relations. Moreover, legal regulation can be based both on the entrepreneur's sense of duty and on motivating business to perform socially significant functions. For example, employing people with disabilities for certain types of economic activities may provide tax benefits for the business entities. This is the context in which social entrepreneurship is interpreted by the Russian legislation. At the same time, social entrepreneurship in the context of this Law is narrowly understood, since it involves the implementation of business activities only towards socially unprotected population groups defined in the Law (pensioners, disabled people, large families, graduates of orphanages, and some others). As we can see, the axiological aspect of the business activity study also affects the legal principles of this activity, among which the principle of freedom of business activity is highlighted. This principle is polysemical and can be studied through the prism of not only legal and economic, but also axiological features, which allows us to see the manifestation of transparency guarantees in this principle. In this broad sense, business freedom has a special economic, social, and legal value. The concept of freedom of business activity is actively considered by many researchers. So, F. Hayek recognizes the priority of economic freedom over the state [19]. The same position is held by M. Friedman, who notes that the state is to provide economic freedom only when the market cannot regulate such freedom by itself [17, p.

50-51]. Basically, the term "freedom" has an evaluative character. Moreover, representatives of the libertarian approach to understanding of the law directly link the right to freedom. So, V. S. Nersesyants points to the axiological foundations of understanding law through the category of freedom [28, p. 70]. Freedom of business activities is most often expressed in a system of benefits for the participants of business activities themselves, since it belongs to people in the natural course of things. Thus, an entrepreneur realizes their creative abilities and motivations for entrepreneurship. However, this principle is valuable not only for the participants of business relations, but also for the whole society, since it is the basic characteristic of a market economy, which, as we know, cannot exist without the free exercise of entrepreneurship.

4. CONCLUSION

Thus, the traditional economic and legal study of business activities is supplemented by an axiological analysis that should not be limited only to the study of certain categories of business evaluation. Within this approach the legal aspects of social entrepreneurship, as well as the characteristics of the social responsibility of the entrepreneur should be studied. At the same time, social responsibility has a positive character and expresses the particular importance of entrepreneurship not only for the business actors, but also for the whole society. Axiological analysis not only justifies the social significance of entrepreneurial activities, but also allows polysemically interpret the legal principles of business.

LITERATURE:

1. Alekseev, S.S. (1999). *Law: an ABC book-theory-philosophy: Experience in complex research [Pravo: azbuka-teorija-filosofija: Opyt kompleksnogo issledovaniya]*. Moscow: Statut.
2. Alter, S.K. (2007). *Social Enterprise Typology*. Virtue Ventures LLC. Nov. 27.
3. Arguments for and against Social Responsibility of Business. Retrieved from <https://accountlearning.com/arguments-social-responsibility-business/>
4. Ayurova, Moskovskaya. (2015). *Social responsibility of business – concept and connection with law [Social'naja otvetstvennost' biznesa – ponjatie i svjaz' s pravom]*. In T.Ya. Khabrieva, A.V. Gabov, Yu.A. Tikhomirov, Pravo i social'noe razvitie: novaja gumanisticheskaja ierarhija cennostej (Law and social development: New Humanistic Hierarchy of Values). Moscow: NITS INFRA-M.
5. Berlin I. (1990). *The crooked timber of humanity: chapters in the history of ideas*. London: John Murray.
6. Bondar N.S. (2017). *Jekonomicheskij konstitucionalizm Rossii: ocherki teorii i praktiki [Economic constitutionalism of Russia: essays on theory and practice]* Moscow: Norma, NITS INFRA-M.
7. Bürgerliches Gesetzbuch. Retrieved from <https://www.gesetze-im-internet.de/bgb/BJNR001950896.html#BJNR001950896BJNG000302377>
8. Business code of the Republic of Kazakhstan. Retrieved from <http://adilet.zan.kz/rus/docs/K1500000375>
9. Civil code of the Russian Federation. Retrieved from <http://www.consultant.ru/cons/cgi/online.cgi?rnd=B2C0780C51A9A9169DD3A3871208BC17&base=LAW&n=340325&dst=4294967295&cacheid=35143974863E68B0CF2F83ABE17FC387&mode=rubr&req=doc#24t38dcmcn>
10. Code de commerce. Retrieved from <https://www.legifrance.gouv.fr/affichCode.do?idArticle=LEGIARTI000027012105&idSectionTA=LEGISCTA000006133171&cidTexte=LEGITEXT000005634379&dateTexte=20200119>

11. Code of ethical principles and rules in managing. Retrieved from <https://mospat.ru/archive/2004/02/6353/>
12. Coleman, Mark Pomerantz. *Social Entrepreneurship in the Northwest. Symposium on Social Entrepreneurship US Association for Small Business and Entrepreneurship*. Annual Conference January 2003. Retrieved from <http://www.socialenterprisemagazine.org>
13. Drayton B. *The power of new ideas. Success Stories New business Portal: social entrepreneurship*. Retrieved from <http://www.nb-forum.ru/interesting/stories/bill-dreyton-sila-novyh-idey.html#ixzz4tdvHRI9k>; electronic portal "Ashoka" <https://www.ashoka.org/en/about-ashoka>
14. Dworkin R. (2011). *Justice for hedgehogs*. London: Belknap Press, pp. 166.
15. Forji, Amin George. *The correlation between law and behaviour as pillars of human society*. Retrieved from https://helda.helsinki.fi/bitstream/handle/10138/157880/Article_correlation_btw_law_and_behaviour.pdf?sequence=1.
16. Friedman M. (2006). *Capitalism and freedom (translated from English)*. Moscow: New publishing house.
17. Giles Paul, Walling Emily. *Good faith in English law What does it mean?* Retrieved from <https://www.eversheds-sutherland.com/documents/services/construction/ConstructionGoodfaithinEnglishlaw.pdf>
18. Grishina, Ya.S. (2016). *Conceptual model of legal support for Russian social entrepreneurship [Konceptual'naja model' pravovogo obespechenija rossijskogo social'nogo predprinimatel'stva]*. (Doctoral dissertation). Moscow.
19. Hayek, F. A., (1960). *The Constitution of Liberty*. Chicago: University of Chicago Press.
20. Houh, Emily. (2005). *The Doctrine of Good Faith in Contract Law: A (Nearly) Empty Vessel? Faculty Articles and Other Publications. Paper 103..* Retrieved from http://scholarship.law.uc.edu/fac_pubs/103
21. Jacques, Defourny, Nyssens, Marthe. (2010). *Concepts of social enterprise and social entrepreneurship in Europe and the United States: Convergences and divergences*. Journal of Social Entrepreneurship. Vol. 1(Issue 1). pp. 32-53.
22. Law of the Republic of Belarus "On entrepreneurship in the Republic of Belarus". Retrieved from https://belzakon.net/Законодательство/Закон_РБ/199/2123
23. Law of the Republic of Kyrgyzstan "On protection of entrepreneurs rights". Retrieved from https://online.zakon.kz/Document/?doc_id=30256788#pos=14;-53
24. Melé, Domènec. *Corporate Social Responsibility Theories*. The Oxford Handbook of Corporate Social Responsibility Edited by Andrew Crane, Dirk Matten, Abigail McWilliams, Jeremy Moon, and Donald S. Siegel. Retrieved from https://dl.bsu.by/pluginfile.php/66247/mod_resource/content/1/Corporate_Social_Responsibility_Theories.pdf. P. 2.
25. Monzón, José Luis, Campos, Rafael Chaves Ávila. (2012). *The social economy in the European Union*. Belgium.
26. Nenovsky, N. (1987). *Law and values. (Translated from Bulgarian)*. Moscow: Progress.
27. Nersesyants, V. S. (1977). *Socrates*. Moscow: Nauka publishing house.
28. Nersesyants, V. S. (2015). *General theory of law and state: Textbook for universities. [Obshhaja teoriya prava i gosudarstva: Uchebnik dlja vuzov]*. Moscow: Norma: NITS INFRA-M.
29. Nonprofit Enterprise and Self-Sustainability Team (NESsT). Retrieved from <http://www.nesst.org/>
30. Posner, R. A. (2017). *Utilitarianism, Economics and legal theory [Utilitarizm, jekonomika i teoriya prava]* Izvestija vuzov Jurisprudence. (Universities' news. Law), (No. 3.), pp. 46-89.

31. Smooth, N.Yu. et al. (2017). *The image of a social entrepreneur is Russia and Kazakhstan*. View of SAP M.G. Smooth Gulbekyan, V. L. Weiner, E. I. Frolova. Astana
32. Social entrepreneurship in Russia and in the world. Editor Moskovskaya, A.A. (2011). Moscow: Publishing house of the Higher school of Economics. P. 7.
33. The club of Orthodox entrepreneurs. Retrieved from <http://kpp-russia.ru/club/dokumenty/sem-principov-vedeniya-del-v-rossii-1912-g/>
34. U. S. Uniform Trade Code Retrieved from <https://www.law.cornell.edu/ucc/2/2-104>

EXPERIENCE IN REFORMING TEACHER TRAINING SYSTEMS IN EUROPE (EXAMPLE OF GERMANY AND FRANCE)

Natalya Nos

*Novosibirsk State University of economics and management, Russia
nnatalja@ngs.ru*

Uiliia Ostrovaya

*Novosibirsk State University of economics and management, Russia
belovayuli@yandex.ru*

ABSTRACT

The article analyzes the features of teacher training in Europe. The integration processes that started back in the 20th century affected all spheres of life, including education. It is with the process of modernization of education that the concept of “Europeanization of education” is associated, which has come into use and has been actively used since the signing of the Maastricht Agreement in 1993, when the European Union received legal authority in implementing the educational policy of European countries. Western European teacher training systems have also undergone profound reform. However, it should be noted that the process of Europeanization of teacher training systems is slower than in other areas. This is primarily due to national traditions that have evolved over several centuries. The Bologna Declaration, which gave the name to the process of harmonization of educational systems, became the fundamental document of integration for European countries in the field of higher education. The main concept of this strategy was the concept of “unity in diversity,” which embodies the ideological meaning of the European integration process in the field of education. The authors of the article give some general trends in the Europeanization of teacher education, which contribute to some harmonization in this area. The authors will consider in detail the system of teacher training in two European countries: in Germany and in France.

Keywords: *education, European countries, Europeanization of education, teacher training, “unity in diversity”*

1. INTRODUCTION

More recently, teacher training systems in European countries have undergone global changes. This is mainly due to the processes of integration in various areas of human existence. Despite the fact that teacher training is currently a priority in the European Union, the process of integration of European teacher training systems is slower than in other areas of higher education, which is primarily associated with national traditions that have developed over the centuries. Thus, the unique two-phase German system of pedagogical education with its university and practical training was not easily subjected to the reform process. The situation was similar with the training of teachers in France, where before the reform processes there were several ways to get the teaching profession. In Germany and France, countries with unique historical experience in developing teacher training across Europe, there have been recent active adaptations of examples of effective teacher training. Despite the structural diversity in the field of teacher training in European countries, some general trends that allow us to talk about the Europeanization of teacher education can be distinguished.

2. THE SYSTEM OF TEACHER EDUCATION IN GERMANY

Looking back at the history the teachers for higher levels of the German school system have always been educated at universities. Teachers of elementary schools and elementary grades of secondary schools did not reach university preparation until 1970.

They studied at teacher training colleges and even before that, in seminaries for teachers. During the 20th century, “lower” teachers received more academic education and training, while “higher” teachers maintained their traditional high academic status and received even more pedagogical and didactic elements [7]. Looking at these events, it becomes obvious that various types of primary teacher education were integrated to the university. In the past 20 years teacher training in Germany has undergone fundamental changes, which is related to the creation of a common European Higher Education Area and the introduction of a two-cycle system consisting of Bachelor's and Master's degrees. This in fact means a complete revolution of the German university system.

2.1. Modernization in Teacher Education

But the Bologna process has changed the system of teacher training education in Germany - but in each of the 16 federal states in a different way, so that there are currently a variety of different models of teacher education [1]. This is due to the fact that teacher education lie in the hand of our 16 „Länder“, that means: the 16 states Germany as a federal state consists of. The Ministries of Education and Cultural Affairs of the German states are responsible for teacher training and regulate it through study regulations and examination regulations. As a result of the Bologna process, there are different levels of reform in the German states when Introduction of bachelor's and master's programs that qualifies for a teaching position. For a long time, Germany was a leader in teacher training compared to other countries. In no other country students do not need so much time before they begin to teach yourself. When the educated teachers enter teaching a position they are much too old: 26-30 years. In many cases they are even older. In addition, German teacher education programs differ by secondary school type. There are special training programs for teaching positions for primary schools, integrated secondary schools and high schools, vocational schools and special schools. The PISA results as well as the educational analysis of the OECD and the Bologna Agreement of 1999 were decisive for the reform discussion in the area of teacher training. During this time, a large number of scientific publications on the situation of teacher training as well as a whole series of commission reports on the topic of the reform of teacher training appeared in Germany. But the inclusion of teacher education in the reform process is especially problematic from a German perspective, which is due to national and cultural contexts. Therefore, despite the ongoing reforms, she continues to maintain her two-tier teacher training system. The first stage is university training, which ends with the First state exam. The second stage is additional practical preparation phase as trainee teachers (Referendariat). The future teachers are trained in special „teacher training seminars“ by special teacher trainers, who have to be experienced teachers. The second phase ends with the Second State Examination, the final stage of teacher training in Germany. Upon passing this final examination, teachers can teach at state schools or private schools. The contents of the first and second phase are not really accorded to one another. It should be noted that teachers and teacher education is part of the public sector organized by state agencies. Therefore, after the first and the second phases, the state examination is taken, which enables the teaching profession. And many federal states want to maintain this two-phase approach in the future in order to maintain civil servant status for teachers.

2.2. Teacher training models in Germany

In Germany there is no common teacher education but a wealth of different teacher education models that differ not only from state to state, but from university to university. Various study structures have different lengths of the courses result. This article describes two different models of teacher training: the integrated model and the consecutive model. The integrated model of teacher training provides for the professional orientation from the first semester and

corresponds to the traditional form of teacher training, which dominated for several years in Germany. Graduates who have completed the First State Examination for the teaching profession can apply for the second phase Referendariat - practical preparation phase. At the end of second phase the students have to pass the Second State Examination. After that the examined teacher has to apply for a teacher position at a certain type of school. For several years now, the consecutive model of teacher training with the Bachelor-Master-Structure has been implemented at many universities in Germany. This organizational form corresponds to the basic idea of a tiered study structure. The 6 semesters-bachelor's course is polyvalent, so that after that students can also take master's courses that have nothing to do with the teaching profession and are geared towards other professional fields. The course with the professional goal of teaching is followed by a master's degree. The Master of Education enables candidates to apply for induction service as trainee teachers. The practical preparation phase ends with a state examination, the final stage of teacher training in Germany. Upon passing this final examination teachers can teach at public or private schools. Compared to the integrated model of teacher training the university degree no longer provides for a state examination according to the consecutive model. Instead, the first phase of teacher training ends with a master's thesis or a master's exam, which is recognized as the First state exam by the state examination office for teaching positions at schools. This is an important change in the field of teacher education for many years. The organization of the examination is now the responsibility of the university and not of the State Examination Board as before. Defying the diversity of realized models must be said that the teacher training programs have a modular structure in all 16 German states. The changes that are currently taking place in the second phase are the shortening of the induction service. Now the duration of the second phase varies between 18 and 24 months. Also worth mentioning is the cooperation of the induction service with the universities. One can speak of better cooperation between First and Second phase of teacher education, which was formerly regarded as the most important disadvantage. In addition, the practical components in the course have been increased. Up until now, the problem of teacher training was mainly that the students had no opportunity to get in touch with the school during the university phase of the training. And then when the future teachers are in front of a school class in the Second phase, they experience the so-called "practical shock". For that reason many universities have introduced a practical semester in the first phase of training, which will allow future teachers to get enough practical experience to go through the second phase - the induction service. In this way, the knowledge acquired during the First phase in practice. This makes the teaching degree more practical, which is appreciated by many educational researchers. This makes the teaching education more practical, which is positively evaluated by researchers. Another feature of teacher training is the introduction of a fundamentally new practical phase on the "professional suitability and professional aptitudes" of future teachers. This phase has already become a prerequisite for university admission in many federal states of Germany. It should be noted that the idea to make entrance to the teaching profession in Germany "selective" exists as much as the teaching profession itself [3]. Thus, many universities in recent years have introduced a fundamentally new type of practice, during which future students will be able to get acquainted with school life from the perspective of a teacher and, based on the experience gained, make a choice regarding their future profession. Like Prof. Dr. Dorit Bosse (University of Kassel) emphasizes that not everyone is suitable for the teaching profession. The fact that the aspect of suitability is particularly important for teacher training is due to the increased demands on the teaching profession. Especially teachers have a formative influence on young generation and the role play not only the specialist knowledge, but also the personality of the teacher. This type of practice under the new law on teacher training allows universities to choose their students more than before [5]. As another practical element, the "orientation practice", that is used to check the suitability and professional aptitudes for the teacher profession.

This type of practice is completed in the first academic year of the bachelor's degree. So one can say that teaching students have to complete different kinds of practices both before and during their studies. But Prof. Dr. Dorit Bosse (University Kassel) warns that so much school and teaching practice is not per se effective in learning [1]. Important factors for the effectiveness of the practical phases are coaching, mentoring and inclusion of individual resources of the students. Only then the future teachers can be better prepared for the teaching profession. In conclusion, it should be said that teacher training in Germany has undergone fundamental changes. The standard period of study for teaching students was considerably reduced. Different models of teacher training are implemented; new practical phases are introduced, which can be assessed positively. But this variety of models that have been implemented does not have to be seen as a disadvantage, but as an opportunity that can lead to better-trained teachers.

3. FROM THE HISTORY OF TEACHER TRAINING IN FRANCE

At the end of the 20th century - the beginning of the 21st century in Europe, the system of teacher training is changing. Each country seeks to study innovative experience in reducing existing training models to a single system, as well as to improve teaching technologies. France is a leading country in the field of education, so it is especially interesting to consider the existing system of teacher training. Teacher education in France is one of the most important public policy priorities. The requirements for teacher training in the country are extremely strict, which explains the large number of highly qualified specialists in the country. Teacher education in France lasted 4 years for primary and secondary school teachers. In the secondary education system, a separate qualification is required for each academic unit. The first two years the future teacher spends at the university, developing the necessary theoretical base either in the subject that he will teach in high school, or in all the main areas of primary school. After graduation, future teachers spend another two years at university schools. («Les instituts universitaires de formation des maîtres»). In France, the university teacher training institutes were training establishments for public education professionals (primary and secondary teachers, principal education advisers). They were replaced by the higher schools of teaching and education, then by the national higher institutes of teaching and education. Teacher training in France at teacher training institutes consisted of several equally important blocks for successful learning:

1. academic knowledge - Usually the first two years of study at the university are devoted to their preparation;
2. educational knowledge - A thorough study of science, familiarity with various teachings and theories;
3. educational technologies and methods - Students not only study each method in detail, but also learn to apply it in practice;
4. child psychology - Classes are usually held in the form of a group discussion under the guidance of an experienced psychologist. Students receive the necessary knowledge about the features of the child's development and together look for a way out of a difficult situation: for example, they decide how to help a shy student adapt in the classroom or how to work with a multinational group of children.

Teacher training in France necessarily included practical exercises. For two years, future teachers regularly conducted classes at the school with which the institute cooperates. An individual mentor from among the most experienced teachers helped prepare the lesson. The last semester for those who receive teacher training in France took place in the practice of continuing education. Only if successful will the student be allowed to take final exams.

3.1. Modernization in Teacher Education (MEEF masters in France)

Nowadays professional training for future teachers is organized within Higher national institutes of teaching and education ("MEEF masters-Métiers de l'enseignement, de l'éducation et de la formation"). The training is also organized over 2 years, these courses combine fundamental theoretical knowledge and practical work. In France there are 32 higher national institutes of teaching and education. They replace the higher schools of pedagogical studies. They welcome all future teachers who can work in kindergarten, elementary school, college or lyceum. Higher national institutes of teaching and education also train future senior education advisers, as well as students destined for other educational professions, including adult training. The higher national institutes of teaching and education organize vocational training: the MEEF masters (teaching, education and training professions), in 2 years after the license. For example, the National School of Agricultural Training in Toulouse is a public institution of higher agricultural education which reports to the Ministry of Agriculture and Food, and which provides initial and continuous training in all teachers and education staff of agricultural technical education establishments. It should be noted that the "MEEF master" makes it possible to prepare for the teaching competition corresponding to a specific professional choice: exercising the profession of teacher in middle or high school, becoming a school teacher, etc. Three of the four degrees offered allow to prepare for teaching competitions corresponding to the different teaching professions that it is possible to practice:

- 1st degree to become a school teacher,
- 2nd degree to teach in middle and high school (general, technological and professional)
- "educational supervision" to exercise the profession of senior education adviser
- "training practices and engineering" does not prepare for competitions but opens up to other training professions: engineering of digital approaches to pedagogy, training engineering for specialized audiences, training of trainers, etc.

3.1.1. The training course for specialized education

A new standard of learning for future teachers of first and second degrees and principal education advisor was implemented at the start of the 2019 school year. It defines the content of the training delivered within Higher national institutes of teaching and education and provides 800 hours of teaching and training. It must be said that from 2022, the competition will be organized at the end of Master 2. The 1st year (Master 1) will include an observation and practical training course in schools for 4 to 6 weeks. The future teachers of the first degree and the second degree follow, according to the mention chosen, a significant volume (45 to 55% at least) of lessons in fundamental knowledge (reading, writing, knowing how to count, respecting others, etc.), teaching and learning strategies, general pedagogy and classroom management, reflective practice and research, etc. Based on the work-study program, the 2nd year (Master 2) includes a part-time responsibility internship (paid). A new training standard for future teachers of first and second degrees and educational senior advisor was implemented at the start of the 2019 school year. It defines the content of the training delivered within Higher national institutes of teaching and education and provides 800 hours of teaching and pedagogical supervision outside internship, over 2 years. It should be noted that the Higher National Institutes of Professorship and Education do not prepare for aggregation. Sometimes they offer modules for preparation for external aggregation and, as part of teacher training, for internal aggregation. On the other hand, to become an associate professor, students who have won the aggregation competition benefit from training and an adapted course in Higher national institutes of teaching and education aimed at acquiring the skills necessary for exercise of the profession.

4. CONCLUSION

Current global development is characterized by the rapid innovation process. Fundamental reform affects all areas of life in society, requiring the renewal of all social institutions and systems, including education. Having analyzed the features of teacher training in Germany and France, we can draw the following conclusions:

- firstly, an increase in the practical component of the teacher training process;
- secondly, there is the opportunity to make teaching practice in one of the European countries, which corresponds to the principle of the Bologna Declaration on student mobility;
- the introduction of a fundamentally new practical phase on the “professional suitability and professional aptitudes” of future teachers.

Based on the analysis, it can be said that some common trends can be noted in the European teacher training systems, which helps to achieve some harmonization of teacher education. However, the specific characteristics that are inherent in national systems continue to persist and impede the integration process. European institutes plan long-term work to provide conditions for further rapprochement of teacher education systems in the context of the Bologna process.

LITERATURE:

1. Bosse, D. Zur Situation der Lehrerbildung in Deutschland. In: Reform der Lehrerbildung in Deutschland, Österreich und der Schweiz. Teil I: Analysen, Perspektiven und Forschung. 2012. – S. 11-23.
2. Labazina Lyudmila Nikolaevna. The modern system of teacher training in France: Dis. ... cand. ped Sciences: 13.00.08: Yaroslavl, 1999 166 c. RSL OD, 61: 00-13 / 31-3 2.
3. Nos N.I. Europeanization of teacher education. Questions of pedagogy. 2018. No. 7. p. 76-78.
4. Ostrovaya Y.S. Practical direction of training future teachers in France. // Actual problems of humanitarian and natural sciences. - 2016. - № 9. - C. 213-216.
5. Reintjes, Ch., Bellenberg, G. Überprüfung der Eignung für den Lehrerberuf durch Selbsterkennung, Beratung und Praxiserleben? In: Reform der Lehrerbildung in Deutschland, Österreich und der Schweiz. Teil I: Analysen, Perspektiven und Forschung. 2012. - S. 187-207.
6. Semenova Yu.I. Professional teacher training in France // Higher education in Russia. - 2009. - No. 10. - S. 126 - 132.
7. Terhart E. Conflicting Concepts of Modernization in Teacher Education: Teacher Education Policies in Germany. In: Teacher Education Policies in the European Union, edited by European Network on Teacher Education Policies. S. 65-73. Lisbon.

THE CONCEPT OF TRUST WHEN INTEGRATING LABOR MIGRANTS INTO SMALL FAMILY BUSINESSES

Pal Zoltan Bite

*Széchenyi University's Doctoral Program in Management (SzEEDSM),
Doctoral School of Regional Sciences and Business Administration, Hungary
bitep@vibrocomp.com*

Marta Konczosne Szombathelyi

*Széchenyi University's Doctoral Program in Management (SzEEDSM),
Doctoral School of Regional Sciences and Business Administration, Hungary*

Zoltan Baracska

*Széchenyi University's Doctoral Program in Management (SzEEDSM),
Doctoral School of Regional Sciences and Business Administration, Hungary*

ABSTRACT

The operation in small family businesses is based on trust. Existence of trust in transactions lowers cost of such transactions, as it allows financial agreements to be less dependent on formal regulations and facilitates investment and innovations. Trust supports the capability of creating the extra added value originating from the family tradition and the reduction of administrative costs. Between native people trust can be relatively easily achieved, as they have the same language, background and origin. However, when it comes to the integration of employees from different cultures this is not the case. Relevance of this topic comes from the fact that small family businesses are essential drive for our economy, however in most cases they face difficulties to benefit from labor migration. It is an accepted fact that on national level labor migration is positive. However, the challenges and the possible benefits of global labor migration on small family businesses have not been investigated in detail. The authors of this paper present an educational concept that includes the different attitudes of a non-native or labor migrant employee. Trust is one thing difficult to learn and to understand. We conclude as the focal point of this the research the education on understanding the cultures and the habits. The proposition is that within a small (family) business labor migrants can only be employed when trust between the owners the native employees and the labor migrant employee exists. To achieve this trust education of all employees in understanding the different cultures is needed. We present the different education methodologies of our concept.

Keywords: *Family Business, Labor migrant, Trust*

1. INTRODUCTION

Family business is defined as being owned and managed by family members (Sharma, Chrisman and Chua, 1997). Firms are usually led by family members across generations (Miller, Steier and Miller, 2003). Family businesses are one of the most widespread organisations globally, almost all firm's started in this business form. (Lee, 2006). The majority of family firms is in the range of small and medium size enterprises. Gagné Sharma and DeMasis (2014) concluded, that SME size family businesses are both conceptually and qualitatively different from the others mainly due to the influence of the family members. Every family in business has a story to tell, a legend to live up to a tragedy to lament (Hamilton, Cruz and Jack, 2017). Such elements not only shape the narratives that are shaped by members of a family but have an influence on the career opportunities of the employees. The integration of labor migrant employees in small family businesses is often a burden difficult to get over. The problem we deal in this research is the concept of trust.

Although it is a widely accepted fact that on national level labor migration is a positive phenomenon, however, the challenges and the possible benefits of global labor migration on small family businesses have not been investigated in detail. There is a gap in scholar literature in our current understanding about this new trend.

2. THEORETICAL BACKGROUND

Family in business broadly relates to members of a family that engage in the foundation, management and continuity of one or several family businesses. Entrepreneurial behavior can be influenced by inherent characteristics of the management, such as age and tenure, as well as by the degree of family influence in the firm, as indicated by the number of generations involved in the business (Kellermanns et al, 2008). The attitude towards innovation is often an overlooked characteristic. Previous articles (Pittino et al, 2013) have highlighted, that the innovation literature virtually ignores the role of the family dimension in innovative strategies and outcomes (Craig, Moores, 2006). The family business literature also devotes rather limited attention to the analysis of innovation processes. As highlighted by Kraus, Harms, Fink (2011). It is possible to recognize innovation in family business as a nascent stage that undergoing significant development (De Massis, Frattini and Lichtenthaler, 2013). We will present, that innovation is a key factor, where labor migrants can do their contribution to. On the other hand one of the most researched fields within family businesses is the field of trust. There is a large number of studies focusing on the impact of trust on performance and highlight, that trust is a main competitive advantage of family businesses (Corbetta and Salvato, 2004). The capability of creating the extra added value originating from the family tradition. In the existing literature, this is defined as follows: Existence of trust in transactions lowers cost of such transactions, as it allows financial agreements to be less dependent on formal regulations and facilitates investment and innovations (Petrakis, Costis 2015). We conclude this fact as essential for SME size family businesses to increase the firm's performance. The reason behind this finding is rooted in the human behavior and the client-supplier relation. Clients aim to select a supplier, where the cost-benefit ratio is sufficient, and the risk of failure is minimized (EC 2010). Risk of failure can be minimized using strict terms of references or based on personal relationship between client and supplier. The literature (Kachaner, Stalk and Bloch 2012) highlights, that during good economic times, family-run businesses don't earn as much money as companies with a more dispersed ownership structure but when the economy slumps, family business far outshine their peers. The simple conclusion to be found in the literature is that family businesses focus on resilience more than performance. We identify the chances for an SME size family business to compete is the personal relationship building; and personal relationships to clients strongly depends on the quality of employees. Trust in the family business literature has been discussed so far, it has been used to explain the firm's performance. In our paper the main focus is on trust between family and non-family or in some cases even labor migrant non-native employees. The need for this research is underlined by the fact, that in recent years family businesses has gone through an institutionalization process, where not only business operation and management was involved, but organizational culture as well. Based on a study (Evren 2017), we found, that change in the organizational culture is a crucial issue and due to the lack of trust family members are afraid of losing decisional power. This resistance of the family members is burden in the overall process, and a burden in the evolution of the firm itself. Contents of trust determine the family member's perception of the employee's trustworthiness in family businesses. Azizi et al (2017) states, that family firm's owners and managers must take steps to strengthen the perception of the non-family employees to have positive attitudes, there is a need for family members to get familiar with the requirements of trustworthiness and they need to focus on what to demand, how to achieve a positive trustworthiness perception in order to pave the road for the desired long term development for the firm.

Sharma and Carney (2012) concluded, that family businesses have large growth potential as they have the habit of developing intangible assets such as social capital trust and tacit knowledge. Trust in general occurs when none of the parties expects the other to harm or abuse (Rousseau et al 1998). Trust has an affective and a cognitive basis. Cognitive trust can be achieved through integrity, credibility, responsibility, reliability and competence (Ribere and Sitar 2010). Cognitive trust between family members and non-family employees in a family can be achieved when development programs of the firm are focusing on the cognitive attitudes. However, when it comes to non-native or labor migrant employees' culture is the main factor towards integrity. In this paper we, present why understanding the culture is important to achieve cognitive trust.

3. ACTUALITY OF THE RESEARCH

The goal of this research is to examine how cognitive trust between family members and labor migrant employees can be achieved. The reason we focus this research on labor migrants is given by the fact that migrants accounted for 70% of the increase in the workforce in Europe over the past ten years. Migrants fill important niches both in fast-growing and declining sectors of the economy. There are several positive aspects in connection with labor migration such as a) it boosts the working-age population, b) migrants arrive with skills and contribute to human capital development of receiving countries or c) migrants also contribute to technological progress and drive innovation. The question remains: how to maximize the benefits of migration for SME size family businesses. The need for this research is underlined by the fact that the rapid population ageing increases demand for migrants to make up shortfalls in the workforce. The literature defines the direction of migration as coming from the Central / Eastern region of Europe flowing towards the Northern and Western part (Friberg, Eldring, 2013). Another source states, that in Europe the scope of labor mobility greatly increased within the EU/EFTA zones following the EU enlargements of 2004 and 2007. This added to labor markets' adjustment capacity. Recent estimates suggest that as much as a quarter of the asymmetric labor market shock – that is occurring at different times and with different intensities across countries – may have been absorbed by migration within a short period of time (Jauer et al, 2014). Central Europe suffers from a significant asymmetric labor shock: the English-speaking generation is leaving, and there is a significant migration from Eastern Europe, the Middle East and Asia. To conclude there are few major challenges for Central European family businesses: a) the local employee market is drying up as highly skilled, English speaking employees increasingly look for jobs elsewhere. b) this asymmetry of migration must be balanced with labor migrant workforces. Furthermore, beside overcoming labor shortage on the local labor market we see significant advantages why a family business shall consider the integration of labor migrant employees: a) innovations through exchange of culture b) support in understanding the needs of new or undeveloped markets c) local knowledge increases the credibility of the firm and the trust in foreign markets d) cost-effective work force

4. PROPOSITION

The objective of the research is to justify the hypothesis if understanding of the culture leads to achieve cognitive trust in an SME size family business between family member and labor migrant employee and to define the necessary educational concept. The study focuses on Vibrocomp's case and general educational concept. Vibrocomp is a family owned SME in the engineering consultancy sector. The firm was founded in 1992 and remained a two-man firm until 2002. The next generation took over the firm in 2002 and turned it into a globally known multinational firm. The successful generational change in leadership that resulted in this significant growth of the firm is not included in this paper, however, could be topic of a future research.

Built on the family knowledge, the firm currently deals with governments all over the world: Hungary, EU (Brussels), Romania, Serbia, Shenzhen (China), Dubai, Federal UAE, and the Qatar Royal Family. The language and the habits are different, but the goals are the same: support their achievements in reducing pollution and increasing the well-being of residents, hence maintaining the economic growth. In the following we present how to overcome the differences mainly originating from the different culture of the labor migrants. It can be stated, that on an SME size traditional conflicts between countries do play a significant role, which the management must be aware of. In our case study we identified three reasons for the integration of labor migrants. a) if a firm is entering foreign market, even if close to the home country b) the start of larger expansion process: the firm expanded to 3 new countries in 2 new regions outside the home continent. c) the employment of labor migrants in the home country due to labor shortage. When a firm is small and only present on the national market in most cases it is or at least it used to be enough to have native employees. Every firm must grow, expand in order to grant long term success and to be an attractive employer. In the investigated case, when Romania became part of the European Union the decision was made to open a subsidiary to serve the Romanian market. With the opening the number of employees immediately increased by +20% as new employees from Romania joined the firm. Family members being afraid from the changes, required all employees to speak beside Romanian also the native language of the firm. The official communication in the firm remained the native language of the family. Driven by the fact, that the whole firm still speaks the common native language of the family no dedicated development trainings were designed to meet the requirements of being a multicultural bi-national firm. Only the manager received training in the culture and habits of the new country. The basic educational concept was enough for one country but had to be further developed when the firm started its larger expansion process. In our case the firm continuously opened new subsidiaries as follows: 1. Dubai, UAE, 2. Shenzhen, China, 3. Doha Qatar. During this expansion not only, employees from different countries but from significantly different religions, habits, political background and time-zones joined. Hard skills are the technical expertise and knowledge needed for a job. Soft skills are interpersonal qualities, also known as people skills, and personal attributes that one possesses (Robles, 2012). As employer, one considers soft skills as very important attribute in job applicants. The firm introduced an innovative integration program. Main innovations of the educational concept were a) the integration program was mandatory for the new employees as well as for the existing ones; b) skills like ethics or knowledge about different cultures religions have been included and trained as a hard skill. As long employees from different cultures are located in different countries and/or continents communication between the employees is mostly limited to written communications. Personal interaction between employees from different cultural origin is limited to division leaders and the management. In their case mentoring was applied to have even better understanding of the different culture originated decision processes. Nowadays as described earlier it is not necessary anymore to be present on the international market to face the challenges of integrating employees from different cultures. As a reason of migration all firms at some stage have to start to employ non-native employees. Focal points of the educational concept are a) differentiated career development for native and labor migrants b) include the culture in the development of all employees c) provide consulting and mentoring to increase the possibility of labor migrants to be leaders in their respective field and being accepted by the native employees d) change the official communication from the native language to English, giving support to all those who have difficulties e) introduce global trends and local values into the project-based approach. The above-mentioned educational concept will result in cognitive trust between family members and employees.

Based on this cognitive trust we propose a successful integration of labor migrants even on an SME size family business level. Furthermore, the archived cognitive trust will result in employees willing to stay longer at the firm which reduces the time and the cost spent on acquisitions.

5. PROPOSED RESEARCH METHOD

In this paper we presented the problem and a case study based concept to solve the problem. In this chapter we will present the proposed research method to a) to prove the hypothesis b) to generalize the concept. In most academical research the main question is to consider whether sampling is needed. In some cases, it is possible to conduct the research on every group member. In our case it is impossible to have an analysis of every SME size family business. We plan to generalize the concept based on a sample research. In our case the entire population will be reduced to samples with the following attributes: a) Hungarian Firms b) Firms with employees less than 100. The second research question is to conduct a) semi structured interviews with the owners/managers of the sampled companies or b) prepare a questionnaire-based survey. The main advantages of semi-structured interviews are: they are carried out with an open framework to allow focused, bi-directional conversational. Semi structured interviews are a good tool to give and receive information. Questions are not formulated ahead; the semi-structured interview starts with general questions. Questions on the focal points are created during the semi-structured interview, in a way to allow flexibility for both parties. The main disadvantage comes from this flexibility, as it might lessen reliability and honesty, while answers are difficult to analyze and compare. A secondary disadvantage is the high time and cost of the survey and tend to have a geographical limitation. Opposite to semi structured interviews web-based surveys are cost effective. Those surveys are practical and an easy way to gather data. The survey can be put on a website or sent directly to the target sample group. Results are already in an electronic format, which allows easy analysis without digitizing data first and are quickly collected and evaluated with online tools provided by the survey host. Web-based surveys have no geographical limitations, online one can distribute the questions to anyone, anywhere in the world. However, the necessity of this opportunity must be reconsidered when defining the target sample group. It is an important aspect to consider cultural differences when conducting cross-national research. Web-based surveys can be designed to allow respondents to maintain their anonymity. With this type of questionnaire results can be expected based on the most honest answers, where sometimes sensitive data is included. Respondents will often answer more truthfully, based on the literature research has shown that having a researcher present can lead to less honest and more socially desirable answers. Respondents, willing to answer can take their time to. A point of discussion is the length of the questionnaire some literature state, that asking as many questions as possible is an advantage, however the authors believe to keep individual questionnaires short, straight to the point, where respondents are willing to focus on the answers. Among the disadvantages of web-based surveys is the lack of conscientious responses, there is no tool to be sure respondents have thought the question through before responding. The only way to overcome this disadvantage is to make the questions simple and the survey short. Furthermore, there is the disadvantage of differences in the interpretation of the questions. compared to personal interviews the researcher here has no possibility to explain the questionnaire and ensure full understanding. Respondents might not understand the meaning of some questions; hence results can be very subjective. Furthermore, if the researcher is not present it is hard to capture emotional responses or feelings of the targeted individuals. As with most research, bias is an issue. Proclivities lead to inaccuracies in the result data, caused by the imbalance of respondents who see the topic in an overly positive or negative light. Pre-screening with a few indirect questions will remove those results from the database.

Based on the above we will continue the research with a web-based questionnaire. The questionnaire will consist of of a quantitative (firm's performance, career development training budget allocations) and a qualitative (educational concepts, cultural habits, willingness of cross-cultural employment) part. Quantitative methods use numbers for interpreting data (Maki, 2004). Large numbers of cases can be analysed using the quantitative approach, and this type of design is deductive in nature, often stemming from a preconceived hypothesis (Patton, 2002). Results can be generalized, and situations make this type of assessment expandable. Although assessment can be carried out with the rigor of traditional research, including a hypothesis and results that are statistically significant, this is not a necessary component of programmatic outcomes-based assessment. It is not essential to have a certain sample size unless the scope of your assessment is on the institutional level. On the other hand, according to Denzin and Lincoln (2011), qualitative research is multimethod in focus, involving an interpretive, naturalistic approach to its subject matter. Upcraft and Schuh (1996) states, that qualitative method is the detailed description of situations, events, people, interactions, and observed behaviours, the use of direct quotations from people about their experiences, attitudes, beliefs, and thoughts. Qualitative assessment is focused on understanding how people make meaning of and experience their environment or world (Patton, 2002). Qualitative assessment is narrow in scope and only applicable to specific situations and experiences. This type of approach is not recommended for generalization to broad situations. Different from quantitative research, qualitative research employs the researcher as the primary means of data collection. In opposite to quantitative assessment, the qualitative approach is inductive, leading to the development or creation of a theory rather than the testing of a preconceived theory or hypothesis. To verify our concept, we defined a method to measure and to evaluate the success of career planning and development in SME size family business. We plan to apply the mixed approach in order to verify our proposition.

6. LIMITATIONS, FUTURE RESEARCH

The research conducted so far is based on the findings of a case study from a Hungarian family owned SME. However due to the setup: 2 main shareholders from the same family, the size: currently about 50 employees in 4 different countries and the sector: engineering consultancy the authors believe that the findings can be generalized for similar companies. In the future questionnaire-based research as described above will be conducted in order to generalize the concept.

7. CONCLUSION

The focus of this research is on labor migrants given by the fact that migrants accounted for 70% of the increase in the workforce in Europe over the past ten years. Due to the current lack of workforce SME size family businesses are facing the challenges of employing labor migrants from different countries and cultures. Family businesses are based on trust, trust is one thing difficult to learn and to understand. Within a small (family) business labor migrants can only be employed when trust between the owners the native employees and the labor migrant employee exists. Cognitive trust can be achieved through integrity, credibility, responsibility, reliability and competence. Cognitive trust between family members and non-family employees in a family can be achieved when development programs of the firm are focusing on the cognitive attitudes. We conclude as the focal point of this the research the education on understanding the cultures and the habits. The authors have presented based on a case study, how to achieve cognitive trust in an SME size family business between family member and labor migrant employee. The presented differentiated educational concept in understanding the culture resulted in cognitive trust between family members and employees. Based on it a successful integration of labor migrants even on an SME size family business level is possible.

Furthermore, the archived cognitive trust will result in employees willing to stay longer at the firm which reduces the time and the cost spent on acquisitions. In the future questionnaire-based research as described above will be conducted to generalize the concept.

LITERATURE:

1. Craig, J. B. L and Moores, K. (2006). A 10-year longitudinal investigation of strategy, systems and environment on innovation in family business. *Family Business Review*, Vol. 19, No. 1, pp.1–10.
2. De Massis, A., Frattini, F. and Lichtenthaler, U. (2013). Research on technological innovation in family business: present debates and future directions, *Family Business Review*, Vol. 26, No. 1, pp. 10–31.
3. EC Expert Group Report (2010). Risk management in the procurement of innovation. Concepts and empirical evidence in the European Union. EUR 24229 EN Directorate-General for Research European Research Area
4. Friberg, J.H. and Eldring, L. (2013). Labour migrants from Central and Eastern Europe in the Nordic countries. Patterns of migration, working conditions and recruitment practices. Tema Nord 2013: 570 © Nordic Council of Ministers 2013. <http://dx.doi.org/10.6027/TN2013-570>
5. Hamilton, E. E., Cruz, A. F. and Jack, S. L. (2017). Re-framing the status of narrative in family business research: Towards an understanding of families in business. *Journal of Family Business Strategy* 8 (2017) 3–12
6. Jauer, J., Liebig, T., Martin, J. and Puhani, P. (2014). *Migration as an Adjustment Mechanism in the Crisis? A Comparison of Europe and the United States*, OECD Social, Employment and Migration Working Papers, No. 155, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5jzb8p51gvhl-en>.
7. Kachaner, N., Stalk, G. and Bloch, A. (2012). What You Can Learn from Family Business, *Harvard Business Review*, November 2012
8. Kellermanns, F. W., Eddleston, K. A., Barnett, T. and Pearson, A. (2008). An Exploratory Study of Family Member. Characteristics and Involvement: Effects on Entrepreneurial Behaviour in the Family Firm. *Family Business Review*, Volume 21(1): 1–14.
9. Kraus, S., Harms, R. and Fink, M. (2011). Family business research: sketching a research field, *International Journal of Entrepreneurship and Innovation Management*, 13(1): .32–47.
10. Maki, F. (2004). The empire of capital and the remaking of centre-periphery relations. *Third World Quarterly* 25(1):149-168.
11. Miller, D., Steier, L. and Le Breton-Miller, I. (2003). Lost in time: Intergenerational succession, change, and failure in family business. *Journal of Business Venturing*, 18(4), 513–531. [http://dx.doi.org/10.1016/S0883-9026\(03\)00058-2](http://dx.doi.org/10.1016/S0883-9026(03)00058-2).
12. Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods*, Sage Publications
13. Petrakis, P. E. and Costis, P. C. (2015). The Role of Knowledge and Trust in SMEs. *Journal of the Knowledge Economy* , 6(1): 105–124.
14. Pittino, D., Visintin, F., Bau', M. and Mazzurana, P. (2013). Collabourative technology strategies and innovation in family business', *Int. J. Entrepreneurship and Innovation Management*, Vol. 17, Nos. 1/2/3: 8–27.
15. Robles, M. M. (2012). Executive Perceptions of the Top 10 Soft Skills Needed in Today's Workplace. *Business and Professional Communication Quarterly*, 75(4): 453-465. <https://doi.org/10.1177/1080569912460400>
16. Sharma, P., Chrisman, J. J. and Chua, J. H. (1997). Strategic management of the family business: Past research and future challenges. *Family Business Review*, 10(1), 1–35. <http://dx.doi.org/10.1111/j.1741-6248.1997.00001.x>.

17. Upcraft, M.L., Schuh, J.H. (1996). *Assessment in student affairs: A guide for practitioners*. San Francisco: Jossey-Bass

ANALYSIS OF THE IMPACT OF MARKETING ONLINE AND OFFLINE COMMUNICATION CHANNELS ON CUSTOMER PURCHASING BEHAVIOR

Peter Jucha

*University of Zilina, Zilina, Slovakia
peter.jucha@fpedas.uniza.sk*

Simona Jaculjakova

*University of Zilina, Zilina, Slovakia
simona.jaculjakova@fpedas.uniza.sk*

Dominik Laitkep

*University of Zilina, Zilina, Slovakia
dominik.laitkep@fpedas.uniza.sk*

Tatiana Corejova

*University of Zilina, Zilina, Slovakia
tatiana.corejova@uniza.sk*

ABSTRACT

At present, marketing communication is important in the business sector, leading to the necessary promotion of businesses and their products or services, as well as to the acquisition of potential customers. Among other things, appropriate marketing communication can lead to a better position of the company among other market participants and increase sales and profit. In the theoretical part of the article we focused on defining the business sector and marketing communication, which is divided into online and offline forms of communication channels. We focused on the different forms of communication and the different types of communication channels currently used by businesses. We compared their positives and negatives as well as different ways of using them and their impact on potential customers. In the analysis of the current situation, we dealt with secondary research, which was focused on online and offline marketing communication and communication channels in the business environment. From the online environment, the paper focuses mainly on social networks, influencers and business presentations via websites. From the offline environment, the article focuses on classic ads in magazines, newspapers, billboards, television and radio. The practical part was devoted to primary research, which was focused on the identification of communication channels and to what extent they influence the purchasing behavior of customers in the Slovak Republic. Through factor analysis we identified two different factors. The first factor reflects a low degree of influence on customer buying behavior through influencers, offline advertising, youtube advertising, and newsletters. The second factor, on the other hand, expresses a high degree of influence on the social purchasing behavior of customers, the quality of the content of social contributions as well as the design of the websites of specific companies

Keywords: *Marketing, Marketing communication, Offline communication channels, Online communication channels*

1. INTRODUCTION

The business environment can be characterized as the environment surrounding the business entity and affecting its business activity. Furthermore, it is necessary to emphasize its close connection with the competitive environment, but also with the governing institutions that determine the rules and conditions of the business environment (STRÁŽOVSKÁ a kol., 2008).

When defining the business environment within the European Union, we can talk about the business environment of the 27 EU Member States, which is influenced by EU legislation, which implies the effort to create a single internal market (eúsav)². To promote the business environment, it is necessary to conduct marketing communications to best promote individual businesses and their products. Marketing communication is one of the four basic elements of the marketing mix.^x The 21st century is an impulse for market players to accelerate the pace of innovation and to make full use of all management and marketing tools, including marketing communication.³ Marketing communication is an important part of modern marketing, which currently requires more than just to produce a good product or to attractively evaluate or make it available to the target consumer. The essence of marketing communication is not only to inform customers about products, about their utility properties, the area of use etc., but to know their needs and requirements and to respond appropriately to them.⁴ For this reason, appropriate marketing communications can lead to a better position in a given market, bring new potential customers and also increase sales and profit. Given the focus of the article, it was necessary to analyze electronic marketing, which is focused on online and offline forms of communication means of marketing communication. In business practice, interaction often involves offline and online marketing techniques being used to generate a constant stream of interested recipients (e.g. website visitors).⁵ Online marketing refers to certain Internet activities that lead to the sale of goods or services. The goal of online marketing is to increase traffic to potential customers on each company's website. In order for online marketing to be carried out correctly, individual customers must reach the forms of online marketing at the right time on the right device.⁶ Subsequently, offline marketing refers to marketing methods that are implemented outside the Internet. The goal of offline marketing is to engage, generate demand for a product or service and reach as many potential customers as possible.⁹ Despite the development of offline technology, marketing remained unchanged. In the following table no. 1. we can see the most used online and offline communication channels.^{7,8}

Table following on the next page

Table 1: Compare online and offline communication tools

Online communication channels	Offline communication channels
Websites – advertising is focused on the defined internet environment.	Advertising in newspapers and magazines – this form of advertising provides a way of promoting in the form of print media.
SEO – displaying websites in the top positions in internet browsers (google, bing, yahoo ...)	Participation in exhibitions and fairs – provides a promotion method where a customer meets the business being promoted directly. This means that the customer can come into direct contact with certain goods or services.
Email marketing – is targeted advertising that is used in e-mail as a means of communicating with customers.	Outdoor advertising – provides advertising on billboards, banners, suburban and urban transport stops, etc.
Affiliate marketing – is based on a performance that rewards 1 or more affiliates for each visitor or customer brought to the business page.	Television and radio advertising – through a short visual or audio spot the potential customer gets to know the product or service of the promoted company.
Social network marketing – like advertising on Facebook, Google+, LinkedIn, and Twitter.	
PPC advertising (Pay per clic) – advertising provided within the advertisement. This kind of ad is charged only when someone clicks on the ad.	
Promotion through Influencers – is based on sharing the private life experience of a person being promoted through a variety of communication channels. Influencers mostly promote various world brands with which they have personal experience.	

Source: 7, 8

The table shows different communication channels through which and promote individual business entities in order to get the best position in the market. After a detailed analysis of individual online and offline communication channels, we can then determine the individual advantages and disadvantages of these communication channels, which can be seen in the following table 2.^{10, 11, 12}

Table following on the next page

Table 2: Advantages and disadvantages of online communication channels

Advantages and disadvantages of online communication channels	
Advantages of online communication channels	Disadvantages of online communication channels
<ul style="list-style-type: none"> ✓ Low advertising implementation costs, ✓ High number of potential online customers, ✓ Diversity of online advertising choice, ✓ Wide coverage of Internet advertising, ✓ Targeting to a specific customer or group of customers, ✓ Realize interactivity to rework ads, ✓ Creating the ranking of collected data through different methods, ✓ Measurability makes it possible to evaluate each ad activity separately and in terms of return on investment. 	<ul style="list-style-type: none"> ✓ Promotion of advertising only if the ad is paid for, ✓ No-readiness of companies to communicate with clients, ✓ No-readiness of companies to move from local market to global market, ✓ Saturation of given ads in online space and subsequent ignorance from the perspective of a potential customer.
Advantages and disadvantages of offline communication channels	
Advantages of offline communication channels	Disadvantages of offline communication channels
<ul style="list-style-type: none"> ✓ Increase sales of products and services, ✓ Ad access directly to potential customers (e.g. mail delivered directly to the mailbox), ✓ Reach customers who do not have Internet access, ✓ This kind of advertising is longer term in terms of time (e.g. rental of advertising space for 2 years), ✓ Targeting inadequate goods or services in a particular region (e.g. publishing a service or product in a regional TV or regional newspaper), ✓ High credibility ads when they appear e.g. in an official regional newspaper, etc. 	<ul style="list-style-type: none"> ✓ High cost of realization of advertising, ✓ Time of preparation of the advertisement, ✓ Saturation of advertising on the streets, in boxes, benches, etc, ✓ Poor measurability of the created ad activity, e.g. in terms of return on funds.

Source: 10, 11, 12

From the table no. 2. it follows that offline or online communication channels have different advantages and disadvantages. It is essential that the individual benefits arising from both online and offline communication channels are fully exploited. At the same time, the disadvantages of these selected communication channels must be eliminated as little as possible.

2. METHODOLOGY

The main goal of the article was to identify individual communication channels and subsequently to find out to what extent they influence the purchasing behavior of customers in the Slovak Republic. To achieve this goal, it was necessary to use methods such as the method of excerpting, the method of analysis, primary research, factor analysis, the method of induction and deduction. The method of excerpting was used to obtain theoretical knowledge of the researched issue. We used the method of analysis to analyze the current situation, when we followed secondary research, which was focused on online and offline communication in the business environment. Subsequently, primary research was carried out, which was oriented to find out what communication channels affect the purchasing behavior of customers in the

Slovak Republic. To calculate the minimum sample size, it was necessary to find out how many people in the Slovak Republic are over 15 years old. As of December 31, 2018, the population over 15 years of age in the Slovak Republic is 4,592,376. After finding the population over 15 years of age, we used the following formula to calculate the large population base.

$$n \geq t_{1-\frac{\alpha}{2}}^2 * \frac{\sigma^2}{\Delta^2}$$

where:

n - is the minimum sample size (minimum number of respondents),

$t_{(1-\alpha/2)}$ - is the critical value determined from the tables (critical values of the normalized normal distribution),

σ^2 - is the spread calculated from the standard deviation,

Δ - is the maximum allowable margin of error.

Then we put the values into the formula:

$$n \geq \frac{1,96^2}{0,03^2} \times 0,5^2 = 1067,11 \doteq 1068 \text{ respondentov}$$

After substituting the values into the formula for the large sample population calculation, we found that at a 95% confidence level and a 3% error margin, the minimum sample size was 1068 respondents. In conducting the primary research, we managed to address up to 1814 respondents. Therefore, it can be stated that the requirement to fulfill the minimum sample size has been met. Subsequently, a factor analysis was used to evaluate the results of the primary research, where two factors were identified through this analysis. The first factor reflects a low degree of influence on customer buying behavior through certain selected communication channels. The second factor expresses a high degree of influence on the purchasing behavior of customers through other selected communication channels. Methods such as induction and deduction were used to evaluate the results and individual recommendations.

3. RESULTS

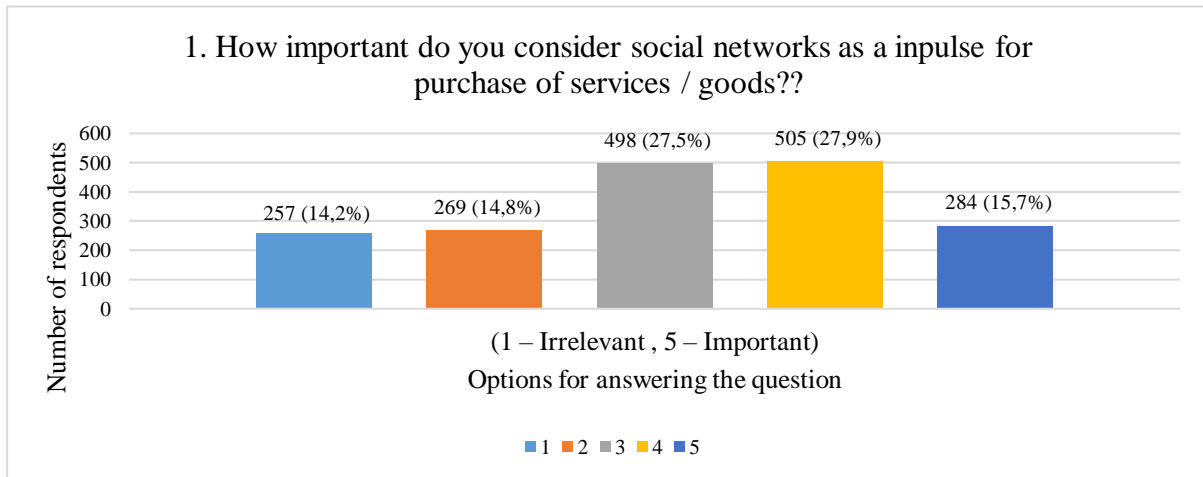
The primary research conducted in the form of a questionnaire yielded results in the form of responses from respondents to eight questions concerning various online and offline communication channels. Respondents answered to what extent they considered the particular communication channel mentioned in the question to be important in influencing their purchasing behavior.

3.1. Results of primary research

The results are shown in the following graphs.

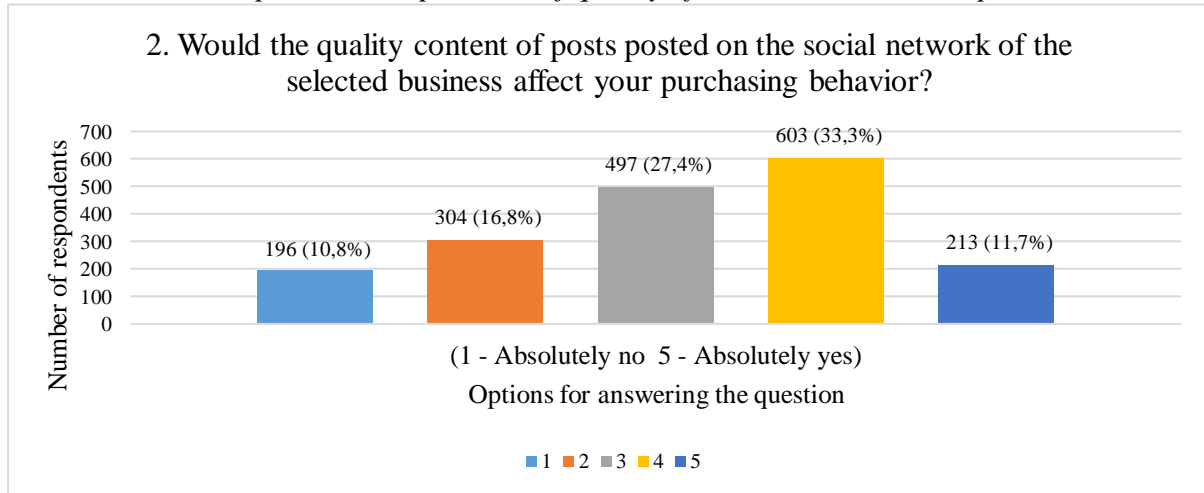
Graph following on the next page

Graph 1: The importance of social networks



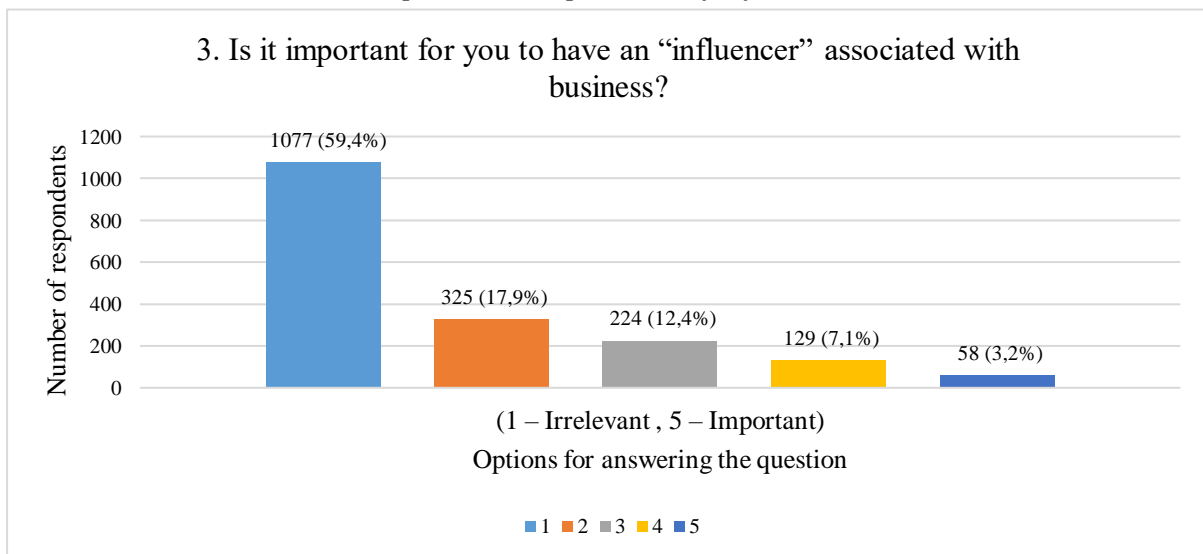
Source: Author

Graph 2: The importance of quality of the content on social posts



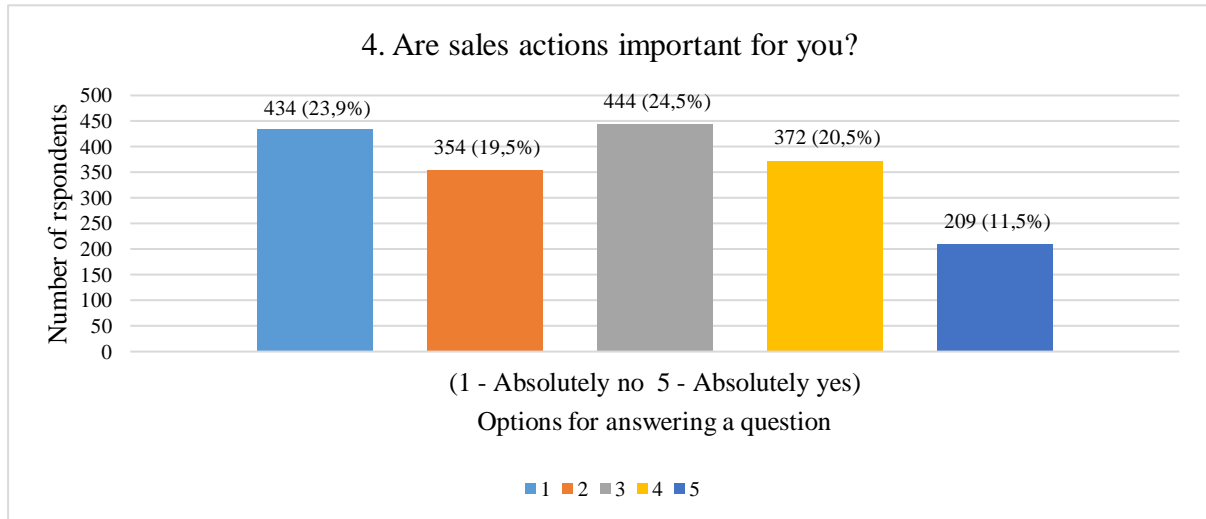
Source: Author

Graph 3: The importance of influencers



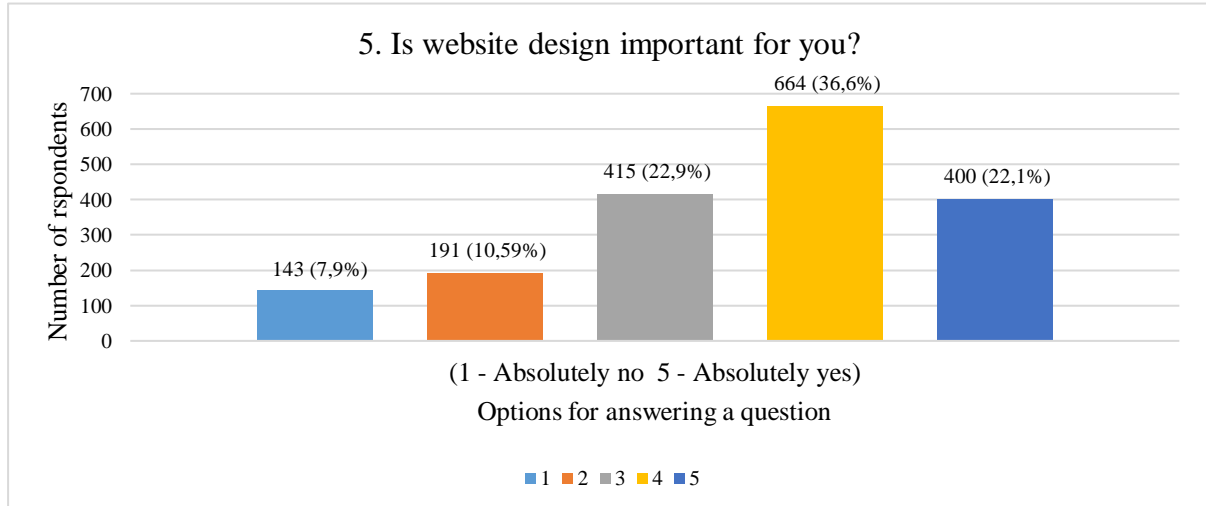
Source: Author

Graph 4: The importance of sales actions



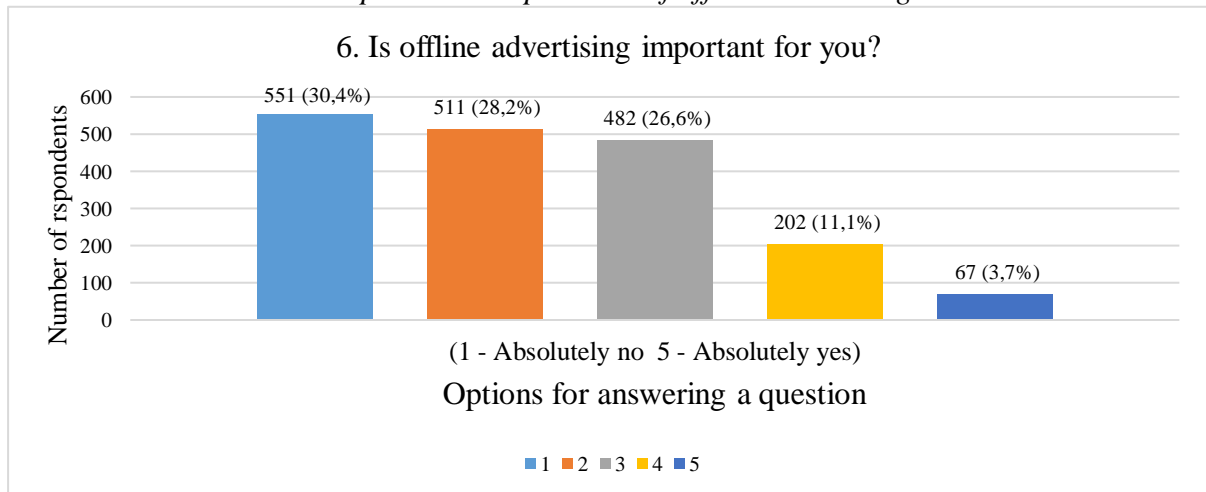
Source: Author

Graph 5: The importance of website design

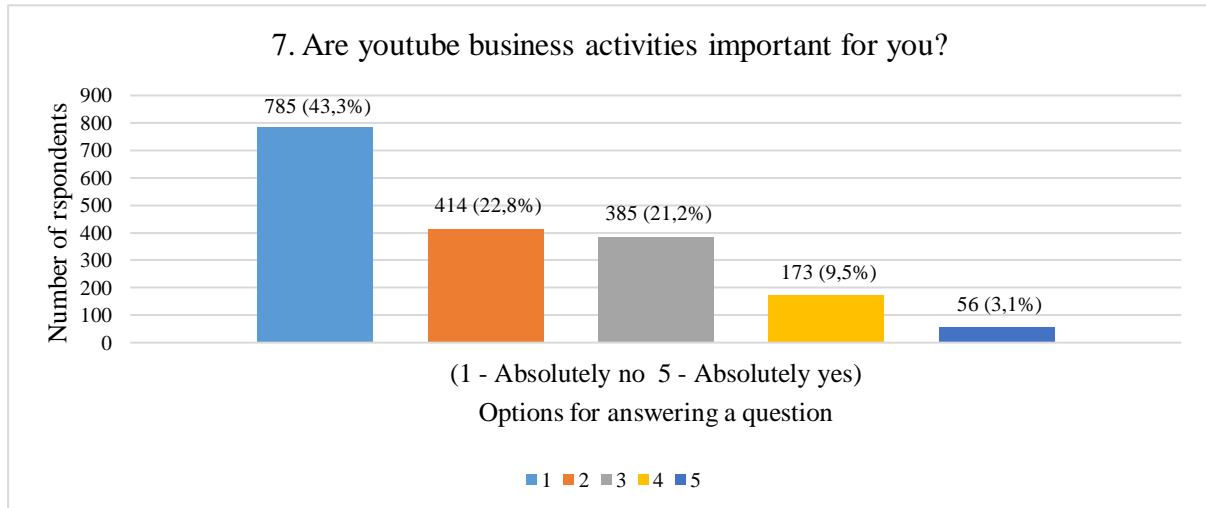
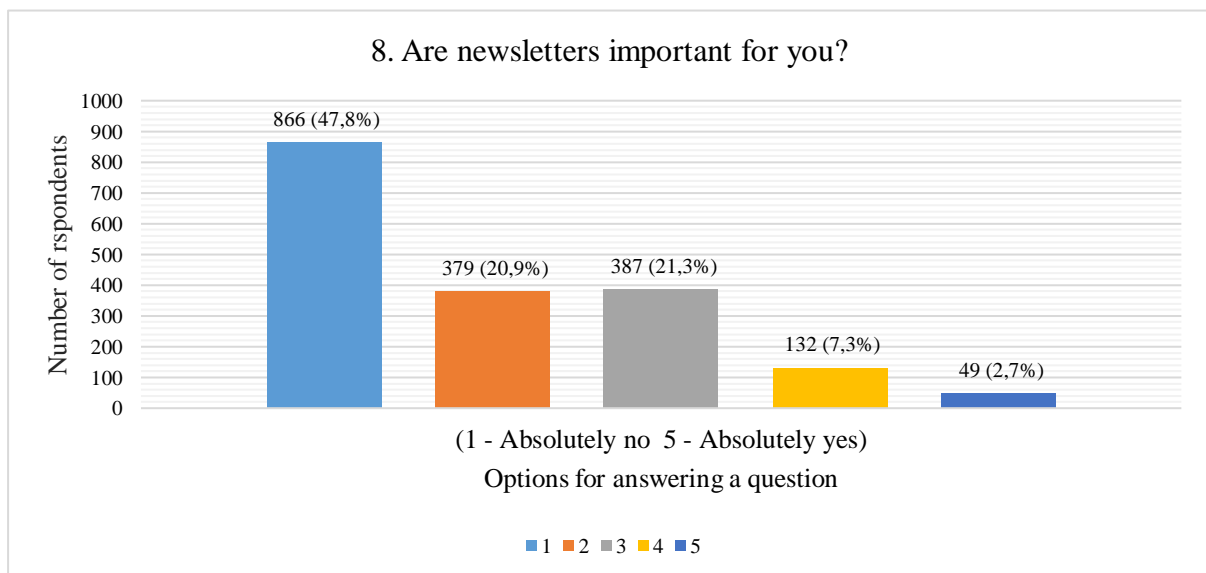


Source: Author

Graph 6: The importance of offline advertising



Source: Author

Graph 7: The importance of youtube business activities*Source: Author**Grpah 8: The importance of newsletter**Source: Author*

3.2. Factor analysis

In the next part the data presented in the graphs are processed by factor analysis.

Table following on the next page

Table 3: Eigenvalues and percentages of explained variability of identified factors

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1. The importance of social networks	2,50	31,21	31,21	1,92	23,95	23,95
2. The quality of the content on social posts	1,22	15,28	46,49	1,80	22,54	46,49
3. The importance of influencers	,92	11,55	58,03			
4. Sales actions	,85	10,62	68,66			
5. Website design	,79	9,85	78,50			
6. Offline advertising	,69	8,68	87,18			
7. Youtube business activities	,65	8,12	95,31			
8. Newsletter	,38	4,69	100,00			

Source: Author

The intrinsic value of the first factor is 2.50. Two factors explain the 46.49% variability of all variables.

Table 4: Factor matrix for all factors and all questions derived from primary research

Variables	Component	
	1	2
1. The importance of social networks	,68	,49
2. The quality of the content on social posts	,68	,52
3. The importance of influencers	,57	-,30
4. Sales actions	,48	,03
5. Website design	,34	,37
6. Offline advertising	,50	-,39
7. Youtube business activities	,57	-,36
8. Newsletter	,57	-,45

Source: Author

In our case, the factor matrix shows the factor load of the variables in relation to the identified factors. Correlation coefficient values range from -1 to 1 where -1 represents the highest possible negative correlation and 1 the highest positive correlation. A value of 0 represents a zero correlation. The given matrix shows what the relations between the variables have.

The factor matrix represents the matrix of identified factors and the correlation values between the identified factors 1 and 2. This is the main output of the factor analysis.

Table 5: Rotated factor matrix for all factors and primary research questions

	Component	
	1	2
1. The importance of social networks	,17	,83
2. The quality of the content on social posts	,15	,84
3. The importance of influencers	,62	,17
4. Sales actions	,34	,34
5. Website design	,00	,50
6. Offline advertising	,63	,04
7. Youtube business activities	,66	,11
8. Newsletter	,72	,06

Source: Author

For a better interpretation it is necessary to proceed to the next step, which is the rotation of factors. After the rotation is applied, it is possible to identify the correlation values for the individual factors and define them so that the load of that factor can be identified by the relevant variable. In this case we proceed by sorting the relevant variables to the factors by assigning them to the factor by their highest value. In the case of variable 4 we assign the variable to both factors as it reaches the same value.

3.3. Factor reduction

Based on the results presented in the rotated factor matrix, it is possible to interpret the outputs. It can be stated that all variables affect respondents when buying, each of which has a different importance. We found that the dependence between attribute variables can be characterized by reducing variables to two factors.

3.3.1. Factor No. 1.

Factor number 1 contains variables whose acquired value is from 0.34 to 0.72. All attribute variables positively correlate with factor No. 1. Factor No. 1 represents a combination of variables such as influencers together with youtub activities and the existence of newsletters advertising. Based on the results of the factor analysis, it can be confirmed that this is a minor factor affecting the customer when making a purchase.

3.3.2. Factor No. 2.

Factor number 1 contains variables whose acquired value is from 0.34 to 0.84. All attribute variables positively correlate with factor No. 2. Factor No. 2 represents a combination of variables such as social networking and website design. Based on the results of the factor analysis, it can be confirmed that this is the most important factor affecting the customer when making a purchase.

3.4. Determination of significance value

For transformed factors 1 and 2, a significance value was determined which evokes the importance of influencing them in the purchase. The table shows the significance values of these factors. The determination of materiality was based on the values determined using the liquor scale in the realized primary survey.

Table 6: Determination of significance value

Serial number	Factor	Significance value
1	Factor No. 2	$[(3,15 + 3,18 + 2,76 + 3,54)/4]$ $= 3,15$
2	Factor No. 1	$[(1,76 + 2,76 + 2,29 + 2,06 + 1,96)/5] = 2,16$

Source: Author

4. CONCLUSION

Based on the results of the factor analysis, it can be seen that customers' buying behavior is most influenced by the advertising and promotion of products and services on social networks, and then by the actual design of the website where specific products or services can be purchased. At the same time, this demonstrates that online communication channels have a greater impact on customer purchasing behavior. This is not a surprising result, as almost all activities and operations are now going online. People are used to accessing all information through the Internet. For this reason, the Internet is becoming an increasingly better means of promoting a variety of products and services, while different companies are trying to offer and sell to potential customers, as well as advertising that affects potential customers.

ACKNOWLEDGEMENT: This contribution was supported by the project VEGA 1/0152/18 Business models and platforms in digital space. This contribution was supported by the project KEGA-043ŽU-4/2019 Support and development of digital skills of students in the context of the requirements of the new economy.

LITERATURE:

1. Mucha, B., Peráček, T., Strážovská, L. (2016). *Business environment in Slovak Republic with the focus on small and medium-sized business*. Retrieved 25.02.2020 from http://www.opf.slu.cz/uds/konference/sbornik16/pdf/mucha_peracek_strazovska_2.pdf
2. Klamová, S. (2020). *Podnikateľské prostredie v EÚ*. Institute of Economic Research SAS. Retrieved 25.02.2020 from <http://www.ekonom.sav.sk/sk/podujatia/podnikatelske-prostredie-v-eu>
3. Chinoracký, R., Kurotová, J., Turská, S., Čorejová, T. (2019). *Perception of marketing communication of educational institution by its students – generation Z*. Marketing identity: Oddline Is the New Online. Retrieved 25.02.2020 from https://fmk.sk/download/MI2019_AJ_final-1.pdf?fbclid=IwAR3tQM98eA97nsUKSv1vATHeTdFx98o_FAjQZDS9QxDYd8XVNongezfJLhw
4. Ferencová, M., Butoracová Šindleriová, I. (2009). *Marketingová komunikácia*. Prešov: Prešovská univerzita v Prešove, Fakulta manažmentu. p. 99-105.
5. Cibáková, V., Bartáková, G. (2007). *Základy marketingu*. Bratislava : Iura Edition. p. 56.
6. Štrach, P. (2018). *Emerging trends in marketing communications: personalization and eventization*. Marketing identity: Digital Mirrors – part 1. Retrieved 25.02.2020 from <https://fmk.sk/download/Marketing-Identity-Digital-Mirrors-I.pdf>
7. Baránek, V. (2019). *Čo je internetový marketing*. Online marketing. Retrieved 25.02.2020 from <https://www.online-marketing.sk/internetovy-marketing/>
8. *Co je offline marketing?* (2018). Retrieved 25.02.2020 from <https://www.rozjetpodnikani.cz/co-je-offline-marketing/>
9. *Čo je to internetový marketing?* Retrieved 25.02.2020 from <https://skalindam.sk/online-marketing/>
10. Marková, M. (2018). *10 výhod digitálneho marketingu, ktoré zaistia rast biznisu*. Retrieved 25.02.2020 from <https://ahoireklama.sk/2018/10/11/10-vyhod-digitalneho-marketingu-ktore-zaistia-rast-biznisu/>

11. *Prečo má tlačaná reklama stále význam aj v dobe online*. Retrieved 25.02.2020 from <https://peroutka.sk/preco-ma-tlacena-reklama-stale-vyznam-aj-v-dobe-online/>
12. *Internetová reklama a užívatelia*. SEO: Optimalizácia pre vyhľadávače. Retrieved 25.02.2020 from http://www.seoprojekt.szm.com/Ereklama_uzivatelia.html
13. Vekové zloženie – SR, oblasti, kraje, okresy, mesto, vidiek. (2019). STATdat.

DETERMINATION OF SOME HEAVY METALS IN VARIETY OF WATERMELON SAMPLES CULTIVATED IN KAGA LOCAL GOVERNMENT AREA, BORNO STATE, NIGERIA

Kolo B. G.

Department of Chemistry, University of Maiduguri, Borno state, Nigeria

Shugaba A.

Department of Biochemistry, University of Maiduguri, Borno state, Nigeria

Kagu M.

Govt Girls College, Maiduguri, Borno state, Nigeria

ABSTRACT

The study was conducted to determine the concentration of heavy metals such as (Cd, Pb, Cu, Ni, Mn, Fe, Zn and Co) in seed, pulp, leaves, stem and root of watermelon (sugar baby and crimson sweet) from Kaga local government area, Borno State, for the period of three months (September, October and November). All parameters were analyzed using standard analytical tools (Atomic Absorption and UV visible smart spectrophotometer).. The result showed that iron (Fe) has the highest concentration in all the samples analyzed with value $(4.38 \pm 0.03) \mu\text{g/g}$ in crimson sweet variety of Ngamdu area followed by Zn with value $(1.78 \pm 1.17) \mu\text{g/g}$ in soil sample while lead showed the least concentration with value $0.01 \mu\text{g/g} \pm 0.001$ in watermelon pulp of Minok agricultural location in all the samples analyzed.. The order of metals concentration in sugar baby sample were $\text{Fe} > \text{Zn} > \text{Cd} > \text{Mn} > \text{Ni} > \text{Cu} > \text{Co} > \text{Pb}$. The order of concentration in sugar baby samples were $\text{Root} < \text{Stem} < \text{Pulp} < \text{Seed} < \text{Leaf}$. Similarly, the order of metals concentration in crimson sweet sample were $\text{Fe} > \text{Mn} > \text{Ni} > \text{Zn} > \text{Co} > \text{Cu} > \text{Cd} > \text{Pb}$. The order of concentration in crimson sweet sample were $\text{Leaf} > \text{Pulp} > \text{Seed} > \text{Root} > \text{Stem}$. In conclusion, the concentrations of all the parameters analyzed were below the threshold limits set by world health organization (WHO). Thus, watermelon samples from these three different locations (Minok, Benisheikh and Ngamdu) from Kaga Local Government Area,) may not constitute possible health hazard and can be consumed as supplements to the body.

Keywords: Kaga, Heavy metals, soil, watermelon, AAS, Borno, Nigeria

1. INTRODUCTION

Watermelon (*Citrullus lunatus*) is one of the most cultivated and consumed crops in the world (Huh et al., 2008). The global consumption of watermelon is greater than any other cucurbit with China leading in its production followed by Turkey, United States, Iran and Republic of Korea (Huh et al., 2008). There are over 1,200 varieties of watermelons worldwide with wide variety of watermelons being cultivated in Africa (Zohary and Hopf, 2000). Watermelon is an annual plant of the Cucurbitaceae family. The edible fruit is produced on trailing vines that are more in length. Fruit vary in shape. Watermelon fruits have a thin, firm outer rind, a layer of white fleshed inner rind that may be up to about one inch thick and an interior edible pulp containing seeds, a few varieties are actually seedless. Pulp color of most commercial varieties is some shade of yellow or red (Sackett, 1974). Watermelons have four distinct parts namely, the rind or peel, the seed, the fleshy white and the fleshy red or pink or yellow parts. The seeds can be brown, white green, or yellow and a few varieties are actually seedless (Murray et al., 2005). Watermelon pink flesh part is used to make wine, as ingredients in salads and juices or just eaten as raw or as sweet juicy treat, while the rind and flesh white part are used as skin smoothers (Mayo, 2007). The amounts of mineral nutrients in plants vary with species and genotype, age of plant, site and season and they vary in different organs and tissues of the same

plant (Pallardy and Theodore, 2008). Watermelon belongs to the gourd family called Cucurbitaceous and the genus Citrullus. The entire content of watermelon constitutes 96% water that is very sweet and refreshingly tasty. The outer cover of the fruit is relatively hard compared to the pulp. The pulp initially is white and changes colour as it matures to ripening. The seeds are flat, having marginal groove on each side near the base and white black margins 10-15 mm long (Alexander,1981). Heavy metal accumulation in plants depends on plant species, and the efficiency of different plants in absorbing metals is evaluated by either plant uptake or soil-to plant transfer factors of the metals. (Covelo et al., 2010). The risk to health from certain elements in food can be assessed by comparing estimates of dietary exposures with the Provisional Tolerable Weekly Intakes (PTWIs) and Provisional Maximum Tolerable Daily Intakes (PMTDIs) recommended by the Joint Expert Committee on Food Additives (JECFA) of Food and Agriculture Organization (FAO) and World Health Organization (WHO) programmes on chemical safety (WHO, 1982a,b, 1989a,b, 1993a,b). However, some of the metals for example Cu, Fe, Mn, Ni and Zn are essential as micronutrients for life processes in plants and microorganisms, while many other metals like Cd, Cr and Pb have no known physiological activity (Kar et al., 2007).

1.1. Objectives of the Study

The objective of the study is to determine the concentration of some heavy metals (Cd, Pb, Ni, Cu, Zn, Co, Fe and Mn) in some variety of watermelon samples.

2. METHODOLOGY

2.1. Sampling Area

Kaga is a Local Government Area of Borno State, Nigeria. Its headquarter is in the town of Benisheikh. It is located in the Northern part of Borno State 72km away. It has an area of 2,700 km² and a population of 90,015 at the 2006 census. It is one of the sixteen LGAs that constitute the Borno Emirate, a traditional state located in Borno State, Nigeria. Ngamdu and Mainok are 12km² and 28km² away from each other respectively. The major occupation of people in this area is farming.

Figure following on the next page

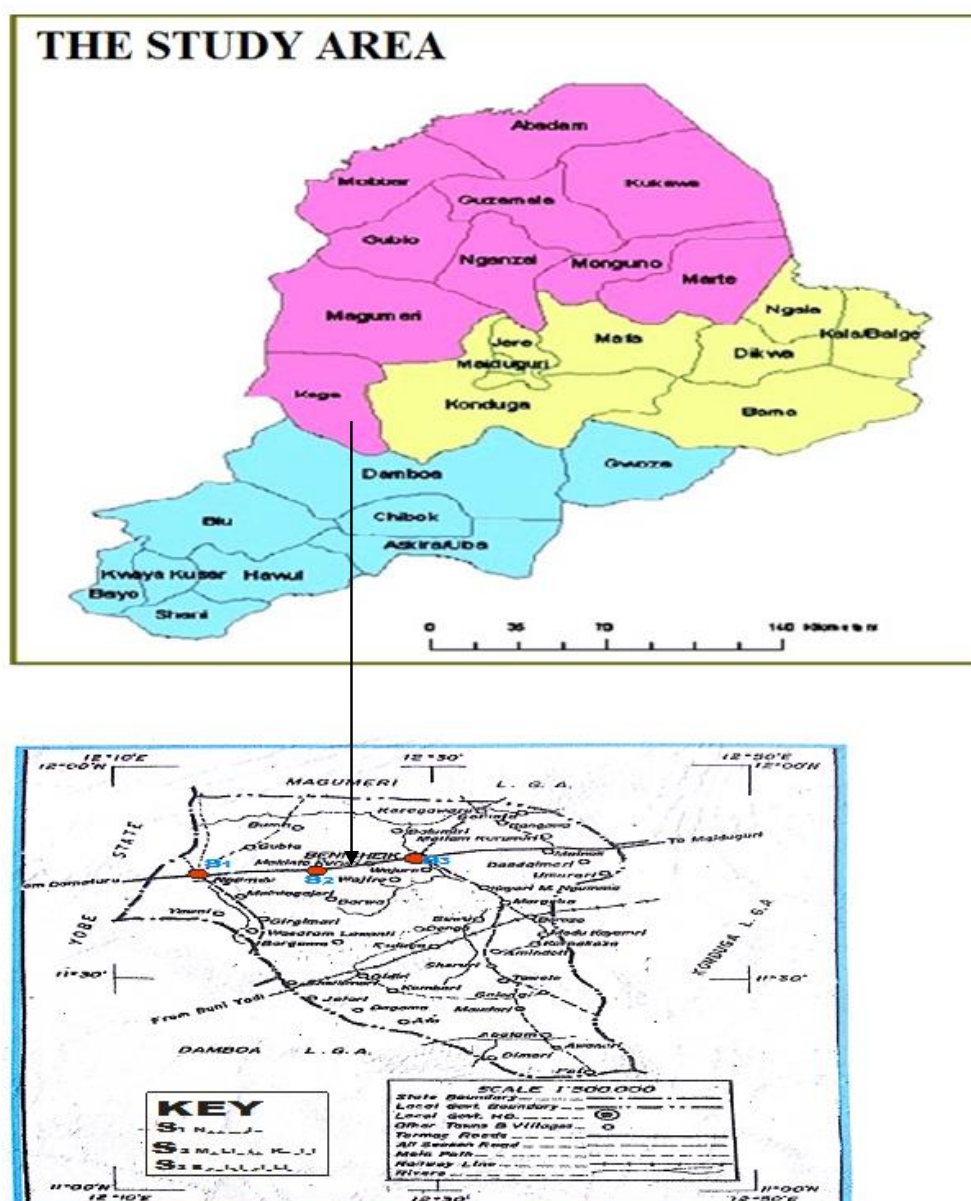


Figure 1: Map of Borno State Showing the study area Kaga S1: Ngamdu, S2: Mainok and S3: Benisheikh

2.2. Sample Collection

Fresh leaves, stem, root and a total of 108 fresh, ripped fruits of two different varieties of watermelon (crimson and sugar baby) were collected from three different agricultural locations of Kaga Local Government Areas of Borno State, Nigeria. At each sample location, samples were collected for the period of three months, (September, October and November). Watermelon samples were put in clean polythene bags, labeled with identification numbers and transported to chemistry research laboratory, University of Maiduguri for preparation and analysis.

2.3. Digestion of Watermelon Samples

The watermelon samples were weighed to determine the fresh weight and dried in an oven at 110°C for 72 h to determine their dry weight. The dry samples were crushed in a mortar and the resulting powder digested by weighing one grams (1 g) of oven-dried ground and sieve (<1 mm) into an acid-washed porcelain crucible and placed in a muffle furnace for four hours at

500°C. The crucibles were removed from the furnace and cooled. 10 mL of 6 M hydrochloric acid (HCl) was added covered and heated on a steam bath for 15 minutes. Another 1 mL of nitric acid (HNO₃) was added and evaporated to dryness by continuous heating for one hour to dehydrate silica and completely digest organic compounds. Finally, 5 mL of 6 M HCl and 10 mL of water were added and the mixture was heated on a steam bath to complete dissolution. The mixture was cooled and filtered through a Whatman filter paper up to mark with distilled water (Schirado et al., 2012). Analysis of samples: Determination of Cu, Zn, Co, Mn, Fe, Cd, Ni and Pb were made directly on each final solution using Perkin-Elmer Analyst 300 Atomic Absorption Spectroscopy (AAS)

3. RESULTS

Figure 2 and 3 Present mean concentration of heavy metals in different parts of sugar baby and crimson sweet samples from Minok agricultural location, Kaga local government area, Borno State. In the sugar baby sample analyzed iron has the highest concentration. The concentration of iron $0.84 \pm 0.18 \mu\text{g/g}$ was higher in the leaves and least in the stem of $0.05 \pm 0.04 \mu\text{g/g}$. Lead showed the least concentration of $0.02 \pm 0.01 \mu\text{g/g}$ in pulp. The order of metal concentration in sugar baby sample were $\text{Fe} > \text{Cd} > \text{Ni} > \text{Mn} > \text{Co} > \text{Zn} > \text{Cu} > \text{Pb}$. The order of concentration in sugar baby sample were $\text{Root} < \text{Stem} < \text{Seed} < \text{Pulp} < \text{Leaf}$. In crimson sweet sample iron showed the highest concentration of $0.85 \pm 0.21 \mu\text{g/g}$ in leaves and the least concentration in pulp of $0.16 \pm 0.02 \mu\text{g/g}$. Lead showed the least concentration of $0.02 \pm 0.01 \mu\text{g/g}$ in pulp analyzed. The order of concentration of metals were $\text{Fe} > \text{Co} > \text{Zn} > \text{Mn} > \text{Ni} > \text{Cd} > \text{Cu} > \text{Pb}$. The order of concentration of heavy metals in crimson sweet sample were $\text{Leaf} > \text{Stem} > \text{Root} > \text{Seed} > \text{Pulp}$.

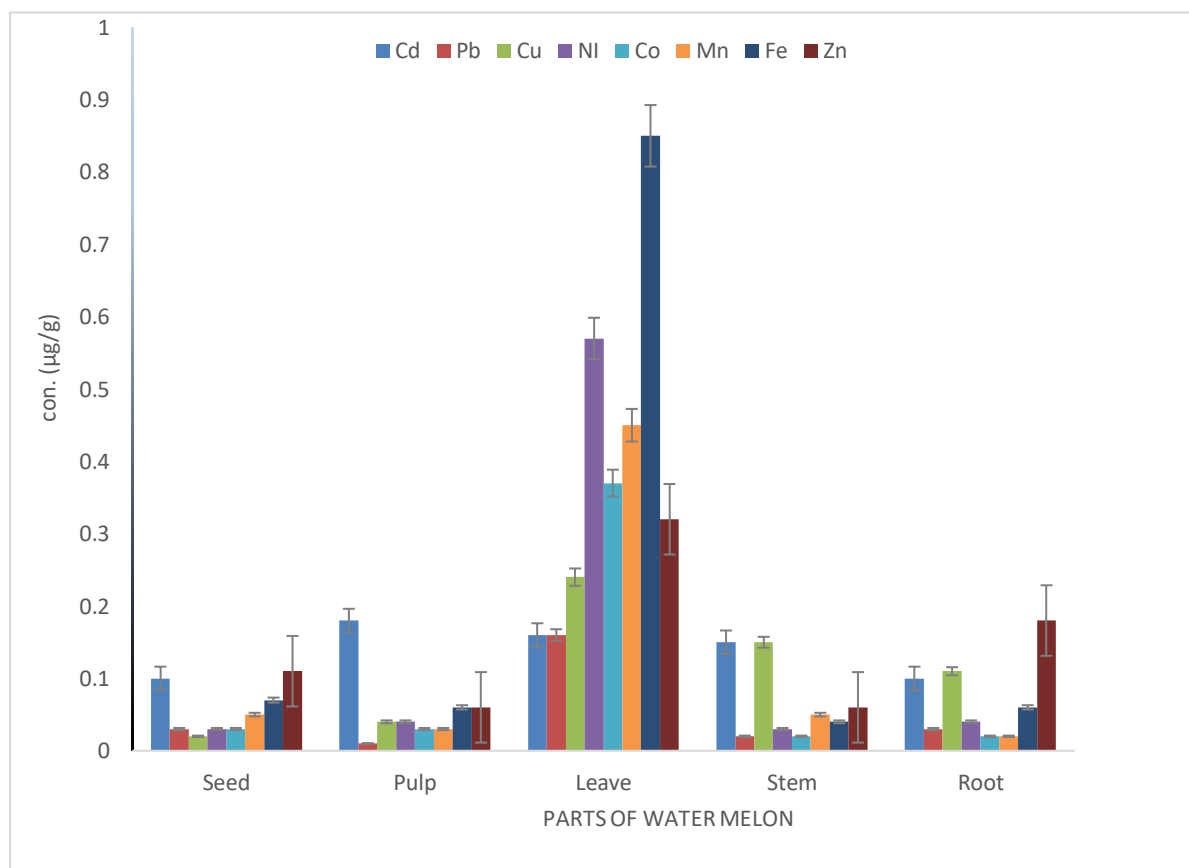


Figure 2: Mean concentration of heavy metals ($\mu\text{g/g}$) in different parts of watermelon sample (sugarbaby) from Minok agricultural location

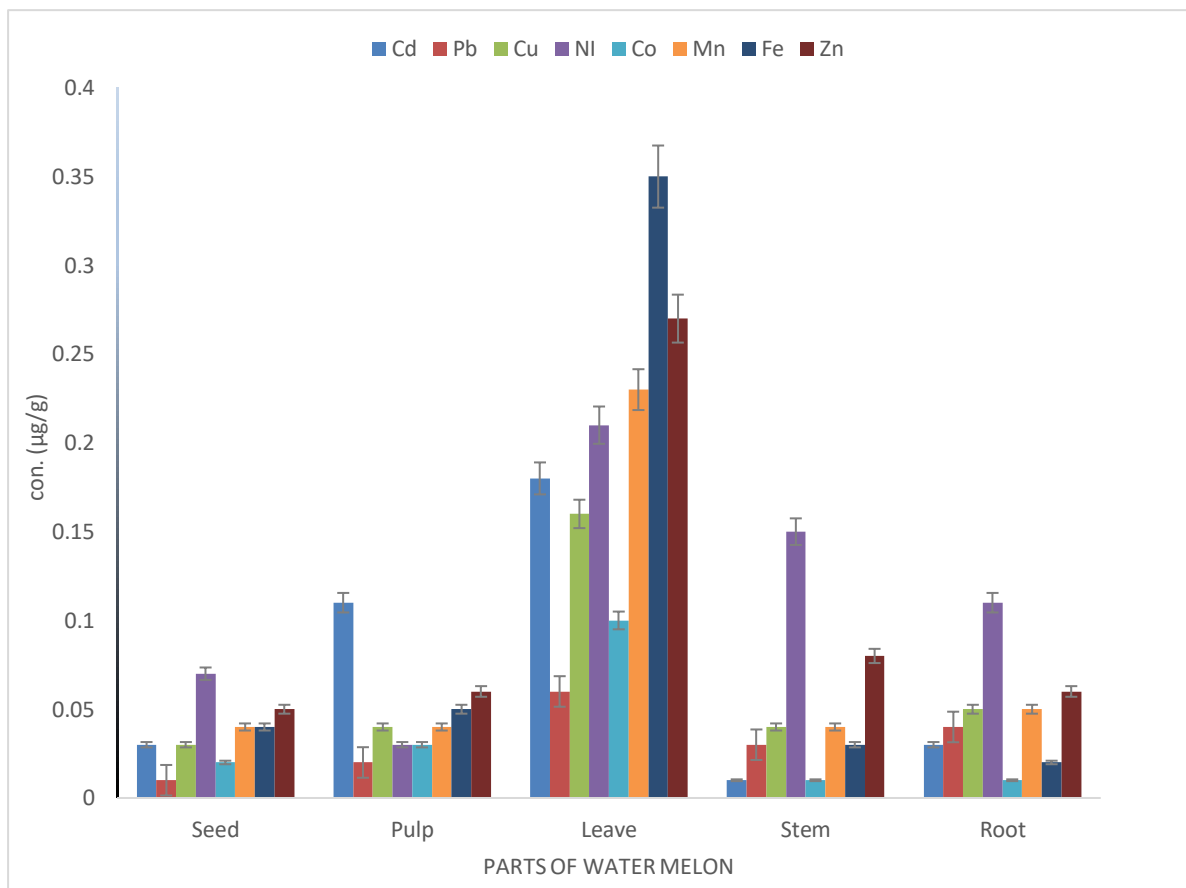


Figure 3: Mean concentration of heavy metals ($\mu\text{g/g}$) in different parts of watermelon sample (crimson sweet) from Minok agricultural location

Figure 4 and 5 present mean concentration of heavy metals in different parts of watermelon sample (sugar baby and crimson sweet) from Benishierk agricultural location, Kaga local government area, Borno State. In sugar baby sample analyzed iron showed the highest concentration. The concentration of iron $1.34 \pm 0.10 \mu\text{g/g}$ was higher in the leaves and least in the pulp of $0.15 \pm 0.01 \mu\text{g/g}$. Zinc showed the least concentration of $0.12 \pm 0.03 \mu\text{g/g}$ in pulp. The order of metals concentration in sugar baby sample were $\text{Fe} > \text{Mn} > \text{Co} > \text{Ni} > \text{Cd} > \text{Cu} > \text{Pb} > \text{Zn}$. The order of concentration in sugar baby sample were $\text{Pulp} < \text{Root} < \text{Seed} < \text{Stem} < \text{Leaf}$. In crimson sweet sample iron has the highest concentration. The concentration of iron $0.86 \pm 0.12 \mu\text{g/g}$ is highest in the leaves and least in the stem of $0.13 \pm 0.02 \mu\text{g/g}$. Lead showed the least concentration of $0.02 \pm 0.01 \mu\text{g/g}$ in pulp. The order of metals concentration in crimson sweet sample were $\text{Fe} > \text{Mn} > \text{Ni} > \text{Zn} > \text{Co} > \text{Cu} > \text{Cd} > \text{Pb}$. The order of concentration in crimson sweet sample were $\text{Leaf} > \text{Pulp} > \text{Seed} > \text{Root} > \text{Stem}$.

Figure following on the next page

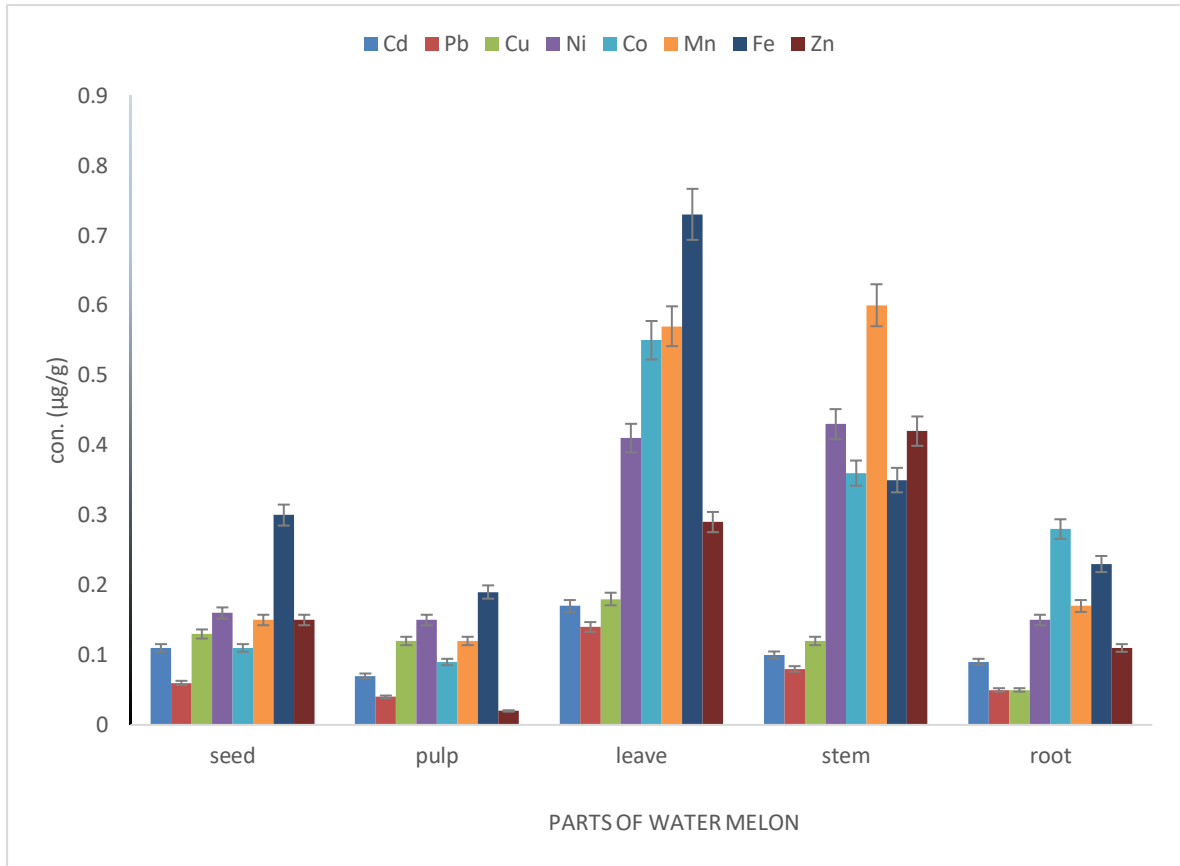


Figure 4: Mean concentration of heavy metals ($\mu\text{g/g}$) in different parts of watermelon sample (sugar baby) from Benishierk agricultural location

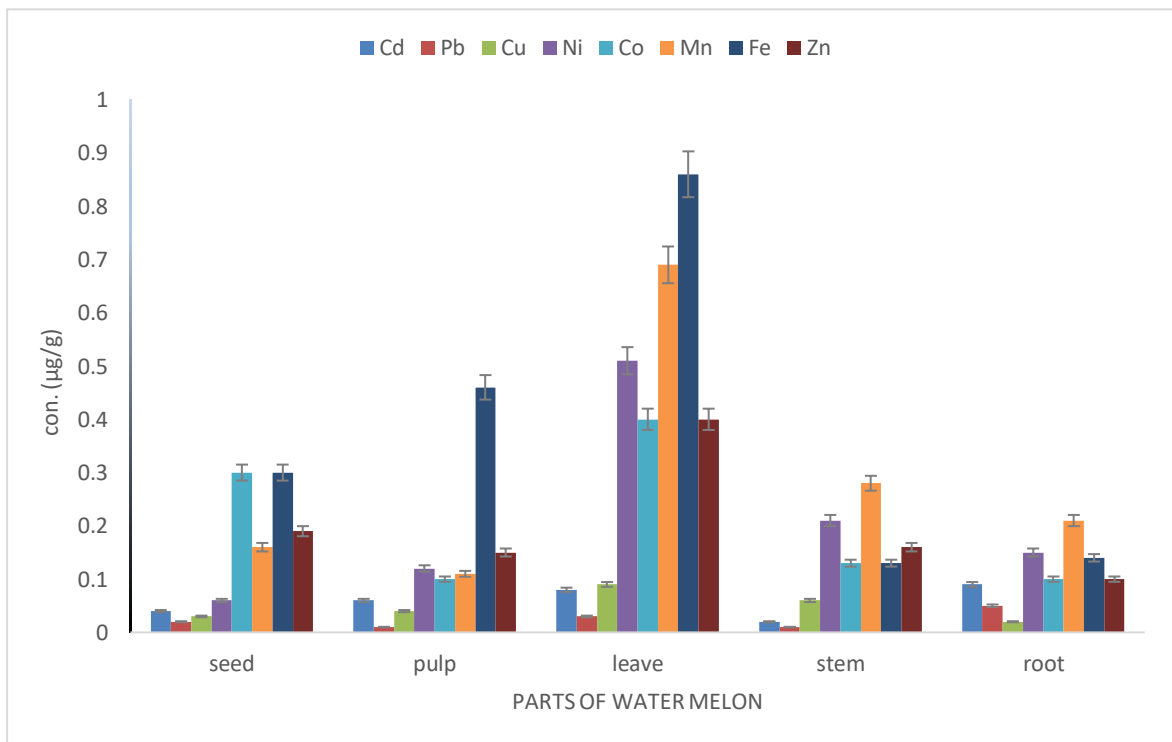


Figure 5: Mean concentration of heavy metals ($\mu\text{g/g}$) in different parts of watermelon sample (crimson sweet) from Benishierk agricultural location

Figure 6 and 7 present mean concentration of heavy metals in different parts of watermelon samples from Ngamdu agricultural location, Kaga local government area, Borno State. In sugar baby sample analyzed iron has the highest concentration in the entire part of the sample. The concentration of Iron $0.85 \pm 0.15 \mu\text{g/g}$ was highest in the leaves and least in the root of $0.34 \pm 0.11 \mu\text{g/g}$; lead $0.02 \pm 0.01 \mu\text{g/g}$ was least in the root. The order of metals concentration in sugar baby sample were $\text{Fe} > \text{Zn} > \text{Cd} > \text{Mn} > \text{Ni} > \text{Cu} > \text{Co} > \text{Pb}$. The order of concentration in sugar baby samples were $\text{Root} < \text{Stem} < \text{Pulp} < \text{Seed} < \text{Leaf}$. In crimson sweet sample analyzed iron has the highest concentration. The concentration of iron $4.28 \pm 0.49 \mu\text{g/g}$ was higher in the leaves and least in the stem of $0.42 \pm 0.11 \mu\text{g/g}$ and Lead $0.10 \pm 0.02 \mu\text{g/g}$ in pulp. The order of metal concentration in crimson sweet were $\text{Fe} > \text{Zn} > \text{Cd} > \text{Ni} > \text{Mn} > \text{Cu} > \text{Co} > \text{Pb}$. The order of concentration in crimson sweet sample were $\text{Pulp} < \text{Root} < \text{Stem} < \text{seed} < \text{Leaf}$.

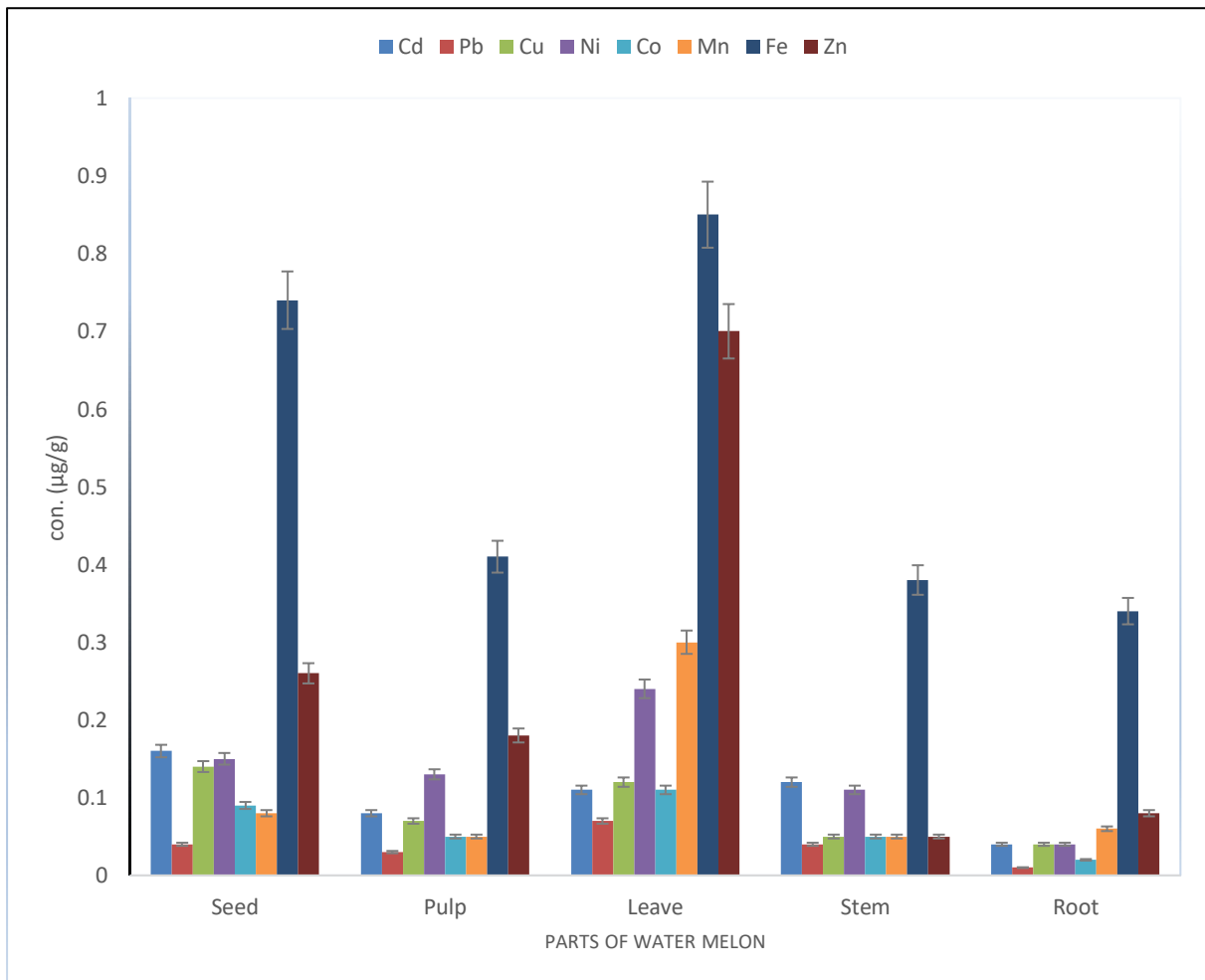


Figure 6: Mean concentration of heavy metals ($\mu\text{g/g}$) in different parts of watermelon sample (sugar baby) from Ngamdu agricultural location

Figure following on the next page

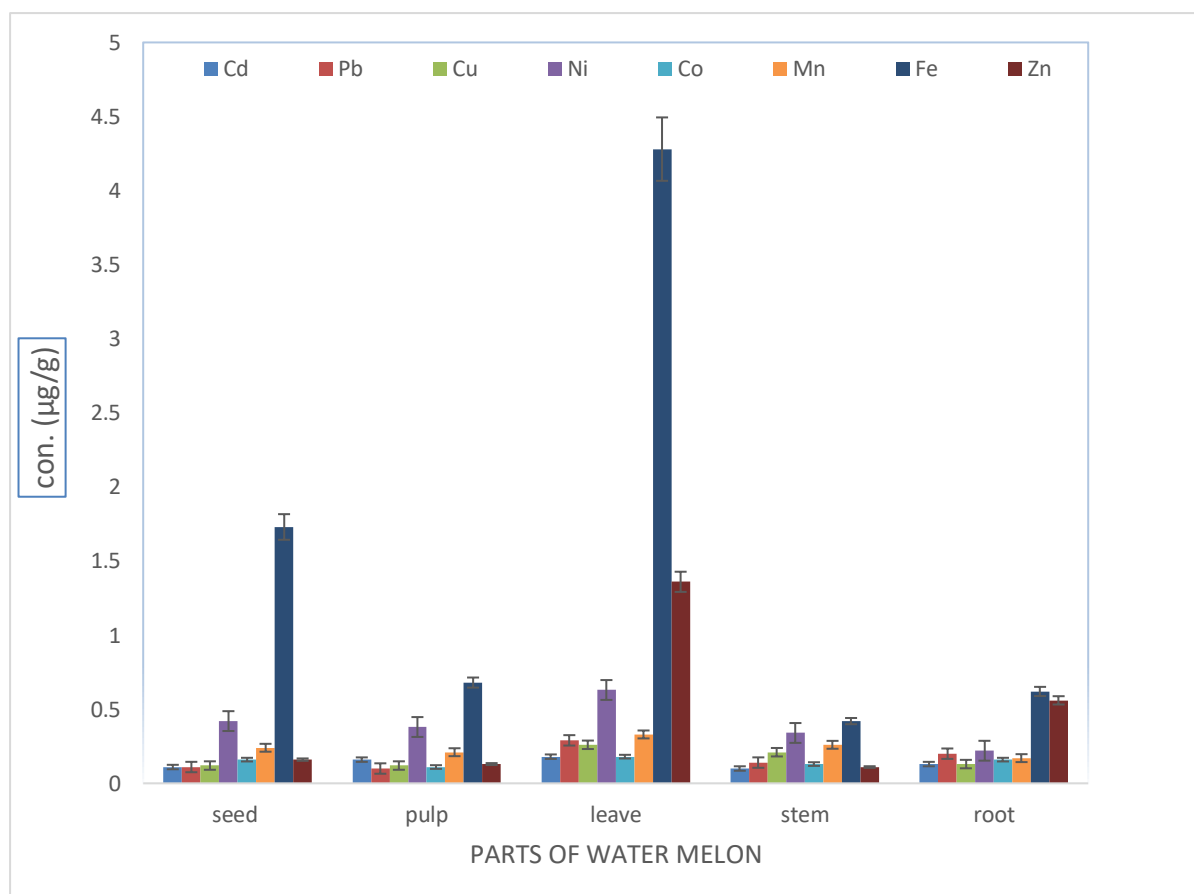


Figure 7: Mean concentration of heavy metals ($\mu\text{g/g}$) in different parts of watermelon sample (crimson sweet) from Ngamdu agricultural location

4. DISCUSSION

Heavy metal contamination of food items is one of the most important considerations in food quality assurance (Khan et al., 2008). The presence of heavy metals such as Pb and Cd in the environment has been a source of worry to environmentalists, government agencies and health practitioners due to their health implications and being non-essential elements of no benefit to human (Adebayo et al., 2011). As trace elements, some heavy metals e.g. copper, selenium and zinc are essential to maintain the metabolism of the human body. However, at higher concentrations they can lead to poisoning (Cambra et al., 1999). The result of this study revealed that the concentration of lead in this analysis increases significantly with depth from 0-10 cm, 10-20 cm and 20-30 cm. Among the different parts of watermelon samples, lead is highest in leaves and least in pulp. The concentration of lead in watermelon samples increases as follows sugar baby > crimson sweet respectively. cadmium increases significantly ($P > 0.05$) to the depth from 0-10 cm, 10-20 cm and 20-30 cm. One-way ANOVA showed that the concentration of cadmium is statistically significant at ($P < 0.05$). The result of this study also showed that cadmium concentration is found to be highest in leaves of sugar baby plant and least in pulp. The trend of cadmium concentration in samples analyzed were Leaf > Stem > Root > Seed > Pulp. The results showed that the concentration of cadmium were lower than the WHO (1999) safe limit of 0.2mg/kg. The high concentration of cadmium in watermelon leaves may be due to its mobility with the plant. Taylor et al., (2007) reported that cadmium is a mobile element which is absorbed by roots and transported to stem where it is uniformly distributed to other part of the plant. Iron is an essential element in human and plays a vital role in the formation of haemoglobin, oxygen and electron transport in human body (Perneger et al., 2014).

The concentration of iron in watermelon samples increases as follows crimson sweet > sugar baby respectively. The iron content in soil and watermelon samples are lower than permissible unit set by WHO (1996) of 20mg/kg so the levels of iron obtained in this study indicate the watermelon sample is safe for consumption. One-way ANOVA revealed that there is a significant difference ($p < 0.05$) in levels of iron in soil and watermelon sample analyzed. The maximum amount of copper was observed in Ngamdu location and the minimum amount was observed in Benisheikh location. In different parts of watermelon samples the highest values of copper was shown in crimson sweet leaf and the least concentration was observed in sugar baby seed. The concentrations of copper obtained in this study are lower than the permissible limit of 10mg/kg set by WHO (1996). Zinc showed the highest concentration in crimson sweet leaf and the least concentration of zinc was showed in crimson sweet pulp. Deficiency of zinc can also result from inadequate dietary intake, impaired absorption, excessive excretion or inherited defects in zinc metabolism (Aggett and Harries (1979). The concentrations of zinc reported in this study are lower than the permissible limit of 50mg/kg set by W.H.O (1996).

5. CONCLUSION

The results obtained from this study showed that the soils of the three study locations were observed to be slightly acidic which may have effect on watermelon grown in Kaga local government area of Borno State. The concentrations of heavy metals and ions were found to be higher in leaves and low in pulp and a significant ($P < 0.05$) difference in levels of heavy metals in root, stem, leaves, pulp and seed of watermelon samples analyzed, but however all the analyte were lower than the WHO standard. Hence, watermelon samples cultivated in Benishiek was observed to be more polluted than Minok and Ngamdu agricultural locations. Therefore, consumptions of these watermelons have no health effect on human.

LITERATURE:

1. Adebayo, K.S., Zurera, G. and Odoh, R. (2011). Survey of heavy metal contaminations of cassava mash and maize corns dried along the highways in some selected states in northern part of Nigeria. *Advance Journal of Applied Science*. 2(5): 561-571
2. Aggett p. J. And harries j. T. (1979) review article current status of zinc in health and disease states. *Archives of disease in childhood*, 54: 909-917
3. Cambra, K., Matinez, T., Urzelai, A. and Alonso, E. (1999). Risk analysis of farm area near a lead and cadmium contaminated industrial sites. *Journal of Soil Contaminant*. 8: 527-540.
4. Huh Y.C., I. Solmaz, and N. Sari. (2008). Morphological characterization of Korean and Turkish watermelon germplasm. 1 *Cucurbitaceae*(2008), Proceedings of the IXth EUCARPIA meeting on genetics and breeding of *Cucurbitaceae* (Pitrat M. ed.), INRA, Avignon (France). May 21-24.
5. Kar D, Sur P, Mandal SK, Saha T, Kole RK (2008). Assessment of heavy metal pollution in surface water. *International Journal of Environmental Science and Technology* 5:119-124
6. Khan S., Cao Q., Zheng Y.M., Huang Y.Z. and Zhu Y. G., (2008). Health risks of heavy metals in contaminated soils and food crops irrigated with wastewater in Beijing, China. *Environmental Pollution* 152(3):686–692.
7. Lacatusu, R., M. Dumitru, I. Risnoveanu, C. Ciobanu, Mihela Lungu, S. Carstea, Beatrice Kovacsovics and Carmen Baci (1999): Soil Pollution By acid rain and Heavy metals(no page)
8. Ladipo m. K. And doherty v. F. (2011). African heavy metal levels in vegetables from selected markets in lagos, nigeria. *Journal of food science and technology* (issn: 2141-5455) vol. 2(1): 018-021, january, 2011 available online

9. Lalor G.C. (2008). Review of cadmium transfers from soil to humans and its health effects in the *Jamaican environment*. *Science of the Total Environment*, 400: 162 – 172.
10. Lei, Y., Korpelainen, H., Li, C. 2007. Physiological and biochemical responses to high Mn concentrations in two contrasting *Populus cathayana* populations. *Chemosphere* 68: 686-694.
11. Mayo Foundation for Medical Education and Research. (2007). Antioxidants-Preventing Disease, Naturally. Mayo Clinic. com. Accessed June 10, 2010.
12. Murray, M.T., Pizzorno, J. and Pizzorno, L. (2005). The condensed encyclopedia of healing food. ATRIA books, New York. Pp 960.
13. Pallardy, G.S and Thiodore, T.K. (2008). Physiology of woody plants. 3rd edition. Elsevier. Oxford. UK. Pp 261
14. Perneger, Thomas, V., Whelton, W., Paul, K. Michael, J. (2014). Risk of kidney failure associated with the use of Acetaminophen, Aspirin and nonsteroidal Anti-inflammatory Drugs. *Journal of Medicine*. 331(25): 1675-1679.
15. Sackett, C. (1974). Watermelons. Fruit and vegetable facts and pointers. United Fresh Fruit and vegetable association. Alexandria. Pp 242.
16. Schirado, T., Vergara, I. and Schalscha, E.B. (2012). Evidence for movement of heavy metals in a soil irrigated with untreated wastewater. *Journal of Environmental Quality*. 15: 9-12.
17. Taylor, M.D. (2007). Accumulation of Cadmium derived from fertilizers in New Zealand soil. *Journal of Science*. 208(12): 123-126.
18. WHO. (1996). "The Role of food safety in health and development"- A Report of Whole Health Organization Expert Committee on Food Safety. Pp 34-100.
19. Zohary, D. and Hopf, M. (2000). Domestication of plants in the old world. 3rd edition. Oxford University Press. USA. Pp.193-195.

SOCIAL PROGRAMMING IN THE CONTEXT OF SOCIAL ECONOMY DEVELOPMENT IN BULGARIA

Venelin Terziev

Russian Academy of Natural History, Moscow, Russia

National Military University, Veliko Tarnovo, Bulgaria

University of Rousse, Rousse, Bulgaria

terziev@skmat.com

ABSTRACT

The present work tries to analyze the existence and the development of social enterprises in Bulgaria. It reviews the possibility for the social programming approach application, aiming increasing their effectiveness and impact, of the process's participants as well as of the supplied services' users. The group of existing problems is defined and certain possibilities for their solving are outlined. Specific approaches and toolkit for application in this complex social process are sought.

Keywords: *social programming, development, social effectiveness*

1. INTRODUCTION

Lately, the social economy and social entrepreneurship development and encouraging concept is part of the European Union policy for coping with social exclusion of individuals in vulnerable state or who has generally fallen into difficult situation. The social economy model is one of the key tools for achieving socially significant goals within the frames of a sustainable and including growth; and the social benefits are measured by the integration and employment of people in unequal state, by the contribution to the process of social inclusion of other people in vulnerable position, and the economic indicator is expressed through the saved public funds for social aid on one hand, as well as through the additional funds for compensating the long-term unemployment's social cost. What is important in order these to happen, is proper conditions with maximum wide scope for the social enterprises development to be established (the vulnerable groups themselves and their problems are diverse and various) and "the answer" of their needs should be flexible enough in order to be fruitful and effective; not "the way to the solutions is important" (the way could be diverse, the way the possibilities for various managerial decisions are diverse and infinite), along which the result is achieved, but the result itself is important (more successful integration and sustainable overcoming of social exclusion) (Kumanova, Shabani; Terziev, 2013a; Terziev, 2014).

2. SOCIAL ENTERPRISES IN BULGARIA

The Economic and Social Council of the Republic of Bulgaria (ESC) (2013) considers the social enterprises in Bulgaria are still unused business model. The existing social enterprises are predominantly non-governmental organizations, which, applying the relevant legislation, establish social enterprises which economic activity is directed towards achieving organization's social goal and mission. Social enterprises in Bulgaria realize their activity in various sectors, having most serious participation in: supply of social services; giving work to disabled people; mediation at finding work for unemployed; ensuring health services; activities in the field of education, etc. According to unofficial data, more than 85 non-governmental organizations in Bulgaria already function on the basis of social entrepreneurship principles. In most cases they render services, and this proposes high economic risk, and they do not realize profit.

This type of entrepreneurship's typological characteristics in Bulgaria do not differ much of the ones of similar enterprises in the rest of Europe (Kumanova, Shabani):

- First: There is clearly manifested social effect – there is balance between the striving towards realizing profit and the direct support of certain groups of people's social status while realizing the main enterprise's activity.
- Second: There is clearly defined target group – mainly individuals from socially vulnerable groups – those, who need help in order to equalize their life and social status with the one of the rest of the society's members.
- Third: There is specific purpose of the economic activity – it is directed towards improving the standard of life, ensuring employment, rendering services and other forms of direct support aiming the relevant target group's social isolation overcoming.

The special symbiosis they bear a priori is an important feature of all social enterprises – between the financial viability and the capability to exercise social impact. Thus they achieve realization of economic, financial and social goals at the same time, with which they acquire higher value and worth for the society. Although there is no general information collected about the existing social enterprises, as well as summarized analysis about the type of the enterprises and their main fields of activity, an Association of the social enterprises in Bulgaria is established in the end of 2005, which 26 members, in their development, work off the practices and strategic directions regarding employment among people in unequal state. The social enterprises in Bulgaria are of various types, depending on their basic characteristics they could be classified as follows:

- First – depending on the field they work in, they are:
 - Social enterprises as suppliers of social and health services;
 - Social enterprises as training and educational organizations;
 - Social enterprises as employers of individuals of marginalized groups or of disabled people;
 - Social enterprises that are in production and trade.
- Second – depending on the target groups – the social enterprises are oriented towards:
 - Socially vulnerable individuals;
 - Individuals with physical or mental disabilities;
 - Children and families in risk;
 - Young people, who are not integrated in the society (like orphans);
 - Ethnic minorities; Women – victims of violence; Elderly people.
- Third – depending on its goals, a social enterprise might have for goal:
 - Economic progress – through creating employment and ensuring well-being of the target groups;
 - Labour integration of socially weak or people with disabilities, of marginalized groups; Business orientation and entrepreneurship; Social protection.
 - As it was already mentioned, most often the social enterprises in Bulgaria at present are connected with the activity of the non-governmental organizations (NGO):
 - Non-governmental organizations rendering services to representatives of their members or to the target groups they have directed their efforts and the services could be educational, consulting services for individual from the vulnerable social groups, social or health services, social support, simple medical services, etc.
 - In practice, there are also non-governmental organizations that perform economic activity – they use the profit from the economic activity to finance activities in fulfillment of the organization's social mission.
 - Another type of organizations that are within the circle of social enterprises are NGO ensuring employment to people from risk social groups, usually disabled people.

Non-governmental organizations that create employment and labour force development are particularly encouraged also by the EU and the donors' organizations ensured financing in the recent years. Number of NGOs, whose task is namely to open new work positions for certain social groups that appear to be their target, could be identified. Often, this model is connected with the so called "protecting employment", where the social enterprise is employer to disabled people - typical example for that are the various unions and associations of disable people - or the blind, of the deaf, etc.

Another widely known model of non-governmental organization - social enterprise is the one of the organizations that play the role of mediators between the target group – most often people with disabilities, and the market. These organizations establish working habits, work environment and opportunities for people with disabilities to work, and after that mediate for the sale of what is produced - through bazaars, through special points of sale, etc. The profit is used for purchase of new materials and developing additional services. Rendering social services is another model of social enterprise existing within NGO - paid social services are rendered to outside clients and at the same time, it is supplier of social services for its members, and this is subsidized by the municipality or the state after a signed contract.

3. SOCIAL PROGRAMMING AS METHOD FOR THE SOCIAL ENTREPRENEURSHIP DEVELOPMENT

The phenomenon called social programming gained popularity in the modern social-economic and political environment. In order to throw light upon its essence and significance for the theory and practice of management in the public sector, we refer to the etymology of the term "programming", which roots have ancient Greek origin ("pro"- in advance, before that and "gramma" - write, mean). Its manifestation in the name "programme" comes from here, which means "directions", "notification", "plan for work, activity, main tasks and goals of a political party, public organization, public figure, etc.... short exposition of contents... of a study subject..." (1982; Terziev, 2013a; Terziev, 2014). In its development, the term "programming" in its classical form has established in Mathematics as combination of methods for developing algorithm of functioning of a digital computing machine, entire computing process, which aims optimization of a separate mathematical expression at given mathematical conditions. This term is key one for the computer field (identified with coding) in the modern world of information technologies, being applicable in its varieties of linear programming (method for finding the maximum or minimum of a linear limiting function at the availability of linear limiting conditions) and non-linear programming (combination of mathematical methods for defining the greatest and the smallest value of non-linear functions at the availability of limiting conditions) (1982a; Terziev, 2013a; Terziev, 2014). More, in its wider interpretation, the term "programming" is connected with a circle of actions in written that express predicting, foreboding, warning, declaring, proclaiming, prescribing, ordering. The common in this palette of the term "programming" meanings is that it expresses certain aspect of human activity, namely the preliminary planning of future actions and activities, noting their limitations. And namely this aspect differs for its social characteristic, which manifestation is in the necessity of taking decision on one hand, and on the other – in the elaboration of a programme that expresses certain prescription, public announcement. In this sense, programming appears to be a process of elaborating programmes understood as particular model for purposeful activity for achieving given goal of social-economic and political development in the new world order. The modern treatment of the term "programming" defines it as a general principle of management, on which grounds the subject derives its actions by certain means in the direction of the goals, according the dynamic changes in the environment. Said in other words, on the particular contents, structure and dynamics of the goal, the actions for its achieving are influenced by the challenges

of environment, where the system functions, by the extent of knowing them and the subordination of the subject, his value orientation, priorities, possibilities he has, the chosen forms and methods for achieving the desired results. This, more than ever, defines the necessity of alternativeness of decisions and of choosing the optimum variant that contributes to management by results. On this grounds, the so called programme-targeted approach of management originates, which manifestation is in the “Planning-Programming-Budgeting-System” (PPBS) (Terziev, 2013a; Terziev, 2014). Arising in the middle of the 60s in the USA as system for planning, programming and budgeting, the programme-targeted approach of management is applied in the American army first. Being based on the idea for accelerating the processes of unveiling the potential in a system at preliminary set goals, the programme-targeted approach quickly penetrates in civil life in the end of 60s and the beginning of 70s (first outside the material, and later in the material sphere) (Due J., Friedlander, 1977). This is the reason for PPBS to be observed as progress in budgeting and as managerial “miracle”. The words of the then USA president Johnson are in support of that, according him: “This system should ensure the execution of the new tasks faster, better and cheaper, opportunity for better decisions should be generated through more and more quality information... Our decision-taking process should have the same level as the one connected with armaments and defence. Shortly and clearly said, we have to exchange our donkey’s carts for trucks and our old guns for new rockets” (Dickermann und andere, 1971). The thing that makes the approach unique for application is namely the integration of its three main components - goals, programmes, programme-targeted structure. And if the goals are connected with the mission (the strategy) and from here, the necessity of “unity of goals within the frame of an organization and the ensuring grounds for distributing organizational resources” (1979; Terziev, 2013a), hence unveiling the organizational potential, then the programmes appear to be the specification of the ways, along which the resources for realizing the goals have to be used. For that goal, each programme contains certain tasks, distributed in time and referring to the relevant executors. From here, each of the PPBS components expresses certain managerial phases. Thus planning defines the long-term goals, while pointing what is firmly intended to be done. Programming is connected with the analysis and the ways and possibilities for achieving the goals (elaboration and selection of alternative programmes) in compliance with the analysis of “expenses-effects (benefits)” and the application of management’s quantity methods. Said in other words, the programme is a plan with certain time terms (dates), and this way the time, when what is firmly intended, would be done, is determined. The budgeting (the financing) is connected with the choice of the most favourable and the most effective programmes and their including in the budget of financing and implementing. And as far as the budget is nothing else but a programme with planned prices, it gives notion how much funds are necessary and when they are to be ensured in order to ensure possibility to be done what is firmly and at the proper time intended to be done. Through the system approach, the pointed managerial phases are integrated in a unified system of interconnected grounds and in certain relation with the financing. This is the reason for one of the most competent specialists in the field of programme management – Charles Hitch (former president of the University of California and former assistant secretary of defense of the USA) to define PPBS as “programme financing”, grounded on the principles characteristic of modern managerial practice. The following principles are of primary importance:

- Long-term goals and expected end results;
- Prioritization and sequence of activities and classification of resources in the conditions of their limitedness;
- Complexity of each problem studying - reviewing each issue or separate field of activity as system. From here the treating of each system as component of another of higher category and subduing the goals and tasks of the separate sub-systems to the system’s overall goal;

- Multivariance of solutions, of the ways and methods for achieving certain goal, which requires the elaboration of alternative solutions for action;
- Evaluation and comparison of the separate alternatives effectiveness on the grounds of objective criteria and with the help of system analysis and its toolkit (modeling, economic-mathematical methods of study and analysis of value, value-effectiveness or value-usefulness, the method of operational studies, machine and game imitating, etc.);
- Continuity of planning or applying the so called continuous planning horizon and conduction of the necessary corrections of plans and programmes in the process of their implementation;
- Combining the programme-targeted approach in management with the programmes financing in compliance with the extent of achieving the goals.

From here, PPBS ground for functioning is the economic approach application towards each activity - object of management, management on the basis of system approach and analysis, financing on programme-targeted basis, which in their essence are three fundamental theoretic-methodological principles. This is what defines PPBS as managerial concept with specific goals and tasks. The more significant of them are:

- Specification of the national goals;
- Coordination of the activities at the various levels with these goals;
- Analysis and value evaluation of the possible alternatives for acting;
- Raising the role and effectiveness of control through financing.

And namely, coordinating the activity of the managerial staff and its directing for realization of the preliminary set goals appears to be the contents of programming. The value evaluation of the possible alternatives and their analysis as well as raising the role, significance and effectiveness of control is connected with ensuring the funds, the financing, which is the most essential element of the system. On this ground, the PPBS positive characteristics are derived and their manifestation is in:

- The possibility for coordinating the planning and the preparation for budgeting;
- Applying the method of continuous planning horizon, on which ground the subordinating and centralizing of decisions preparation process becomes possible;
- The conduction of many-year-analysis, which allows evaluation of the advantages and disadvantages of each possible solution (globally and rationally), and from here the choice of an adequate to the goals alternative;
- Economic grounding of the taken decisions from point of view of usefulness and expedience of expenses;
- The bounding of the taken decisions' fulfillment and their financing, which is manifestation of the simultaneous economizing and effective use of resources.

It is visible that PPBS presents the budget as declaration of the general policy that defines the resources necessary for the conclusion of the management final goals. At the same time, the system reviews the activities as intermediate stage of transforming the resources into services and usefulness of each programme. And this, in its essence, is manifestation of the dependence "expenses-effects", which is in the base of the management by results. Of course, PPBS is not deprived of weak sides. Regarding the fact that some of the goals and tasks have specific nature, experts' opinion is that "the greatest difficulty and the main weak point of the overall system is that it is difficult to formulate sub-goals that could serve as resulting operative tools of the current policy out of the general and universally acknowledged culturally specific values as peace, freedom, security, justice, education and healthcare" (Dickerman).

Beside the mentioned, from political-juridical point of view, the system widens the possibilities and prerogatives of executive power, while the ones of the legislative one reduce. And this is ground for conflict between them. To add to all that, one should take into consideration the circumstance that PPBS is not bound to the yearly cycle of budget drawing. As a result, it is not unusual practice to duplicate the decisions taken on the ground of programmes, synthesis of the various analytical studies and outlining of future goals. But they are not always considered with the environment's priorities and changes. Not ranking last, the big document flow and document turnover create administrative inconveniences and strengthen the bureaucratic processes. These are the reasons in the end of the 60s and the beginning of 70s PPBS, already transferred from the American army into the civil structures, to stay at doctrinal and experimental level in its development. PPBS modified variants leave lasting traces in the practice of budgeting in the present conditions although it has somewhat lost popularity. It is adopted for application by the newly accepted member states of NATO, too. The simultaneous adequate distinguishing of the management phases-planning, programming and budgeting, the analysis and the proper assessment of their interaction is in support of these states' choice. It refers to an intransient worth of PPBS, which is not to be underestimated. Besides that, it requires special attention regarding the correlation between the revenues and the expenses. What is particularly considered is the actual price of the transformed resources that are necessary for achieving the preliminary given results, defined as possibility or executing of an obligation, which is in support of the management by results, of the role and place of programming in the management of public processes. And it, the management, applies certain toolkit for impact upon people, including:

- The hierarchy, organization, where the way of impact (attitude towards power) is subordination, pressure from above over a person with the help of compulsion, the control over the distribution of resources and other of that kind;
- Culture as manifestation of worked out and recognized by the society and organizations groups of values, social norms, formulations and stereotypes of behaviour, rituals, requiring people to behave in strictly defined manner;
- The market represented by the network of equal in rights relations along the horizontal, based on the purchase-sale of various goods, of property, of equilibrium in the interests of seller and buyer. They almost always exist in the live, real economic and social systems. More important is what is given priority and what is mainly staked on.

And as far as programming is accompanied by the use of the mentioned toolkit of management, the circumstance that it is what the organization ensures, which in its essence is hierarchical, with the characteristic relations of power, submission, etc., where there is "systematized, conscious uniting of the actions of people, who trace the achieving of certain goals" (Terziev, 2014), is in support of the statement that it is a common principle of management. And this, regarding management oriented towards results. Something more, this organization's ensuring through programming could be presented as number of definite components. It's about:

- Connecting the goal with the possible means for achieving, choosing variant and its establishing in its capacity of a necessary one;
- Elaboration, reproduction and correction of forestalling algorithm or prototype for actions that lead to achieving the goal;
- Structuring of these actions in a certain way, giving them expedience and consistency, without which the actions themselves are just separate, sporadic acts, not connected in a unified process;
- Communication of the programme with the agents, monitoring of their actions under it.
- From here, programming appears to be an important element in the purposeful systems, special variety, of which organizational systems appear to be.

The organizational system in its essence is such a system, which purpose is coordination of the actions of purposeful parts such as the social groups and personalities, and goal-directing (means and objects for activity) with the global goal, namely getting certain result (main end product). Said in other words, programming after certain form and way connects the purposeful part of the organizational system with the subjects of activity. This way hierarchy, distribution of the power-efficient and executive functions among the programme's subjects originates in the organizational system (1996). One should take into consideration the strong interrelation among the forms of organizational system and the programming. "The hard" (conditionally called "administrative-command") organizational system as a rule defines the relative forms or programming and the types of programmes from the type directive plan. "The soft" ("liberal-democratic") system defines only the general reference points and recommendations for their achieving. But in practice we can see various symbioses between "hard" and "soft" systems within the multiform combinations of programming (1996a). This is one of the sides of the interrelation between the forms of organizational system and the programming. Not to be underestimated is also the other side, where the manifestation is in the reverse impact of the programming form and its product-programmes on the organizational system. The elaborated and fixed in a certain form programme might determine definite form of system. The changes (corrections) in the programme, as a rule, lead also to relevant changes in the system. Programming is directly related also to another historically drawn out approach for managerial impact. The word is about culture. Here also deep interrelation is found, rooted in the essence of culture. It, the culture, is observed as "specific human method of activity", as "combination of sustainable forms of activity". It is in the base of the life activity of the individual or the personal culture, the culture of the social group or the class culture, or the culture of society as a whole. Such an approach is supplemented by the axiological and value essence, which manifestation is in the fact that culture is observed as "combination of human values", like all the things that elevate, cultivate, humanizes life and the human relations. The sociological approach towards culture finds accelerated development in the recent years, according which it is understood as "specific, genetically non-descendable combination of means, methods, forms, samples and reference points for interaction between people and the inhabited environment they elaborate in their joint life for maintaining certain structures of activity and communication". In the sociological approach, culture is observed as "system of collectively adopted values, beliefs, samples and norms of behaviour, inherent to a certain group of people. Culture - this is the collective programming of human mind that distinguishes the members of a certain group from another". One should take into consideration the fact that the general level and the characteristics of culture in a society exercise significant influence on the forms and contents of social programming. Social programming in its cultural expression (aspect) is based on the fact that only social relations contributing for the human personality progress could create all necessary "preconditions for "the algorithmic nature of culture" as way for activity, to become consecutively rational, overcoming the stochastic subjectivity, the elemental uncontrollability and the preconditions for that, the free human activity constantly to ensure the outcome of these "algorithms", the elevation to the methods for activity renewed by the own human manifestation for creative capabilities". Here lies the entire manifestation of the social planning essence in its creative impact upon social reality, ensuring its practice transformation according to the adequately recognizable values of human world. The approach towards culture as a codified system (and as a rule, reflected in bearers of various type), samples and norms of behaviour, activity, communicating and interaction between people, who have regulative and controlling function in society, deepens the understanding of its interrelation with social programming. The elaboration of form and way of action, which manifestation is in all the elements in the programmes, starting from unveiling the goal and finishing with verification of the achieved results, occurs on the ground of the value orientation of subjects, the rationalizing and the choice

of the most significant needs and ways for their overcoming. This, in its turn, is connected with the normative aspect of culture, which through programming gets regulative-managerial solution. And here is the manifestation of the ambiguous connection between programming and market with its “invisible hand”. The contradiction between both categories forces at first glance. Programming with its immanent characteristic towards introducing systematic, structuring of processes, formalization of the impact upon them, and the market with its classic feature of elemental interweaving and collision among the various public forces (1996a). At a deeper going into the essence of these two categories, number of moments that connect them, immerge. After all, there should be distinction between social programming through market, as social institute, and the state programming of market economy, and through it the social field, too. The first one appears as social programming through “the invisible hand of market”, uncovered yet by Adam Smith. The “invisible hand of market”, programming the egoistic interests of producers and consumers directs them towards goal that penetrates in their intentions. Following its own interests, they undertake such actions that serve society’s interests (1996). In compliance with that, effective social programmes are to prognosticate the benefits from the investments in one or another component of theirs. The state programmes entirely financed from the state budget are not effective, neither economically, nor socially as far as economy as a whole defines the wealth of society by definition. As programme, Adam Smith expresses that statement in the principle “Laissez faire”, according which the single people and enterprises are obliged to act in economy without the intervention of state. In the social-historical development’s practice from that time this condition is not realized in any country in absolute form. However, the state intervention in economy to the 20th century is “passive”, incidental and in most cases has the nature of extraordinary measures in times of wars or indirect regulating through legislation and monetary system (1996a). The system intervention of state is increasing in the economy and other spheres of social life in the 20th century. One of the central places in that general trend is occupied by the issue with the correlation between state regulating and the market self-regulating. Experience outlines three directions (models), while solving that issue, namely in the USSR and the group of countries from Central and Southeastern Europe, Central and Southeastern Asia, known as socialistic countries. According to the recognized terminology, “communist block” to the beginning of the 90s, under the influence of the Marxist doctrine and its modifications, a model of centralized, directive based planning of economic and social development that denies the market, is realized. More, alongside with the process of nationalizing the economy, increasing of the spheres of social life directly or firmly regulated by the given system was taking place (1996). Number of methods is found within this model, in particular, the balance and the normative ones, applicable practically in each form of programming. This model gives also incitement for elaborating the methodology and the trial for social planning, social design and some other forms of social programming. In principally different direction - to the 30s, there is practice of “passive” participation of state in the economy of other countries, where the term “planning”, according to the F. Polak’s note, is a curse. According to him “... the deep economic crisis during the 30s came after countless other disasters and shook the very basis of the western system of production, and it also produced revolution in the economic thought” (Vasilyev, 1999; Vasilyuk, 1995). This revolution, connected with using the J. Keynes doctrine, supposes “active” state intervention, including with the help of programming in the economic sphere. In the beginning of the 30s, projects for state programmes occur, which goal is to reduce unemployment and to soften the other crisis manifestations (in particular, the “Papen Plan” in Germany, the “Marquet Plan” and the “Plan for mobilization of economy and for establishing new social order” in France), the “Programme for Tennessee River Valley Development in the USA”, etc. (Vasilyev, 1999). Programming starts being actively applied in the activity of single companies, the Ford factories, the Lockheed Company, etc. (Vasilyev, 1999).

Programming has special incitement after the Second World War in Western Germany (in connection with the “Marshall Plan”), in France (State Plan for Development of the National Economy for 1947-1952), in Japan and in number of other countries (1996a). Controversial phenomena are observed in the further development of state programming in the countries with market economy, connected with activating or decreasing the state intervention in certain social-economic and political situations. As a whole, “the uniting” of market factors with programming becomes one of the leading trends in social development. Nevertheless, the thesis “Laissez faire” is not forgotten and thrown away from the political lexicon. It functions as a principle of the public powers that contain the immanent powers of each country to subordinate everybody and everything. Practically, perspective and current “business plans”, marketing projects, programmes for work with the staff and similar ones are elaborated in each company. Within the frame of programming, technologies like “indicative planning”, “planning-programming-budgeting” (PPBS) and others are founded and elaborated. International social programmes are in elaboration under the aegis of international organizations (UN, UNESCO, EU, World Labour Organization, etc.), recognizing the market conditions during their realization. In this complicated structure, even at national level, “the law for planned and proportional development” is not realized, because of which the system of total state directive planning is built. It gives its opportunities for an organization for interaction between the interested participants in the socially significant activities. Programming is mechanism, which refers to the class of very complicated systems, where the components possess great freedom of behaviour. The connection among the elements as well as of the system with the environment, are recognized for flexibility and instability. Order is changed by an element. The contents and structure of the system are not strictly defined; its limits are not precisely marked. A lot of things in the system are unclear, indirect, “distorted”. This gives us grounds to define it as arranged-elemental process. Despite that, the term leaves the layer of political and ideological reasoning on the subject “to be or not to be” and is introduced for use in the public management, with the requirement for deep theoretic and methodological revision and methodological-technological rationalizing, which manifestation is in the elaborated programmes, as manifestation of the prescribing (deontic) side of human activity.

4. CONCLUSION

The system of social entrepreneurship, still not quite developed, should look for proper mechanism for improving and for finding relevant place and space in the so “hostile” and dynamic environment. Market mechanisms push out the existence of such companies in the periphery of their essence, despite the established institutional mechanisms for their protection. They harder and harder find or defend their state and focus on activities that are oriented towards rendering services – which, in general, do not bring great profit and are not very interesting for the other participant in the market game. Of course, these are activities that are indisputably necessary for the society for its existence and development and should be tolerated the relevant way. Basic or significant issue is how and what way they to exist in order to be maximum useful for the participants and the users of this type of services and how we would assess their social effectiveness. This is quite complex and multi-aspect issue, which is undoubtedly part of the process of social programming. Social programming, in its essence, is a complex process that creates good opportunities to be used in the development of social entrepreneurship. A detailed and thorough analysis is necessary to be made on the activity up to the present moment, where to try and find the positives and the negatives of this process’ progressing to the present and then to proceed to applying that programme approach. The chaotic development of the process up to now, which is characterized with good enough practices, too, but is mainly regulated by the operating market mechanisms, gives partial result.

Set goals and tasks have in their base the solving of already existing social problems with suitable tools and mechanisms. The search for the most reliable and proper for the certain conditions approach is successful to the extent that it realizes positive intentions, but also negative from point of view that it does not satisfy them to sufficient extent. The collection and analysis of sufficiently reliable information is one of the elements, which should be corrected in time. The actuality of such data is of special significance for taking correct and exact solutions in this direction. The outlining problems in the functioning of social enterprises in Bulgaria correspond directly with the differences in the economic development of the relevant regions in Bulgaria, which is completely natural. From such point of view, differentiated approach of regional nature should be searched. The accumulation of a number of problems imposes the search of a solution of such type. The general study of the process is undoubtedly difficult and long process, but should be conducted in the course of this activity's development and at the lack of objective information about it, which should be collected by the state institutions that are called upon doing that by the law.

LITERATURE:

1. Dickerman D. i dr. tsit. izd. s.144 (Dickerman D. и др. цит. изд. с.144).
2. Dickermann D. und andere. (1971). Das Rationale Budget Kolner Universitats-Verlag 1971, p.137.
3. Due J. and A. Friedlander. (1977). Government Finance Nomewood Illinois, 1977, p.139-145.
4. Kumanova, M., Shabani, N. Analiz na sotsialното predpriemachestvo v Balgariya. Proekt „Initsiativa za inovatsii v sotsialnata ikonomika” s finansovata podkrepa na Evropeyskiya sotsialen fond i Republika Balgariya chrez Operativna programa „Razvitie na choveshkite resursi”, shema „Bez granitsi – Komponent 1”, izpalnyavan ot Sdruzhenie „Znanie” – Lovech.
5. Rechnik na chuzhdite dumi v balgarskiya ezik. (1982). S. 1982 s. 693.
6. Rechnik na chuzhdite dumi v balgarskiya ezik. (1982a). S. 1982 s. 694.
7. Sotsialното predpriyatie i sotsialното predpriemachestvo. (2013). Sofiya, 2013. Republika Balgariya. Ikonomicheski i sotsialen savet. ISS/3/009/2013.
8. Strategie Planning aug Policy (1979). N. Y. 1979, 68.
9. Teoriya i metodika sotsialnyoy raboty. (1996). M. 1996.
10. Teoriya sotsialynogo raboty. (1996a). M.1996.
11. Terziev, Venelin. (2013a). Vazdeystvie na politikite na pazara na truda za osiguryavane na zaetost. Izdatelstvo „Dema Pres – Ruse“, 2013.
12. Terziev, Venelin. (2014). Vazmozhnosti za povishavane na effektivnostta na sotsialnata adaptatsiya na voennosluzheshti, osvobodeni ot voenna sluzhba. Izdatelstvo „Primaks“ – Ruse, 2014.
13. Vasilyev, V. P. (1999). Sotsiologicheskaya problema upravleniya i sotsialnyoy zashtita. Sotsiologicheskie issledovaniya // 1999 №11.
14. Vasilyuk, F. E. (1995). Tipologiya perezhivaniya razlichnyih kriticheskikh situatsiy // Psihologich. Zhurnal. 1995-№5 T. 16, s.104-114.

ATTITUDES TOWARDS ENVIRONMENTAL PROTECTION ADOPTED BY THE BUSINESS SUBJECTS IN THE REPUBLIC OF CROATIA

Ivan Kovac

*University of Zagreb, Faculty of Economics and Business, Croatia
ivan.kovac@efzg.hr*

Kristina Petljak

*University of Zagreb, Faculty of Economics and Business, Croatia
kpetljak@efzg.hr*

Dora Naletina

*University of Zagreb, Faculty of Economics and Business, Croatia
dvuletic@net.efzg.hr*

ABSTRACT

The importance of the actions companies undertakes regarding environmental protection was realized long in the past. Unfortunately, modern solutions regarding limited energy resources, industry, logistics etc. mostly become also the sources of environmental pollution. Environmental protection is a significant area and almost no reasonable one doubts, but its actual implementation in practice is a huge problem. Concerning this, this paper aimed to analyse attitudes towards environmental protection adopted by the business subjects in the Republic of Croatia. For this purpose, empirical research was conducted on the sample of companies which stated their attitudes and everyday activities they perform with the aim of environmental protection. This research is unique in its kind, as it focuses on the business sector in the Republic of Croatia.

Keywords: *environmental protection, Croatian companies, empirical research, Republic of Croatia*

1. INTRODUCTION

The world today, despite strong development and advancements in science and technology, is still facing issues like food scarcity and limited drinking water and energy supplies. Although very intelligent and resourceful, our civilization has been coping with these existential problems for years, and they remain unsolved, and they are even becoming bigger since pollution negatively influences the production of healthy food and sources of drinking water. We are witnessing the ozone layer being damaged, the influence of global warming, the irreversible pollution of our environment and rapid waste of non-renewable natural resources. It is quite clear today that the industrial revolution, with its positive changes, has also brought negative consequences regarding environmental pollution and threat to human health. In this sense, the 20th century is characterized by the concern for the environment at the global, regional, national and local level (Cardwell, 1984). This extraordinarily negative and alarming trend has been continued in this century as well, but now these issues grow exponentially. Unfortunately, modern solutions regarding limited energy resources, industry, logistics etc. mostly become also the sources of environmental pollution. This is primarily true of the pollution generated using fossil fuels, which still remain the primary sources of energy throughout the world. Namely, economic development of any country is conditioned with energy, i.e. its sources. In line with that, energy bears enormous influence over sustainable development and environmental protection. It is, therefore, crucial to use more renewable sources for energy production to reduce its negative impact on the environment.

One of the main challenges of the modern society regarding the protection of the environment is connected with the reduction of CO₂ emissions and gradual replacement of fossil fuels with those energy sources that have far less impact on the environment (Mahalingam and Ramesh, 2013). For a long time now, we have found in the literature papers that analyze in detail the reasons why companies are introducing environmental management and corporate responsibility (Aguilera et al., 2007). Unfortunately, concern about environmental protection during the economic crisis has reduced since the media more preoccupied with economic rather than environmental issues (Carmichael and Brulle 2017). Environmental protection is a significant area and almost no reasonable one doubts, but its actual implementation in practice is a huge problem. Consequently, in the literature, we find papers suggesting that expenditures for environmental protection, which are part of public spending, usually stimulate the economy of a country in the short-run (Blanchard and Leigh, 2013). However, we also find scientific papers suggesting that environmental protection expenditure increases costs in some industries and thus reduce economic activity (Joshi et al., 2000). Despite of all these facts, there is no alternative to environmental protection. The world realized long ago what catastrophic consequences environmental pollution could lead to. Therefore, efforts are made to act and create such a society that will develop without polluting their environment. Attitudes multinational companies adopt towards environmental protection is essential and their impact on environmental policy is enormous. In this context, it is necessary to note that trade globalization has contributed significantly to the growth of awareness of the general public regarding the social and ecological effects of multinational companies (White, 1999). For all the reasons mentioned above, the goal of this paper is to examine environmental protection and its activities which companies conduct to preserve the environment. Regarding the research methodology, the paper consists of secondary data analysis which is based on the scientific paper analysis as well as empirical research data.

2. LITERATURE REVIEW ON ENVIRONMENTAL PROTECTION

Intense industry development brings wellbeing, but it also brings about challenges like pollution and nature being in danger. These challenges are characterized by the exponential growth of the issues connected with air pollution, global warming, water and soil pollution (Bagur-Femenias et al., 2013). If we speak of sustainability and the interconnectedness of economic, social and ecological aspects of a society's development, then it is clear that economic growth and social welfare support environmental care and vice versa (Vos, 2007). But, unfortunately, many countries even today are trying to achieve rapid economic growth regardless of grave environmental pollution they are causing along the way. It is understood that such economic growth at the expense of the environment cannot lead to social welfare. The importance of the actions companies undertake regarding environmental protection was realized long in the past, and therefore, data publishing about their efforts has been stimulated and, in some countries, it has been made obligatory. Namely, long ago, initiatives were started to be prepared for systems, policies and procedures regarding environmental protection to become institutionalized (Jones et al., 1998). This has been significantly supported by the guidelines of the international organization for the ISO 14001 standards, as well as the Eco-management and Audit Scheme issued by the European Union (EMAS), and with their emergence, the standardization of corporate practices for environmental protection has been largely improved. When talking about the standards for reporting on environmental protection, we should first mention the contribution of the Coalition for Environmentally Responsible Economies (CERES), the ICC Business Charter for Sustainable Development and the Global Reporting Initiative (GRI), (Buchholz, 1998). Naturally, their contribution to the development of environmental care should be observed in the broader sense, with the policy for environmental protection adopted by the operations management, then the issue of environmental protection through various

processes of organizational and functional areas and regarding the obligations for the improvement of ecological efficiency with continuous research of best practices and operations of re-evaluation etc. After the Rio de Janeiro Summit in 1992, three primary goals for the global concept of sustainable development were defined. The first goal is related to ecology, i.e. prevention of environmental degradation and elimination of their risks. The second goal relates to economy, i.e. satisfying basic material needs of the human civilization with the use of the techniques and technologies that do not harm the environment. The third goal relates to social and humanitarian aspects of the human civilization (Bina, 2013). It is directed towards ensuring social minimum, and the result should be to stop hunger and poverty. Likewise, this goal should ensure proper health protection, development of the spiritual sphere (the culture), safety and education. Unfortunately, we are witnesses that little has been done regarding sustainable development since that summit. There are still significant risks related to environmental degradation. Due to this fact, green human capital must be present in the companies, to accept all environmental management practices (Jabbour et al., 2019). This is primarily related to green manufacturing and green supply chain management. We are still using techniques and technologies that destroy the environment and are not used for satisfying the basic material needs of humanity. Quite the opposite, they serve first and foremost the interests of the capital and maximizing the profit, while destroying and polluting the environment significantly. Today, there are still countries where many people die of hunger or get ill due to environmental pollution or lack of drinking water. Some countries, understanding the significance of environmental protection, and serious consequences certain countries pay due to rapid economic development, are trying to introduce strict legislation and reduce negative impact economic development has on the environment. This is especially true of industry and traffic which represent one of the biggest polluters in most countries. Specific countries (Denmark, Japan, Netherlands, etc.) mandate that their business subjects publish information on their environmental impact (Kolk, 2003). In this way, they wish to raise awareness in the economy regarding environmental protection. On the other hand, in this way, they want to create one of the mechanisms for encouraging ecological protection as a way of competitive advantage as opposed to those subjects which do not pay much attention to environmental protection. According to that, the IRRC (The Investor Research Responsibility Center) has conducted research, and the results say that most Japanese companies (90%) inform the public on their goals, achievements and the expenses regarding specifically environmental protection (Metrick, 2001). In general, the world has been trying to stimulate and boost the production of eco-friendly products with national and international regulations to reduce the negative impact on the human environment. However, these efforts are still insufficient. Although products and services of those companies that produce in line with the highest ecological norms are considered important factors of competitiveness, there are still those companies that are relatively successful, but their products and services and their products impact the environment very negatively. It is clear that the process of commitment to ecology in an economy is necessary, but still too weak and too slow. In line with that, business subjects should behave in the way that they do not harm the environment. There some authors, that implied a positive link between employees' green behaviour and environmental sustainability of a company (Iqbal et al., 2018). The sustainability of their business is here crucial. In literature, "business sustainability" is defined as economic, social and ecological efforts a company or an organization put into implementation and management of the impact of their own network and the business network on the life and eco-systems of the country (Wagner and Svensson, 2014). Over time, many methodologies have developed based on different indicators to establish the levels of sustainable development in a specific country. For this purpose, various indicators are used, but we will mention only a few of them here: Composite Index of Environmental Performance (García-Sánchez et al., 2015), Economic Performance Index (IMF, 2013),

Environmental Performance Index (Esty et al., 2008), etc. Indeed, when establishing the level of sustainable development in a country, it is necessary to adjust the methodology that would best reflect the actual state of environmental protection. With the correlation and evaluation of the acquired indicators, using different statistical analyses, it is possible to ascertain the most important aspects and the level of sustainable development (Neumann et al., 2018). Regarding business sustainability, literature offers not only economic, social and ecological components of sustainable development but also the elements connected with them (Hassini et al., 2012). Namely, empirical researches propose 20 elements: seven economic, seven social and six ecological elements. Business sustainability is related to profit and profitability, i.e. if the benefit does not have to be imperative, the ability to generate profit is a crucial element of survival and sustainability. Another vital aspect of economic business sustainability is competitiveness and reputation in society. The studies described in the literature point to the fact that sustainable business positively influences the reduction of the costs. Therefore, costs reduction is the third element connected to the economic component of business sustainability. It is understandable that corporative brand, being the fourth element if the company owns one, can positively influence all three before-mentioned elements of economic business sustainability. Of course, we encounter positive spin-offs as well, and they are the fifth element of the economic aspect of business sustainability. Let us take an example: if a company that is a good model of sustainable business, is mentioned in this context in the media, it can lead to reducing the necessary funds allocated for marketing. It is then understandable that financial benefits and savings can be incorporated in the right decisions related to sustainable business, and they are the sixth element of the economic aspect of sustainable business. The seventh element of the economic issue of business sustainability represents the compromise, meaning that, for example, when acquiring goods, the lowest price is not the most crucial criterion as an economic component, but rather social and ecological component is taken into account when making that decision or any other business decision (Wu and Pagell, 2011). As already has been mentioned, the social component is essential for business sustainability, next to the economic and ecologic one. The social component comprises of further seven elements. The first element relates to the importance of organizational support for business sustainability. Namely, business sustainability is superficial, insignificant and even pointless without the management support, i.e. the support from the top management. Following it, companies human resource strategies have to be harmonized with environmental goals to increase the output of sustainable operations (Teixeira et al., 2016). For successful business sustainability, all the subjects must be devoted to it, not just those in the company, but the entire business network as well. For the success, it is not enough that the interested parties are only within the company, but all those direct and indirect business partners have to be engaged, too, for business sustainability to be possible. And this is the second important element of the social component in business sustainability. The third element of the social component implies that for achieving business sustainability, much time is needed, along with consistency with the long-term perspective. The fourth element of the social component indicates that sustainable business demands real dedication and commitment since it is necessary to invest much effort, and its implementation is very complex. Corporative culture, with its policies, principles, norms and values, represents an essential fifth element of the social component. It is crucial to integrate sustainability culture with the companies culture to speed up green programs and reach desired performance (Galpin et al., 2015). The next element attaches great importance to the company's reputation. It is clear that reputation will have a strong negative influence if there is public discontent regarding the efforts the company makes for business sustainability. This is why the public needs to be acquainted with all the efforts of the company so the company can further improve its business sustainability.

This is the seventh element of the social component in business sustainability. Ecological aspects of business sustainability deal with the total e-footprint a company and its co-operators leave in the eco-system. The emission of harmful carbon compounds represents a crucial part of business sustainability. The evaluation and measuring of carbon footprints is the first element of the ecological component. It is a crucial measure of greenhouse gases and carbon dioxide that contribute to global warming. The second element of the environmental component is climatic changes and global warming, i.e. standardized monitoring and testing of the effects human activities have on them. Many different initiatives in and outside the company are of extreme importance for reducing the e-footprint in the environment, which is also the third element of the ecological component for business sustainability. For instance, companies collaborative approach to increasing innovation on environment and acceptance them is fundamental for sustainability (Antonioli et al., 2013). It is essential to understand that business sustainability has to imply a comprehensive strategy and not just a few isolated efforts and attempts. In line with that, the programs for the improvement of environmental protection have to be developed on eternal principles and focus on all that can be used for the welfare of the environment. These programs for improving ecological protection represent the fourth element of the ecological component in business sustainability. Product dematerialisation represents one of the innovative solutions of the ecological component. It is important to understand that pollution and e-footprint of the existing and future products and services can be minimized through the manufacturing life-cycle, including recovery and/or recycling. Here should be mentioned the circular economy, that has the potential to increase sustainable economic growth. The circular economy is based on reusing processes, recycling and reconditioning (Cleary, 2009). In order to establish the impact of an individual business subject on the environment, environmental performance indicators have been developed, based on which successfulness regarding environmental protection can be evaluated. For this purpose, a set of variables has been created, establishing the actual efficiency and productivity of environmental management at the specific business subject (Jasch, 2000). There are two main groups of the basic indicators of environmental activities and performances. The first group is made of the environmental operational indicators such as environmental site planning, energy consumption, maintenance of equipment, air pollution control, noise pollution control, water pollution control, waste pollution control. The second group of the basic indicators of environmental activities and performances are environmental performance indicators, and it consists of the indicators related to site environment, regulatory compliance and auditing activity. Many business subjects have become successful in managing the environment due to the implementation of the ISO 14001 (Environmental Management Systems EMSs). Needless to say, the influence of the introduction of the ISO 14001 (Environmental Management Systems, - ISO 14001 EMS) is very important for the successfulness of the business subject. It is very important to understand the broader context of environmental protection and sustainability in a national economy. Moreover, we find scientific papers in the literature suggesting that the degree of the environmental innovation, the degree of recycling and renewable energy use have positive impacts on the economic growth in a country (Ruiz-Real et al., 2018). It is of great significance to understand the implications of introducing the ISO 14001 (Environmental Management Systems, - ISO 14001 EMS) on the competitiveness and cost-effectiveness of the economic subject i.e. on its business successfulness. Literature offers a significant number of papers suggesting how the implementation of the ISO 14001 (Environmental Management Systems, - ISO 14001 EMS), leads not only to positive influence on the environment but the implementation also positively influences many other business segments. There are papers whose findings clearly show how the introduction of the ISO 14001 (Environmental Management Systems, - ISO 14001 EMS) can increase customer satisfaction (Hui et al. 2001). It is important to mention that the ISO 14001 implementation also positively influences business reputation, and on the other hand,

increases profitability of the economic subject (Sambasivan & Fei, 2007). There are authors that point to the fact that due to the ISO 14001 system, it is possible to intensify customer loyalty, which is an important element for the business success of any economic subject (Chittaie, 2012). It is a well-known fact that loyal customers ensure the future on the market. Moreover, literature offers studies that prove how the ISO 14001 system leads to the increase of the market share, (Tan, 2005). The implementation of this system enables successful environmental management; the costs are reduced, and the product and service quality are increased since there is less waste; there are savings in the consumption of raw materials, electricity, water and gas (Zutshi & Sohal, 2004). It is very important to mention the paper where the authors claim that it pays to be ecologically aware from the business point of view as well. Namely, they have tried to prove that if a business subject, for example, reduces the emission of greenhouse gases successfully, reduces air pollution etc., it influences the costs reduction and the business success (King & Lenox, 2001). Therefore, the success of a business subject regarding environmental protection positively reflects on cost reduction and, consequently, positively affects business successfulness.

3. EMPIRICAL RESEARCH ON ENVIRONMENTAL PROTECTION ADOPTED BY THE BUSINESS SUBJECTS IN THE REPUBLIC OF CROATIA

After detailed secondary data analysis and following the foreign research streams, the research instrument (a questionnaire) was designed which investigated attitudes towards environmental protection, the importance of environmental protection for company strategy and implementation and certification of environmental management systems in companies. The primary, empirical research was conducted from May to September 2019 via the Survey Monkey platform, and the link for the questionnaire was distributed via business emails, sent to the companies experts in this area.

3.1. Research instrument and sample characteristics

The research was conducted on a sample of 95 companies in the Republic of Croatia. The respondents were instructed beforehand and familiarized with the goal and purpose of the research. A base of email addresses of the individuals that work in the companies that are devoted to environmental protection was created. A questionnaire was designed in the SurveyMonkey software and the link leading to the questionnaire was forwarded along with the invitation to participate in the research. The goal of the research was to define the importance Croatian companies give to environmental protection. The questions in the questionnaire related to general data about the company (legal form, form of ownership, time on the Croatian market, total profit in 2018, description of the market the company operates on, the number of employees, the share of employees with high education). Furthermore, in the questionnaire, the respondents were asked to express their level of agreement with the statements relating to the evaluation of the attitude their company holds towards environmental protection. A Likert scale was used, marked from 1-5, where 1=completely disagree, 2=disagree, 3=neutral, 4=agree, 5=completely agree. Then, the respondents were asked to state their opinion on how important environmental care was as a determinant of strategy of their company (completely irrelevant, slightly relevant, neither relevant nor irrelevant, relevant, extremely relevant) and if their company has implemented and certified the system of quality management, according to the ISO 9000 norm and the environmental management system, according to the ISO 14001:2004. At the end of the questionnaire, the respondents were asked to write the name of the department they work in, their position in the firm, years of experience in the logistics industry and the data on gender, age and the level of education.

Figure 1: General data on Croatian companies

	Frequency	Percent
Legal form		
joint-stock company	13	13.7
limited liability company	69	72.6
limited partnership	2	2.1
general partnership	11	11.6
other legal forms	13	13.7
Form of ownership		
private	4	4.2
state ownership	1	1.1
cooperative	3	3.2
mixed	87	91.6
Years on Croatian market		
less than 5 years	2	2.1
5 to 10 years	11	11.6
more than 10 years	82	86.3
Total profit in 2018		
less than 100 million HRK	56	58.9
100 to 500 million HRK	7	7.4
500 to 1 billion HRK	5	5.3
1 to 10 billion HRK	4	4.2
more than 10 billion HRK	23	24.2
do not know/do not want to answer	56	58.9

Source: primary research

Most Croatian companies that have participated in the research, are limited liability companies (72.6%), then joint-stock companies and companies of other legal forms (13.7%). Furthermore, most Croatian companies are in mixed ownership (91.6%) and 86.3% of them operate for more than ten years on the Croatian market (Figure 1.). The data on the total profit of the companies can be seen in Figure 2.

Figure 2: Markets where Croatian logistics companies operate

	Frequency	Percent
Bjelovar-Bilogora county	1	1.1
Brod-Posavina county	1	1.1
City of Zagreb	21	22.1
Istria county	1	1.1
Karlovac county	3	3.2
Krapina-Zagorje county	2	2.1
Lika-Senj county	1	1.1
Osijek-Baranja county	2	2.1
Primorje-Gorski Kotar county	1	1.1
Sisak-Moslavina county	2	2.1
Split-Dalmatia county	4	4.2
Šibenik-Knin county	1	1.1
Zadar county	1	1.1
Zagreb county	5	5.3
territory of the Republic of Croatia	39	41.1

Source: primary research

Most Croatian companies operate on the entire Croatian territory (41.1%), then in the City of Zagreb (22.1%) and Zagreb county (5.3%), Split-Dalmatia county (4.2%), while other companies listed only one county, which means they operate locally (as evident from Table x). As for other countries, the companies stated they operated in Europe: Bosnia and Herzegovina, Slovenia, Serbia, regions of the Balkans, Austria, Germany, Italy, in Asia and Africa. Even 71.6% of the logistics companies stated they had more than 50 users, then there are companies that have between 10 and 20 users (12.6%), the companies with 20 to 50 users (9.5%), and only 2.1% of those that have fewer than 5 users of their logistics services. In addition, regarding the number of employees, the structure is as follows: 35.8% of the employees have up to 10 employees, 37.9% of them have 10 to 50 employees, 7.4% of the companies have 50 to 250 employees and 18.9% of them have more than 250 employees. The visual representation in Table x shows the shares of employees with high education. Less than 25% of employees with high education work in 47.4% of the companies; 25% to 50% of the employees with high education are in 27.4% of the companies, 50 to 75% of the employees with high education work in 12.6% of the companies and more than 75% of the employees are in 12.6% of the companies.

Figure 3: Users of services and structure of employees in Croatian logistics companies operate

	Frequency	Percent
Number of users of the company's services		
fewer than 5 users	2	2.1
5 to 10 users	4	4.2
10 to 20 users	12	12.6
20 to 50 users	9	9.5
more than 50 users	68	71.6
Number of employees		
under 10 employees	34	35.8
10 to 50 employees	36	37.9
50 to 250 employees	7	7.4
over 250 employees	18	18.9
Share of employees with high education		
less than 25%	45	47.4
25% to 50%	26	27.4
50 to 75%	12	12.6
more than 75%	12	12.6

Source: primary research

Figure 4 shows the attitudes of the logistics companies towards the environment, measured by a Likert scale from 1 to 5, where 1= completely disagree and 5= completely agree. As presented in Figure 4, most respondents expressed their agreement with the following statements: *We monitor regularly and adhere to legislation concerning environmental protection* ($\bar{x}=4.16$; $SD=.971$); *We take care of the environment in our every-day business activities* ($\bar{x}=4.06$; $SD=1.029$); *Responsibility towards the environment is the key part of our company's strategy* ($\bar{x}=4.11$; $SD=.984$). Furthermore, the companies, to a lesser extent, publish the way they take care of the environment on their websites ($\bar{x}=2.76$; $SD=1.457$), which is not in line with the trends in the scientific literature.

Figure 4: Companies' attitudes towards environmental protection

Statements	Mean	Median	Mode	Std. Deviation	Variance	Min	Max
Responsibility towards the environment is one of the key components in our company's strategy.	4.11	4.00	5.00	.984	.968	1	5
Information on the ways we take care of the environment are published on the website of our company.	2.76	3.00	1.00	1.457	2.122	1	5
Support coming from the top management/owner is crucial for environmental care.	3.94	4.00	5.00	1.109	1.230	1	5
We take care of the environment in our everyday business activities.	4.06	4.00	5.00	1.029	1.060	1	5
Environmental care positively influences the business results of the company.	3.60	4.00	3.00	1.224	1.498	1	5
Environmental care represents a business opportunity for the company.	3.48	3.50	3.00 ^a	1.293	1.672	1	5
Environmental care implies costs for the company.	3.48	3.00	3.00	1.147	1.316	1	5
We monitor regularly and adhere to legislations concerning environmental protection.	4.16	4.00	5.00	.971	.943	1	5

a. Multiple modes exist. The smallest value is shown

Source: primary research

Then, the companies were asked how much, in their opinion, environmental care is important as a determinant of their company's strategy. The answers were as presented in *Figure 4*.

Figure 5: Importance of environmental care as the determinant of the strategy of companies

	Frequency	Percent
extremely irrelevant	7	7.4
slightly relevant	9	9.5
neither relevant nor irrelevant	15	15.8
relevant	39	41.1
extremely relevant	25	26.3
Total	95	100.0

Source: primary research

The respondents were asked if their company had implemented and certified the system of quality management, according to the ISO 9000 norm. Even 21 out of 95 companies answered they had implemented and certified the system of quality management, according to the ISO 9000 norm. One of the companies implemented the system in 2000, the other in 2001, the next one in 2010 and the next one in 2018; two companies implemented the system in 2013 and 2014, and three companies in 2015. It is alarming that even 34 respondents (35.8%) do not know if their company has implemented and certified the system of quality management, according to the ISO 9000 norm. Even 16 companies answered how their company had implemented and certified the environment management system, according to the ISO 14001:2004. One company implemented the system in 2012, the other in 2013, then the next in 2015, the next in 2018 and the next in 2019. Two companies implemented the system in 2016.

Figure 6: Socio-demographic characteristics of the respondents

	n	%
Education		
secondary education	35	36.8
higher education	19	20.0
high education	38	40.0
MA, PhD	2	2.1
Years		
less than 30	8	8.4
30 to 40	35	36.8
40 to 50	31	32.6
50 to 60	17	17.9
over 60	3	3.2
Gender		
Male	42	44.2
Female	52	54.7

(Source: primary research)

Most respondents are female, 54.7%, and 44.2% are male respondents. Regarding the age of the respondents, 8.4% of the respondents are younger than 30, and 3.2% older than 60. There are 17.9% of the respondents from 50 to 60 years of age, 32.6% from 40 to 50, and 36.8% of the respondents are between the ages of 30 and 40. Most respondents (60.0%) have high or higher education, and then follow those with Master's or Doctoral degrees (2.1%), while 36.8% of them are unemployed.

4. CONCLUSION

The concern for the environment at the global and national level has been continued also in this century as well, but now these issues grow exponentially. Environmental pollution becomes an extremely negative and alarming trend. Unfortunately, modern solutions regarding limited energy resources, industry, logistics etc. largely become also the sources of environmental pollution. The world realized long ago what catastrophic consequences environmental pollution can lead to. Therefore, efforts are made to act and create such a society that will develop without polluting its environment. In general, the world has been trying to stimulate and boost the production of eco-friendly products with national and international regulations in order to reduce the negative impact on the human environment. However, these efforts are still insufficient. Environmental protection is a very important area and almost no reasonable one doubts, but its actual implementation in practice is a huge problem. One of the main challenges of modern society regarding the protection of the environment are connected with the reduction of CO₂ emissions. The importance of the actions companies undertakes regarding environmental protection was realized long in the past and therefore, data publishing about their efforts has been stimulated and, in some countries, it has been made obligatory. Namely, long ago, efforts were started to be made for policies and procedures regarding environmental protection. This has been significantly supported by the guidelines of the international organization for the ISO 14001 standards, as well as the Eco-management and Audit Scheme issued by the European Union (EMAS), and with their emergence, the standardization of corporate practices for environmental protection has been largely improved. Based on the empirical data, we can conclude that Croatian companies regularly monitor and adhere to legislation concerning the environmental protection, they take into consideration environment

in their every-day business activities and put the environmental protection in the heart of their company's strategy. It is important to understand that business sustainability must imply a comprehensive strategy and not just a few isolated efforts and attempts. In line with that, the programs for the improvement of environmental protection have to be developed on continuous principles and focus on all that can be used for the welfare of the environment.

LITERATURE:

1. Aguilera, R.V., Rupp, D.E., Williams, C.A. and Ganapathi, J. (2007). Putting the S Back in Corporate Social Responsibility: A Multilevel Theory of Social Change in Organizations, *Academy of Management Review*, 32, pp. 836-863.
2. Antonioli, D., Mancinelli, S. and Mazzanti, M. (2013). Is environmental innovation embedded within high-performance organisational changes? The role of human resource management and complementarily in green business strategies, *Research Policy*, 42(4), pp. 975-988.
3. Bagur-Femenias, L., Llach, J. and Alonso-Almeida, M.M. (2013). Is the adoption of environmental practices a strategical decision for small service companies? An empirical approach, *Management Decision*, 51(1), pp. 41–62.
4. Bieger, T. and Wittmer, A. (2006). Air transport and tourism - Perspectives and challenges for destinations, airlines and governments. *Journal of air transport management*, 12(1), pp. 40-46.
5. Bina, O. (2013). The green economy and sustainable development: an uneasy balance?, *Environment and Planning C: Government and Policy*, 31, pp. 1023-1047.
6. Blanchard O. and Leigh D. (2013). Growth Forecast Errors and Fiscal Multipliers, in: *IMF Working Paper*, no. 1.
7. Buchholz, R. (1998). Principles of Environmental Management: The Greening of Business (Prentice Hall, New Jersey).
8. Cardwell, L.K. (1984). Between Two Worlds: Science, the Environmental Policy: Emergence and Dimension. 2nd Ed. Durham NC: Duke University Press.
9. Carmichael, J. and Brulle, R. (2017). Elite cues, media coverage, and public concern: an integrated path analysis of public opinion on climate change, 2001–2013., *Environmental Politics*, 26(2), pp. 232-252.
10. Chittaie, R. (2012). Customer relationship business management and business strategies, *International Journal of Organizational Leadership*, 1(1), pp. 13–22.
11. Cleary, J. (2009). Life cycle assessments of municipal solid waste management systems: A comparative analysis of selected peer-reviewed literature, *Environ. Int.*, 35, pp. 1256–1266.
12. Esty, D. C., Levy, M.A., Kim, C.H., de Sherbinin A., Srebotnjak T. and Mara V. (2008). 2008 Environmental Performance Index. New Haven: Yale Center for Environmental Law and Policy.
13. Galpin, T., Whittington, J.L. and Bell, G. (2015). Is your sustainability strategy sustainable? Creating a culture of sustainability, *Corporate Governance*, 15(1), pp. 1-17.
14. García-Sánchez, I.M., Alexandre das Neves Almeida, Th. and Paes de Barros Camara, R. (2015). A proposal for a Composite Index of Environmental Performance (CIEP) for countries, *Ecological Indicators*, 48, pp. 171-188.
15. Hassini, E., Surti, C. and Searcy, C. (2012). A literature review and a case study of sustainable supply chains with a focus on metrics, *International Journal of Production Economics*, 140(1), pp. 69-82.
16. Hui. I. K., Chan. A. H. S. and Pun. K. F. (2001). A study of the EMS implementation practices, *Journal of Cleaner Production*, 9, pp. 269-276.
17. International Monetary Fund. Secretary's Department (2013), International Monetary Fund Annual Report 2013: Promoting a More Secure and Stable no. Global Economy.

18. Iqbal, Q., Hassan, S.H., Akhtar, S. and Khan, S. (2018). Employee's green behaviour for environmental sustainability: a case of banking sector in Pakistan, *World Journal of Science, Technology and Sustainable Development*, 15(2), pp. 118-130.
19. Jabbour, C.J.C., Sarkis, J., de Sousa Jabbour, A.B.L., Renwick, D.W.S., Singh, S.K., Grebinevych, O. and Godinho Filho, M. (2019). Who is in charge? A review and a research agenda on the 'human side' of the circular economy, *Journal of Cleaner Production*, 222, pp. 793-801.
20. Jasch, C. (2000). Environmental performance evaluation and indicators. *Journal of Cleaner Production*, 8(1), pp. 79-88.
21. Jones, K., T. Alabaster and J. Walton (1998). Virtual Environments for Environmental Reporting, *Greener Management International*, 21, pp. 121-137.
22. Joshi, J., Krishnan, R. and Lavel L., (2000). Estimating the hidden costs of environmental regulation, *The Accounting Review*, 76(2), pp. 171-198.
23. King, A. A. and Lenox, M. J. (2001). Does it really pay to be green? An empirical study of firm environmental and financial performance. *Journal of Industrial Ecology*, 5(1), pp. 105– 116.
24. Kolk, A. (2003). Trends in Sustainability Reporting by the Fortune Global 250, *Business Strategy and the Environment*, 12, pp. 279-291.
25. Mahalingam, S. and Ramesh B. (2013). Experimental and Emission Analysis of Rubber Seed Oil and Jatropha Oil Blends with Diesel in Compression Ignition Engine, *IREME Journal*, 7(5), pp. 955-959.
26. Metrick, C. (2001). Env Reporting Forum IRCC Reports on Corporate Environmental Performance in Japan', Retrieved 13.01.2020 from http://www.listserv.moses.com/pipermail/env_reporting_forum/2001/
27. Neumann, K., Anderson, C. and Denich, M.(2018). Participatory, explorative, qualitative modeling: application of the iMODELER software to assess trade-offs among the SDGs. Economics: The Open-Access, *Open-Assessment E-Journal*, 12 (25), pp. 1-19.
28. Ruiz-Real, J.L., Uribe-Toril, J., Valenciano, J.D.P. and Gázquez-Abad, J.C. (2018). Worldwide Research on Circular Economy and Environment: A Bibliometric Analysis. *Int. J. Environ. Res. Public Health* 15, 2699.
29. Sambasivan, M. and Fei, N.Y. (2007). Evaluation of critical success of implementation of ISO 14001 using analytic hierarchy process (AHP): A case study from Malaysia. *Journal of Cleaner Production*, 16, pp. 1424-1433.
30. Tan, L. P. (2005). Implementing ISO 14001: Is it beneficial for firms in newly industrialized Malaysia? *Journal of Cleaner Production*, 13(4), pp. 397-404.
31. Teixeira, A.A., Jabbour, C.J.C., de Sousa Jabbour, A.B.L., Latan, H. and De Oliveira, J.H.C. (2016). Green training and green supply chain management: evidence from Brazilian firms, *Journal of Cleaner Production*, 116, pp. 170-176.
32. Vos, R.O. (2007). Defining sustainability: a conceptual orientation, *Journal of Chemical Technology and Biotechnology*, 82(4), pp. 334-339.
33. Zutshi, A. and Sohal, A. (2004). Environmental management system adaption by Australasian organizations: Part 1: Reasons, benefits, and impediments. *Technovation*, 24(4), pp. 335–357.
34. Wagner, B. and Svensson, G. (2014), A framework to navigate sustainability in business networks: the transformative business sustainability (TBS) model, *European Business Review*, 26(4), pp. 340-367.
35. White, A. (1999), Sustainability and the Accountable Corporation, *Environment*, 41(8), pp. 30-43.
36. Wu, Z. and Pagell, M. (2011). Balancing priorities: decision-making in sustainable supply chain management, *Journal of Operations Management*, 29(6), pp. 577-599

THE CONCEPT OF ADAPTIVE INFORMATION SECURITY MANAGEMENT IN DIGITAL ORGANIZATIONS BASED ON THE ANALYSIS AND MONITORING OF BUSINESS PROCESSES

Zinaida Rodionova

*Novosibirsk State University of Economics and Management, Russian Federation
z.v.rodionova@edu.nsuem.ru*

Irbulat Utepbergenov

*Institute of information and computational technologies, Republic of Kazakhstan
i.utepbergenov@gmail.com*

ABSTRACT

During the large-scale transition to digital economy technologies, the challenges of protection of information resources are compounded by dynamic changes in business processes due to the interference of the external environment that directly affect the internal environment of the organization. External changes include changes caused by the legislation or regulation documents of superior bodies. Internal changes can be caused by business processes optimization, joint use of information resources with other enterprises, changes in information processing technologies, etc. These changes affect all elements of the information security system: information resources, concept papers, instructions and regulations, configuration of software and hardware solutions. Information support of the changing business processes requires new information resources and their security supposes special approach. The article describes the process of adaptive information security management of a digital organization on the conceptual level based on the analysis and monitoring of business processes that are dynamically changing under the influence of external and internal environment. A model of information security management system designing and development process that meets the ISO/IEC 27000 family standards with the possibility of implementing adaptation mechanisms is presented in general way. The methodology, tools and methods of system analysis to be used in the project on the development and implementation of information security management system of an organization are suggested. The approach to organization information security risk management based on the analysis of business processes is presented.

Keywords: *business process, concept, digital organization, information security management*

1. INTRODUCTION

The steady growth of information security malfunctions, confirmed by numerous foreign and domestic studies (InfoWatch, SearchInform, PwC, etc.) makes the task of ensuring the protection of information resources and IT infrastructure a high priority. Thus, the Doctrine of Information Security of the Russian Federation, approved by the President of the Russian Federation on 5 December, 2016, puts "protection of information resources both existing and emerging on the territory of Russia" in the list of four main components of national interests in the information sphere. The very essence of the modern enterprise activity supposes a change or a significant modification of the business model, as well as a dynamic change of processes and technologies throughout the life cycle of a product and/or project, which makes the use of the classical information security management system (hereinafter ISMS) not effective. Such approach does not allow to quickly track and apply these changes to the settings of ISMS, as a result, the management process is time-consuming, expensive, and poorly formalized. It should be noted that functioning of an organization in digital environment leads to emergence of new threats and vulnerabilities for information systems, such as cyber terrorism, confidential information leakage, the risks of electronic payments, unreliable data networks, the threat of

"identity theft" due to the use of digital identification, the risks of "Internet of things" and others that need to be studied and require development of counteractions methods. In addition, greater attention should be given to the protection of innovations used in producing goods and providing services [1]. Establishing ISMS of an organization based on the analysis and monitoring of business processes will ensure its effective adaptation to changes in business environment and the specific features of generated information resources.

2. USE OF PROCESS APPROACH FOR AN ORGANIZATION INFORMATION SECURITY MANAGEMENT

All above mentioned allows to conclude that the effective ISMS of an organization can be created using process approach that is also stated in section 0.2. "Process approach" of International standard ISO/IEC 27001 "Information technology. Security techniques. Information security management systems. Requirements." The essence of the process or system approach is the ability to analyse the system as a whole, not its parts, but its practical implementation for the purpose of information security management faces with difficulties, which on the one hand are connected with the lack of a description of clear mechanisms, on the other with the uncertainty of knowledge sources. The key role in information security management of an organization is played by the information security management system (hereinafter ISMS), which is understood as a system that allows establishing, implementing, operating, monitoring, reviewing, maintaining and improving information assets security to achieve the strategic goals of an organization. An ISMS design process is described in detail in the ISO/IEC 27000 family of standards "Information security management systems". To structure management process, the "Plan-Do-Check-Act" (PDCA) model is adopted [2]. In accordance with process approach and PDCA model four steps in designing ISMS are defined: the ISMS establishing; implementing and working of the ISMS; monitoring and review of the ISMS; update and improvement of the ISMS. Next, we consider in more detail milestones and stages of the ISMS design project (hereinafter the ISMS project), which supposes application of system analysis methods.

3. USE OF SYSTEM ANALYSIS METHODS AND TOOLS FOR ISMS DESIGN AND DEVELOPMENT

Figure 1 shows the business process model "ISMS design and development", made in the IDEF0 notation of functional modelling. Statement of work, as well as work conditions are developed in accordance with ISO/IEC 27003 "Information technology - Security techniques - Information security management systems - Guidance". The methods and tools of system analysis suggested for the implementation of works related to the design and development of ISMS, which will formalize the process of creating ISMS and ensure the subsequent adaptation of the system to changes in the external and internal environment are highlighted in the figure in bold italics. The work of the first phase of ISMS development begins with the approval of the guidelines for the launch of the ISMS project. The justification for the implementation of this project is made by describing the use of ISMS for this organization and drawing up a draft project plan. To manage an ISMS project ISO 21500 standard "Guidance on project management" can be used. During the first phase, an organization's priorities for the development of ISMS are specified and ISMS main objectives are set. The priorities of ISMS are determined in accordance with the strategy of activities, indicated in "Business Strategy", a document which can show business objectives graphically in the form of a "Strategic map" [3]. DFD (Data Flow Diagram), methodology of graphic structural analysis can be used to determine the priority areas of information security of an organization. The model is recommended to display the priority directions of economic activity of an organization and the corresponding information systems and information flows.

This model allows to analyse, on the one hand, the causal relationship between possible violations of confidentiality and/or violations in the steady operation of information systems, and, on the other hand, violations of the normal course of current business operations.

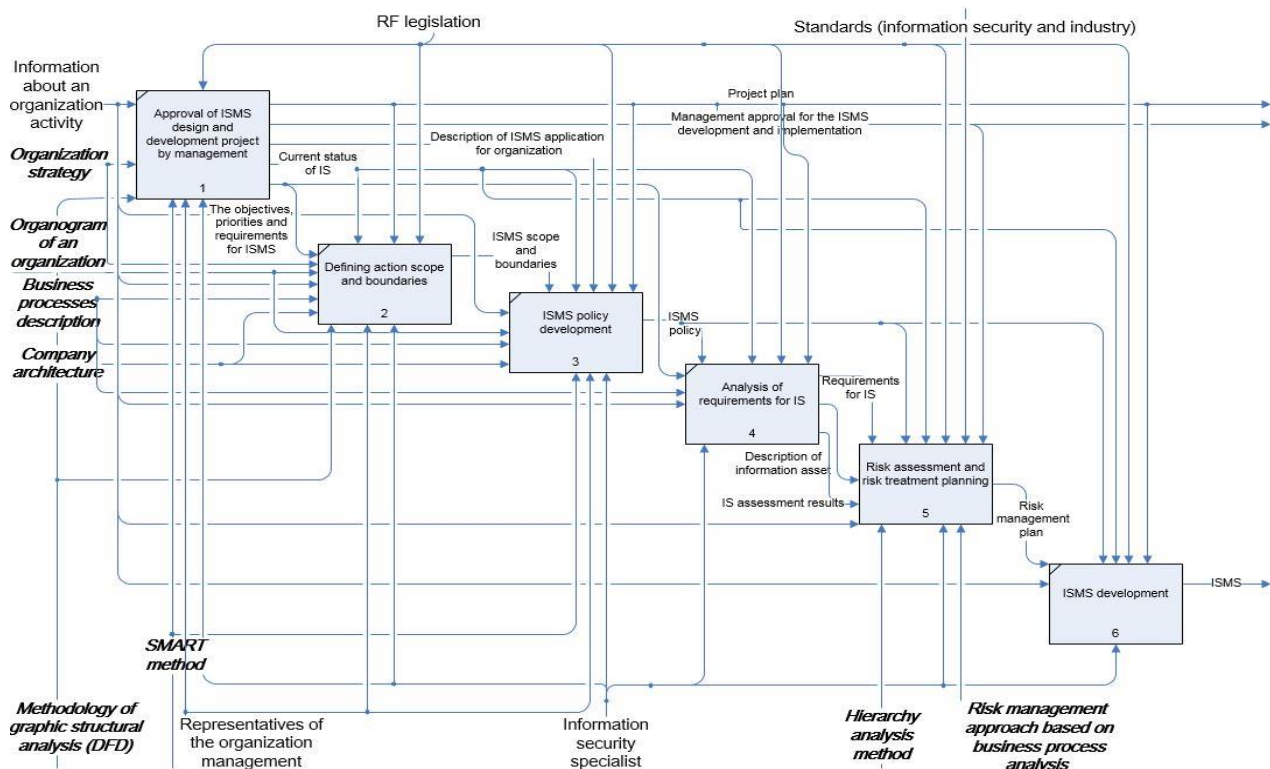


Figure 1: Business process model "ISMS design and development"

The DFD model can also be useful to demonstrate how information security contributes to the achievement of the strategic goals of an organization. The objective of ISMS implementation should be aimed at improving the risk management process of information security, the effectiveness of management, as well as the development of competitive advantages of an organization. It is advisable to use the "SMART" method [4] to set the ISMS objective. Once the launch of ISMS design and development project has been approved by company management, the scope and boundaries of the system under development can be determined based on the requirements of all stakeholders, taking into account available assets and technologies. The following information on the activities of an organization will ensure the completeness and integrity of the results in the process of determining the scope and boundaries of the ISMS.

- Description of all activities and business goals of an organization ("Business Strategy", graphical model "Strategic map").
- Description of the organogram of an organization.
- Description of business processes of an organization (types of information resources).
- Enterprise architecture (preferably a graphical diagram of organization information systems and supporting infrastructure. ArchiMate modelling language can be used).
- Based of the obtained information on the activities of an organization the following works are to be carried out:
 - The identification of the interested parties related to the ISMS and their requirements.
 - A description of the external and internal concerns that are equally important in order to meet the business strategic objectives, and to ensure the effectiveness of the ISMS.
 - The scope and boundaries of the ISMS shall be recorded in the outcome document.

Any exclusion of an entity from the scope of the ISMS needs to be justified in detail. The next stage is the establishment of the information security policy. As a rule, the ISMS policy is an extended version of the organization information security policy, so below we will describe the process of a general document development. It is advisable to start the development of information security policy by defining its objective, which can also be formulated through the SMART method [4]. As a rule, the objective usually reflects the position of the management on the information assets protection. The primary objective and several supporting objectives, facilitating its implementation, can be identified. The primary objective of an organization in the sphere of the information protection is associated with the provision of confidentiality, integrity and availability of information. The set of strategic information security objectives and the corresponding indicators of effectiveness can be presented graphically on a strategy map. It is important to note that the information security strategy map can be developed as a model for a specific department of the organization (for example, for its information security department). The design of the information security strategy map seems to be more effective within the framework of a detailed business level strategy maps. Below follows the description of the strategy of the set objectives implementation. The 5 P's of Strategy system, developed by the Canadian scientist Henry Mintzberg, is a popular approach in the general theory of the strategic management. CISCO, Gartner, ISACA and other similar approaches and models can also be used for the business-oriented information security strategies development. For the efficiency and utility reasons ISO/IEC 27003 recommends that along with the ISMS policy development stage, the analysis of information security requirements should be carried out. This development stage begins with the definition of the information security requirements for the ISMS process. The primary information is usually obtained from the descriptions of business processes thus allowing to assess the impact of information security incidents on the business activities. An information security specialist needs to identify how important the information circulating in each of the business processes is. All the data obtained are recorded in the Information Security Outcome Document, which shall include: the definition of the main business processes, functions, entities, information systems and communication networks; business information assets; classification of the most important business processes and assets; information security requirements; list of known vulnerabilities; requirements for information security training and education. It is recommended that the organization identified assets be detailed and described as follows: the business process name and its description (emphasis on the activities associated with the information asset – production, storage, transfer, removal); the importance of the business process (critical, important, supporting); the owner of the business process; business processes providing input and output data; ICT; the asset classification. Based on the information obtained, a preliminary assessment of the information security is made through the comparison between the current state of the information security and the objectives of the organization. The ISMS functioning is based on the process of the effective risk management. The information security threats analysis and risk assessment is a continuous ongoing process, the baseline data are determined at the initial stage of the ISMS design, then in the process of its functioning changes in threats and risks are being monitored, their reanalysis and evaluation being carried out. Guidelines for risk management are provided by ISO / IEC 27005 standard Information technology - Security techniques - Information security risk management. Risk management begins with the choice of a risk assessment methodology [5] and the subsequent risks definition, analysis and assessment in line with the chosen methodology. Most popular methods of risk assessment include: CRAMM, NIST two-factor model, RiskWatch, GRIF system, methodology for identifying the urgent threats for the personal data in the personal data information systems, Taubenberger-Jürjens method, etc. In accordance with the chosen method, the following activities are to be carried out: identifying threats and their sources; identifying existing and planned measures and means of control and

management; identify vulnerabilities; determining the consequences of the loss of confidentiality, safety, availability, non-repudiation or other violation of the information security requirements; assessing the impact of incidents occurred; assessing the probability and level of each risk; compare the level of risk with the criteria of risk assessment and acceptance. The information obtained is recorded in the risk management plan. As a rule, the data for this stage are usually collected from the employees and external experts questionnaires and interviews, carried out during the pre-project survey and follow-up audits, thus complicating the further update of the information. The authors propose an approach to risk management based on the analysis of business processes, the feasibility of which is justified in [5]. At the stage of the ISMS design the final plan for the ISMS implementation through the development of the organization security system based on the selected risk treatment options is compiled, as well as the requirements for keeping records and documents, combining ICT security measures, physical and organizational processes and the development of the specific ISMS requirements.

4. INFORMATION SECURITY RISK MANAGEMENT BASED ON THE BUSINESS PROCESS ANALYSIS

The analysis of formal models of business processes allows the organization to obtain the information needed for the execution of a wide range of information security tasks. In particular an automated approach to the formalization and updating user access rights based on the analysis of the business process models in EPC notation (Event-Driven Process Chain) is proposed in [6]. The approach to risk management based on the analysis of the organization business processes involves the use of a formal business process model as the main source of information for the threats and vulnerabilities analysis, as well as the further information security risks assessment. Analysis of the most common methods of risk assessment [5, 7], allowed us to determine the list of objects and their characteristics necessary for the design of the model of threats and vulnerabilities: the information asset; the department in charge of the information asset; the information carrier; information system; the user; characteristics of the user access to the information; data transmission channel; storage resources; processing technology. This list is not exhaustive and can be extended for the purposes of a specific methodology of designing a threat and vulnerability model. Figure 2 presents the knowledge metamodel, including functional, organizational and information models of a business process and allowing to identify and update the organisation information security risks. The list of characteristics of users' access to the information is given in the callouts. The organizational model defines the list of performers of the business process, scopes their duties and responsibilities. The amendments to this model following the termination of employment, transfer to another position, new employments, organizational structure changes, etc. through the change management process influence the processes of allocation of duties and responsibility, managing data access, risks, incidents and vulnerabilities. The business process model will help to increase employees' awareness of information security issues, ensure the continuity of the business process, and update the access control model. The information model reflects the organization information systems, their units, functions, users and serves as a data source for the purposes of the management and monitoring of the information infrastructure and access rights management.

Figure following on the next page

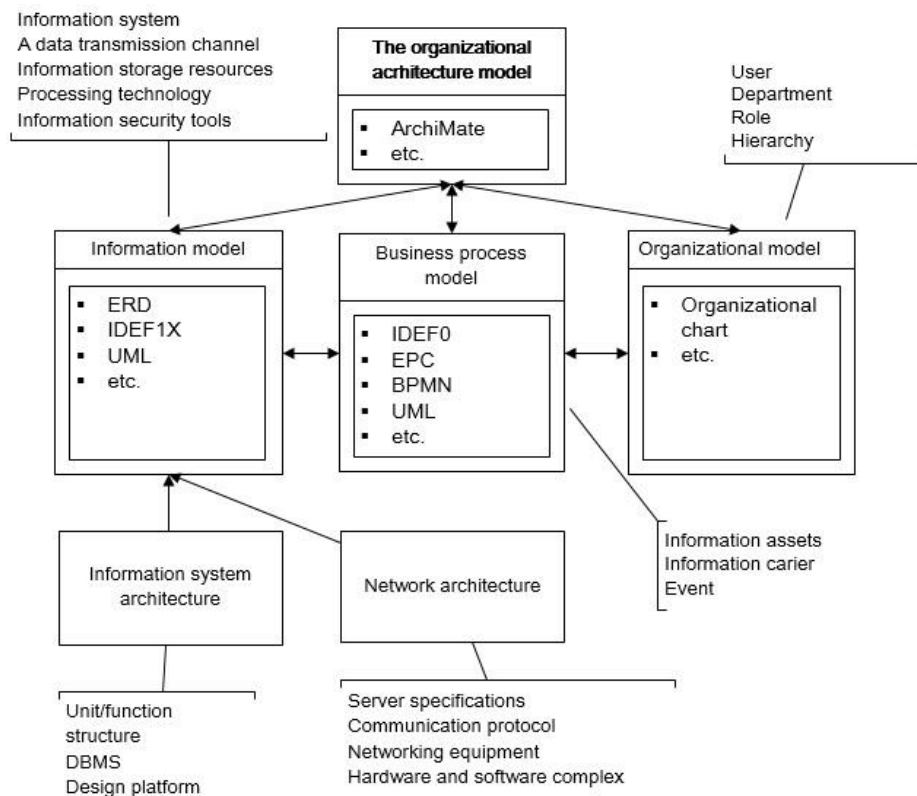


Figure 2: Knowledge metamodel of the information security risk management

It is important to note that the data extracted can serve as a basis for identification of the protected assets in relation to the objects of the business process, when: each vulnerability can be assigned to an object, determining this vulnerability associated with the method of processing, transmission and / or storage; each threat is aligned with the aspects of information security, the violation of which can lead to a threat (privacy, availability and / or integrity); the source (such may be the executor of the business process or a person who does not participate in the execution of the business process, force majeure events, etc.) is determined for each threat.

5. CONCLUSION

The logic of reasoning leads to the following conclusion: the design of the information security management system based on the analysis and monitoring of business processes will ensure its effective adaptation to the changes in the business environment and specific features of the generated information resources. In the future, it is necessary to conduct further research on what level of maturity of the processes an organisation should reach in order to ensure the implementation of the developed adaptation mechanism.

LITERATURE:

1. Utepbergenov, I., Bobrov, L., Medyankina, I., Rodionova, Z., Toibaeva, S. (2019) *About the Concept of Information Support System for Innovative Economy in the Republic of Kazakhstan*. Recent Research in Control Engineering and Decision Marketing, vol. 199, pp. 515-526.
2. Rodionova, Z., Utepbergenov, I. (2018) *System concept to the creation of adaptive mechanisms for security management of information resources*. Computational Technologies. vol.1, pp. 227-238.
3. Rodionova, Z., Pestunova, T. (2016) *Enterprise information security management based on business process approach: Monograph*. NSUEM, Novosibirsk.

4. Petrie, J. (2017) *Aligning security with changing business strategy, goals and objectives* //IDG CONTRIBUTOR NETWORK. Retrieved 01.09.2019 from <https://www.csoonline.com/article/3231994/aligning-security-with-changing-business-strategy-goals-and-objectives.html>.
5. Rodionova, Z., Pestunova, T., Gorinova, S. (2014) *Analysis of information security aspects based on formal business-process models*. Tomsk State University of Control Systems and Radioelectronics, pp. 150-156.
6. Rodionova, Z. (2015) *Design of Algorithms for Automated Access Control Based on Business Process Approach*. Computational Technologies. vol.1, pp. 218-224.
7. Utepbergenov, I, Bobrov, L., Medyankina, I., Rodionova, Z., Toibaeva, S. (2019) *About the Concept of Information Support System for Innovative Economy in the Republic of Kazakhstan*. Recent Research in Control Engineering and Decision Marketing, vol. 199, pp. 515-526.

THE DYNAMIC OF INDICATORS OF THE FINANCIAL MARKET IN THE PROCESS OF CYCLICAL DEVELOPMENT IN THE NATIONAL ECONOMY

Viktor Barkhatov

*Institute of Economics of industries, business and administration
Chelyabinsk State University
Chelyabinsk, Russia
ecoba@csu.ru*

Ekaterina Lymar

*Institute of Economics of industries, business and administration
Chelyabinsk State University
Chelyabinsk, Russia
lymar@csu.ru*

Ivan Koptelov

*Institute of Economics of industries, business and administration
Chelyabinsk State University
Chelyabinsk, Russia
koptelov@csu.ru*

ABSTRACT

The market economy assumes a cyclical economic development. Many of the scientists have identified the relationship between the economic and financial cycles. The emergence of financial markets in the early 20th century gave rise to the theory of financial cycles, which shape financial ups and downs, like economic cycles. It is necessary to identify and analyze indicators of financial cycles in the national economy, which make it possible to predict the ups and downs of the financial and, consequently, economic cycles. The article describes in detail the indicators characterizing the financial market and having an impact on the financial and economic cycles. The purpose of the article is to present the results of the analysis of indicators characterizing the financial market in the process of cyclical development of the national economy. The present study based on the analysis of eight relative indicators chosen to identify financial cycles in the Russian economy. The indicators are compiled in such a way as to cover as widely as possible all areas of the economy that may be affected in the event of General changes in the financial markets. In turn, information on the joint dynamics of economic variables in an aggregated form can be collected the basis of factor model. Within the framework of this approach, a statistically significant correlation between variables can be considered as a consequence of the influence of common factors on them (in this case, the phases of the financial cycle).

Keywords: *financial crisis, financial cycles, financial markets, financial recovery, national economy*

1. INTRODUCTION

Market economy assumes the circularity of economic development since it involves inflation, business climate, law of demand, and other factors. The emergence of financial markets in the early 20th century gave impetus to the development of the theory of financial cycles, which account for financial ups and downs similarly with economic cycles. Though the theory of financial cycles is today at its infant stage, it has been rapidly developing since the conceptual emergence of financial markets and the avowal of their significance for global economy.

The study is based on the analysis of eight relative indicators selected for identifying financial cycles in the Russian economy. The indicators are compiled in such a way as to cover as widely as possible all areas of the economy that may be affected in the event of General changes in the financial markets.

2. LITERATURE REVIEW

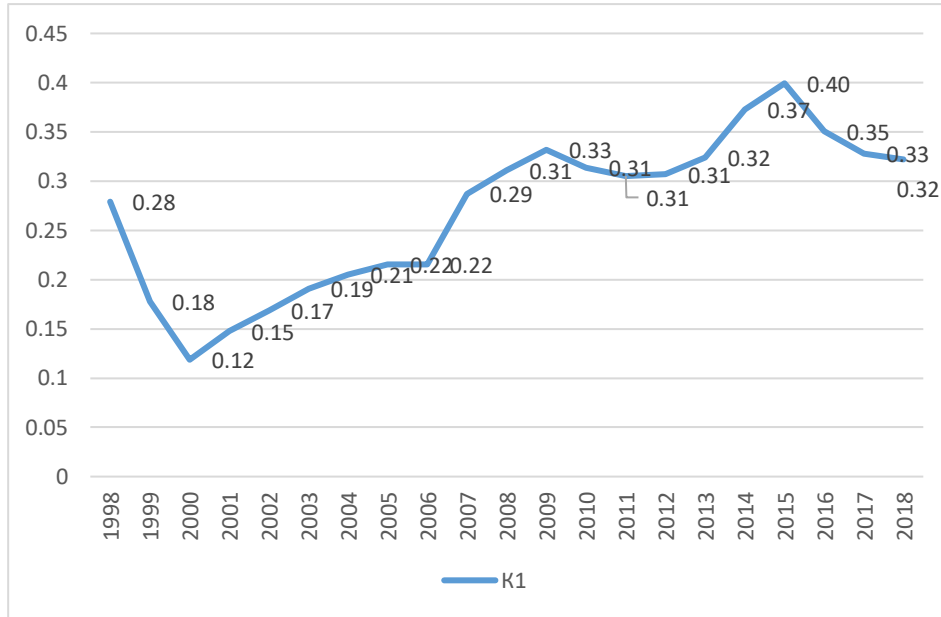
Many economists have spoken about the impact of the financial system on the cyclical nature of the economy. They identified various indicators of influence and developed methods for assessing it. A. Gelb pointed to the correlation of indicators of financial markets and phases of financial and economic cycles. Based on the regression analysis, R. Rajan and L. Zingales argue that the high degree of development of financial markets contributes to the development of new enterprises, especially in knowledge-intensive industries, which leads to overall economic and financial growth. In the early 1990s. R. King and R. Levine considered indicators of financial development of 77 countries for 1960-1989. their work was based on such indicators as: financial depth, the share of private banks in loans, credit to private business, the ratio of loans to private enterprises to GDP, and so on. They calculated significant coefficients for 77 countries and, based on the regression equation, found a strong relationship between them. In addition to banking indicators, Levine's further research took into account the role of the stock market in financial development. It was found that the initial level of stock market liquidity, along with the initial level of development of the credit system, has a positive correlation with future rates of economic growth, capital accumulation and labor productivity growth. T. Beck and N. Loayza investigated the impact of the development of financial intermediaries on the rate of investment savings. Their research did not confirm a stable relationship between these indicators. However, a statistical relationship was found between the development of financial intermediaries and GDP. These views confirmed the opinion. J. Schumpeter on financial development.

3. DYNAMIC OF INDICATORS OF THE FINANCIAL MARKET (1999-2018)

Indicator K1 - the ratio of banks ' requirements to the economy to GDP. This indicator is used to measure the debt burden at the macro level and is recommended by the Basel III international standards as a baseline for calculating the credit gap and determining the amount of regulatory capital. As extensive international practice shows, the creditworthiness of the real sector of the economy is a reliable harbinger of a full-scale banking and, as a consequence, financial crisis. The selected variable more correctly reflects changes in the credit load than, for example, the growth rate of new lending, since, being expressed as a percentage of GDP, the indicator is normalized by the size of the economy. [1] This suggests that, first, it is not affected by the natural cyclical demand for loans, and, secondly, it has a more smoothed dynamics than other similar indicators.

Figure following on the next page

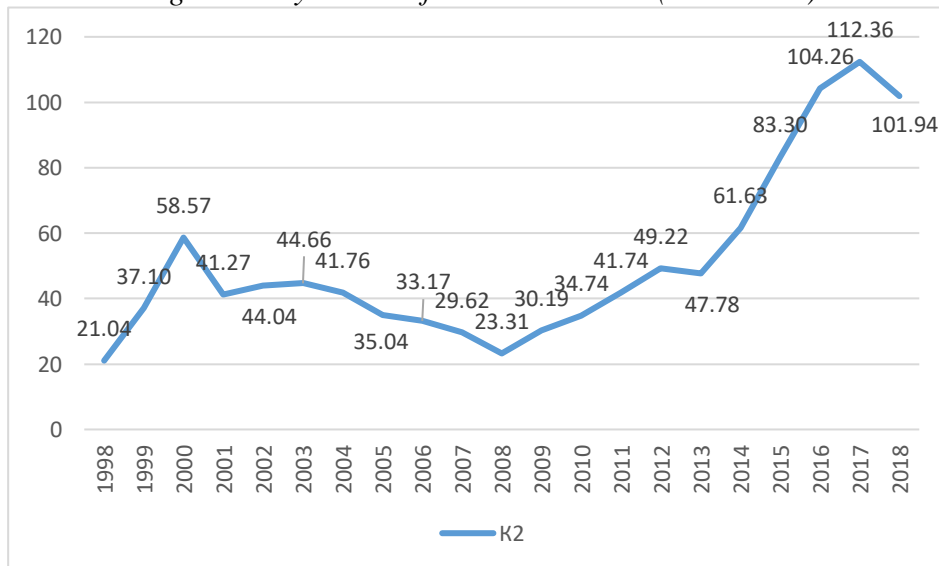
Figure 1: Dynamics of the K1 indicator (1998-2018)



Source: evaluated by authors

The end of the 90s – the beginning of the 2000s was marked by a decline in the K1 indicator. This is due to an increase in the number of loans issued to businesses and institutions. The same trend is observed in the historical downturns of the financial cycle-2007 and 2012-2013. The K2 indicator is the ratio of the M2 monetary aggregate to the country's gold and foreign exchange reserves (gold reserves). It reflects at the same time the degree of "pumping" of the economy with ruble liquidity and the ability of the regulator to ensure the convertibility of the national currency. International experience confirms that an increase in the ratio of M2 to gold reserves increases the likelihood of a currency crisis [5]. In addition, an increase in this indicator may accompany GDP growth or be associated with changes in the behavior of the population, when it is optimistic about the future dynamics of financial markets and seeks to accumulate savings. In this sense, the movement of the M2 indicator to the gold and foreign exchange reserve is closely related to both economic and financial cycles.

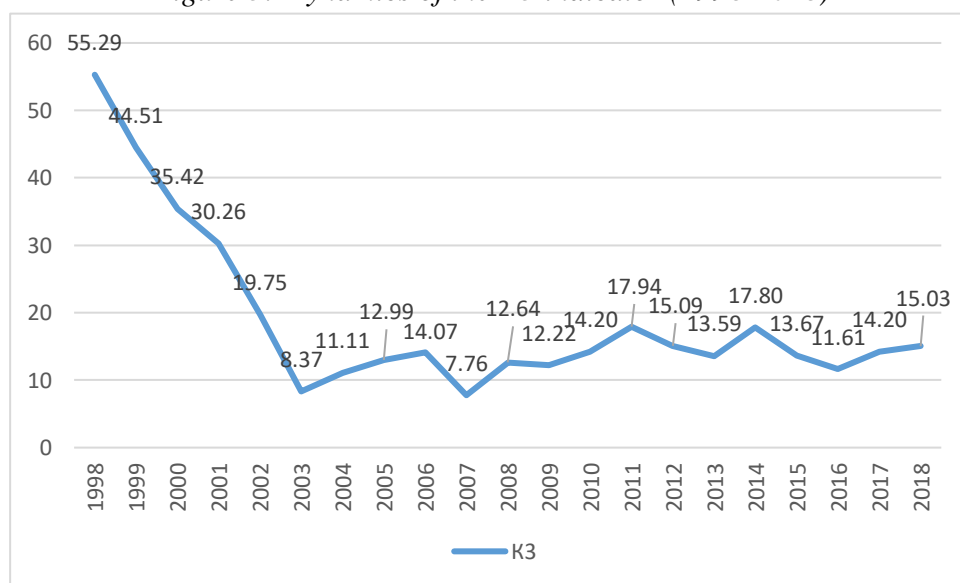
Figure 2: Dynamics of the K2 indicator (1998-2018)



Source: evaluated by authors

The decline in the indicator was observed during the period 2001-2008. The situation has changed in the last 10 years. Indicator K3 - the ratio of the country's foreign trade turnover (the sum of exports and imports of goods and services) to the total turnover of the domestic currency market. If optimistic expectations dominate among economic agents, the variable takes on higher values, since against the background of confidence in the national monetary unit, currency transactions are carried out for the purpose of carrying out calculations on transactions or capital movements aimed at its growth (deposits, loans, factoring, etc.), and export receipts balance the outflow of foreign currency on imports (in most cases, even within a single business entity). When moving to the pessimistic phase of the financial cycle, speculative operations begin to dominate the foreign exchange market, its turnover increases, while foreign trade volumes decrease (as a rule, exports are more important than imports, which puts additional pressure on the foreign exchange market).

Figure 3: Dynamics of the K3 indicator (1998-2018)

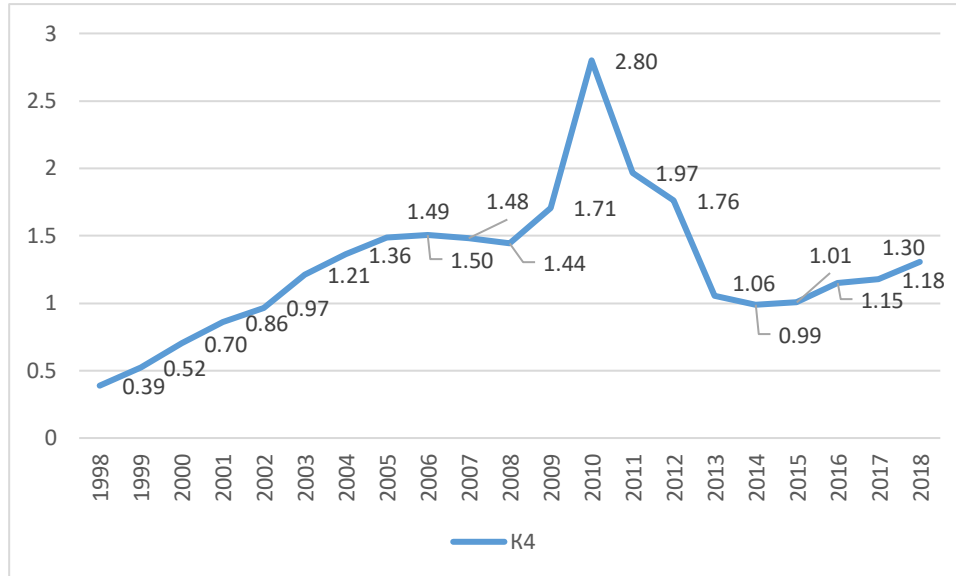


Source: evaluated by authors

Indicator K4-credit Conditions. The indicator characterizes the perception of financial risks on the part of the loan offer. During the growth phase of the cycle, banks can encourage lending to less creditworthy and riskier customers by offering low interest rates and long terms (underestimating the level of risk). When risk materializes, banks, on the contrary, tend to overly tighten credit conditions, which leads to a significant restriction of financing of the solvent part of the real economy (credit crisis). [4] within the framework of the FCI construction, credit conditions are approximated by the ratio of the average term (in months) of long-term ruble lending to legal entities to the value of the corresponding interest rate (for new loans). The average term of long-term loans was estimated based on the actual balances of customers' credit debt and annual repayment volumes. Thus, the extension of terms and reduction of rates leads to an increase in the values of the credit conditions indicator and Vice versa.

Figure following on the next page

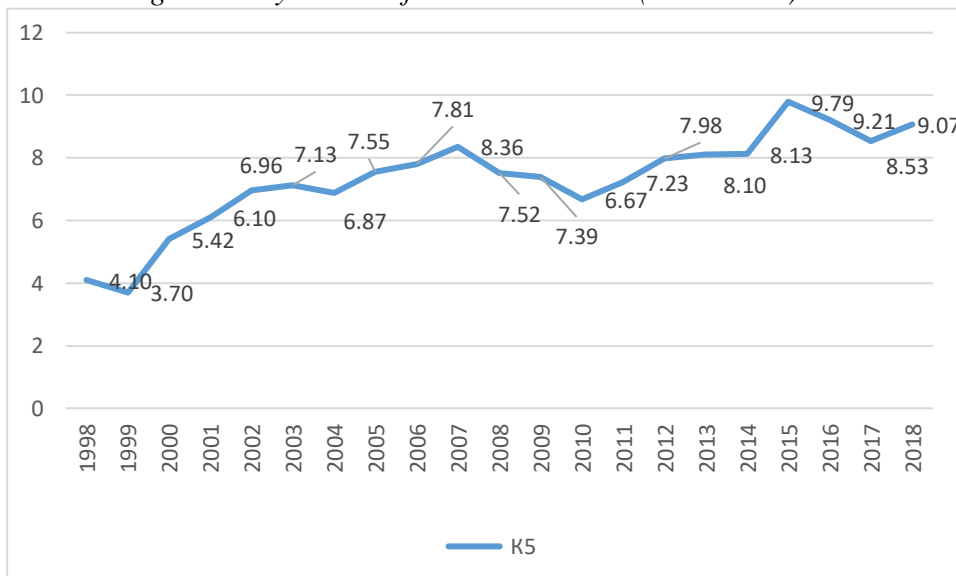
Figure 4: Dynamics of the K4 indicator (1998-2018)



Source: evaluated by authors

The K5 indicator is the ratio of assets to equity in the banking sector (leverage). This indicator clearly characterizes the cyclical nature of financial intermediaries' activities. An increase in leverage means an increase in the scale and risk of banking operations at a time when optimistic sentiment prevails in the economy. Accordingly, the reduction in the banking sector's assets relative to its capital indicates the onset of a cyclical downturn in the financial market, accompanied by the retirement of a significant amount of non-performing loans and the early withdrawal of a "healthy" part of the assets from the economy. [3] at the same time, as a rule, the conditions for granting new loans are sharply tightened and the efficiency of banking activities is reduced.

Figure 5: Dynamics of the K5 indicator (1998-2018)

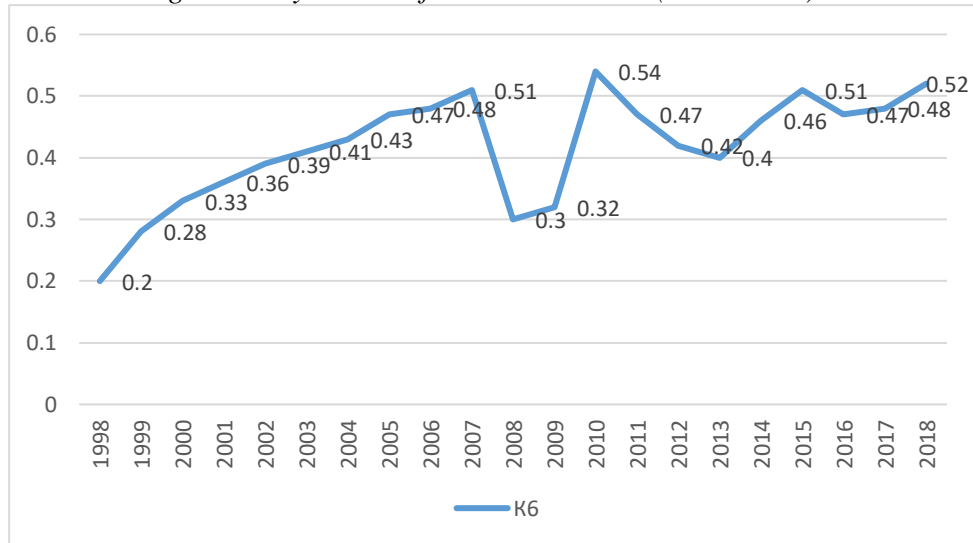


Source: evaluated by authors

Indicator K6 - the Ratio of the value of shares of joint-stock companies in circulation to the annual revenue of organizations from the sale of manufactured products. Such indicators of securities market capitalization are directly related to the business cycle rather than the financial

cycle [6]. However, this variable adds to the overall picture of the nature of the expectations formed by market participants, showing by its dynamics how optimistic business entities are when assessing future financial flows.

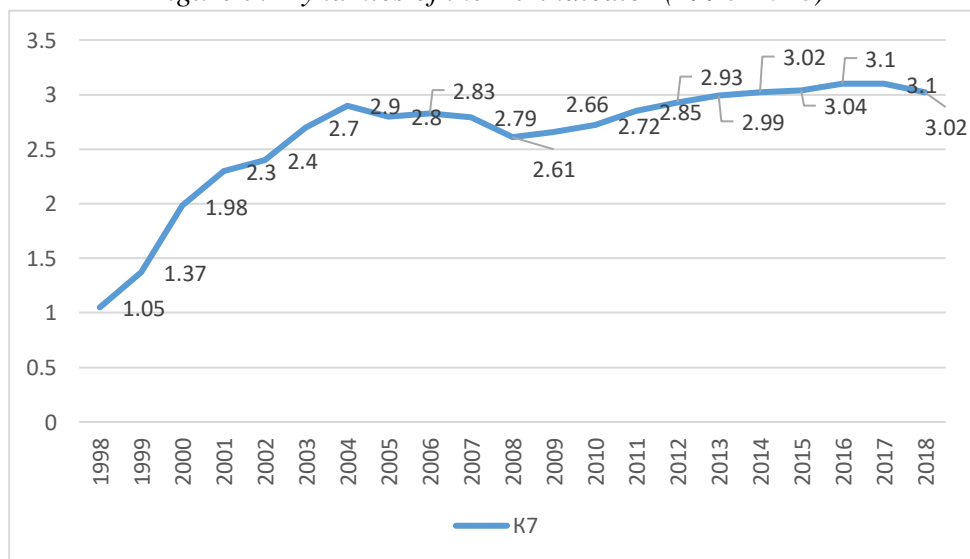
Figure 6: Dynamics of the K6 indicator (1998-2018)



Source: evaluated by authors

The most significant decline was observed in 2008-2009. The decline in the capitalization of large Russian corporations as a result of the global financial crisis. Indicator K7 is the ratio of the volume of government securities in circulation on the domestic market to the consolidated budget revenues. The growth of the indicator not only indicates an increase in the capacity and liquidity of the government securities market during a cyclical upswing, but also signals an underestimation of financial risks on the part of the Issuer.[2] Accordingly, the decrease in this ratio (the volume of redeemable bonds exceeds the volume of issued ones) may be the result of an increase in investor distrust of government securities against the background of changing expectations in the economy (or, on the contrary, the result of a budget surplus and sustainable economic growth).

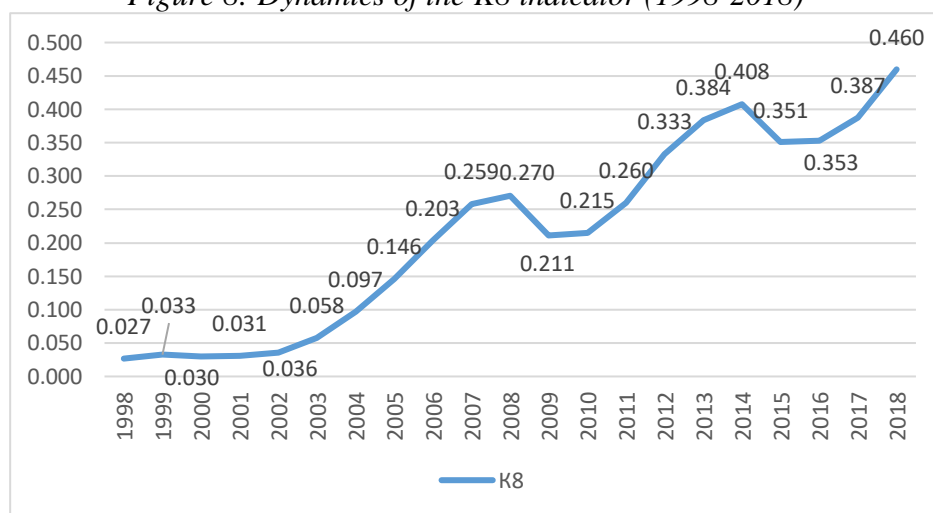
Figure 7: Dynamics of the K7 indicator (1998-2018)



Source: evaluated by authors

Changes in this indicator are not so significant. During the entire period, the value does not change much. This is due to the General directions of state policy. Indicator K8 - the ratio of interest income of banks on loans and other transactions with individuals to the monetary income of the population. The dynamics of this indicator is influenced by two main factors – the willingness of the population to borrow based on the assessment of future revenue growth prospects and the payment discipline of the Bank's retail customers. Both aspects are closely related to the procyclical nature of the country's banking sector.

Figure 8: Dynamics of the K8 indicator (1998-2018)



Source: evaluated by authors

Figure 8 shows a decline in 1998, 2009, and 2015-2016. These are periods of financial and economic downturns. The study identified eight main significant indicators that characterize the financial market in the process of cyclical development in the national economy. The ratio requirements of banks to the economy to GDP (K1), the ratio of M2 money to foreign exchange reserves (GCR) of the country (K2), the ratio of foreign trade turnover of the country (sum of exports and imports of goods and services) to the total turnover of the domestic foreign exchange market (K3), credit conditions (C4), leverage (K5), the ratio of the value of shares of joint stock companies, in circulation, annual revenue of the organizations from the sale of manufactured products, the ratio of the volume of state securities in circulation on the domestic market to the revenues of the consolidated budget (K7), the ratio of interest income of banks on loans and other transactions with individuals to the monetary income of the population (K8). The dynamics of these indicators indicates that there is a correlation between them and the phases of the financial and economic cycles.

4. CONCLUSION

The analysis that we have carried out in the article focuses on the indicators of the financial market in the process of cyclical development in the national economy. Authors made to the following conclusions. Analysis of the experience of economists in the direction of financial markets made it possible to identify the most significant indicators of the financial market for their research in dynamics. The analysis of financial market indicators showed that during the period 1998-2018 there were changes in accordance with the General economic and financial situation in the country. This highlights the necessity of identify the correlation between these indicators and the phases of the financial cycle. In turn, information about the joint dynamics of economic variables in aggregate form can be collected on the basis of factor models.

Within this approach, a statistically significant correlation between variables can be considered as a consequence of the influence of common factors on them (in this case, the phases of the financial cycle).

LITERATURE:

1. Abramov A.E., Radygin A. D., Chernova, M. I. (2014) Regulation of the financial .markets: models, evolution, efficiency / / Questions of Economics.
2. Alessi, L. Comparing different early warning systems: Results from a horse race competition among members of the Macro-Prudential Research Network, [Electronic resource] / L. Alessi, A. Antunes, J. Babecky, S. Baltussen, etc. (2014)– Mode of access: http://www.ecb.europa.eu/events/pdf/conferences/140623/Vasicek-et-al_Comparing-Different-Early-Warning-Systems.pdf.
3. Beck T., Levine R., Loayza N. (2000) Finance and Sources of Growth// Journal of Financial Economics, №58
4. Gelb A. (1989) Financial polices: Growth and efficiency, Working paper no 421, The World Bank, Washington, DC
5. King R., Levine R. (1993) Finance and Growth: Shumpeter Might Be Right// Quarterly Journal of Economics, № 108
6. Plasil, M. (2013) An indicator or the financial cycle in the Czech economy [Electronic resource] / M. Plasil, J. Seidler, P. Hlavac, T. Konecny. – Mode of access: http://www.cnb.cz/en/financial_stability/fs_reports/fsr_2013-2014/fsr_2013-2014_article_i.pdf.
7. Song Shin, H. (2013)Procyclicality and the Search for Early Warning Indicators / H. Song Shin // International Monetary Fund. – WP/13/258, [Electronic resource] / H. Song Shin. – Mode of access: <https://www.imf.org/external/pubs/ft/wp/2013/wp13258.pdf>.
8. Zarubezhnov E.S., Koptelov I.O. (May 2018) Economic growth and analysis of the country's development through macroeconomic indicators / I. O. Koptelov, E.S. Zarubezhnov // Bulletin of Chelyabinsk State University.

QUALITATIVE STUDY OF THE INCLUSIVE COMPETENCE OF TEACHERS OF VOCATIONAL EDUCATION INSTITUTIONS

Svetlana Kurnosova

Chelyabinsk State University, Chelyabinsk, Russia
ksa0308@mail.ru

Nikolai Kokanov

Chelyabinsk State University, Chelyabinsk, Russia
kokanov@mail.ru

Tatyana Lushnikova

Chelyabinsk State University
Chelyabinsk, Russia
lu.ta@bk.ru

Linara Battalova

Financial University under the Government of the Russian Federation, Moscow, Russia
linara_b@mail.ru

Yulia Petrova

South Ural State College, Chelyabinsk, Russia
petrova_yuv@icloud.com

Elena Martynova

Chelyabinsk State University, Chelyabinsk, Russia
anna.ido@yandex.ru

ABSTRACT

The article discusses global prospects for the study of inclusive competence of teachers of educational organizations of vocational education. The purpose of the paper is to present the results of the research devoted to the study of the cluster approach to the study of the inclusive competence of teachers of vocational educational organizations, which gives opportunities for actualizing the potential of the studied quality.

Keywords: *Inclusive education, Inclusive competence, Educational organization, Cluster approach, Competency building model*

1. INTRODUCTION

At the current stage of social development, education becomes one of the essential areas of life, which is closely intertwined with absolutely all spheres of social existence. The present analysis of conditions stimulates to find the newest combinations of the high-quality education system in the Russian Federation: it must correspond to the high level of economic development, social prescriptions to satisfy the possibilities of constant formation of individual properties of people. In the National Doctrine of Education of the Russian Federation until 2025, the problem of the importance of education as one of the global criteria for assessing the mobility of the economy and society is brought to the first place. The main objective of the current education system is to meet the needs of individuals at various levels, including the acquisition of the necessary educational level, the organization of the required level of qualification of an employee in the direction of his or her professional activity, in demand in the world of professions, as well as readiness for mobility.

Statistical data received during the research confirm its relevancy. Experimental work carried out in Chelyabinsk State University, Chelyabinsk State Academy of Culture and Art in the field of study of problems of professional development of pedagogical staff showed that the existing system of continuous professional development of teaching staff is only at the initial level of formation. About half of the participants in the survey, namely, 48% of university teachers indicated that even the systematic completion of professional development courses in 3-5 years does not allow for timely correction of their professional activities in accordance with changes occurring in the educational system and, consequently, reduces the readiness to apply innovation in educational activities, including activities in the system of inclusion. At the same time, the results of this research prove that modern workers in the field of vocational education are overwhelmingly interested in providing personality-oriented content of professional development (37%); in the organization of targeted training for the system of continuous professional development of scientific and pedagogical workers (30%); the creation of system-forming mechanisms to ensure the natural self-organization of the system of professional development (28%); coordination of the set of institutions and services of the system of professional development of scientific and pedagogical workers in terms of values, objectives, content, methods and forms of their activities (22%); overcoming its closed nature and increasing dependence on the consumer (16%). Thus, in solving these problems we see the social and pedagogical level of relevance of the research. The foundation for a change in the concept of education in the Russian Federation is the sequence of coordinated operations aimed at developing an inclusive education system, which finds its reflection in the idea of developing the inclusive competence of teachers in additional vocational education.

2. QUALITATIVE STUDY OF THE INCLUSIVE COMPETENCE OF TEACHERS OF EDUCATIONAL INSTITUTIONS OF VOCATIONAL EDUCATION

Researching the problem of preparing teachers of educational organizations of professional education for the design of an inclusive information and educational environment in chronological order, we will analyze the main periods of its formation, establishing the social trends that have formed during each of them - the existing conditions in which it is possible to trace the evolution of academic views on the design of elements of the educational system, aspects of an inclusive information and educational environment, their relationship with scientific activity. Ontologically, the problem of preparing teachers of professional educational organizations for inclusive information and educational activities is directly related to several social phenomena, which are quite widely covered in various branches of science, including pedagogy: 1) the transition to an information society; 2) the informatization of education; 3) the updating of the paradigm of continuing education. As a result of the implementation of these programs, Russian educational institutions have almost equaled the main number of teaching staff with inclusive competencies with European educational organizations, as evidenced by data from various international sociological studies. There has also been a positive trend in recent years towards implementing an inclusive education system. At this stage of implementation of joint training of students with conditionally healthy development and with limited health opportunities, there is an accumulation of information and educational potential within each educational organization. Progress in this direction is constrained only by the insufficient number of teachers with specialized training in inclusive education, i.e. the process of creating and using information and communication technology tools in the educational process. The profoundly developed philosophical and pedagogical concept of continuing education was put forward by J. A. Kamensky, who saw "universal education", the inclusion of all people without exception in culture ("pampedia") as a means of achieving social harmony and "universal correction of human affairs". Ya.A. Kamensky presented an all-encompassing holistic picture of human upbringing and self-improvement throughout his life - from the

"school of birth" to the "school of death". The turn of modern philosophical and pedagogical thought, and then the turn of special pedagogical research to the problems of continuous education is associated with the educational consequences of the scientific and technological revolution. The leading factor that has generated the problem of preparing qualified specialists for inclusive information and education is the transition to an information society. In the implementation of the cluster approach can be identified several key points: first, the existence of a common goal; secondly, the legal framework for joint activities of subjects; thirdly, the developed mechanisms for interaction between subjects that unite in a cluster; fourthly, the mechanism of management and, fifthly, compliance with the declared common goals. Consequently, the cluster approach is based on a partnership of stakeholders and is applied in research on their competitiveness problems as well as a method of stimulating innovation. The issue of continuing education can be roughly divided into two main areas. The first relates to the construction of a system of continuous education as part of social practice (the social and educational aspect of continuous education); the second relates to the very process of appropriation by a person of new life, social and professional experience (the psychological and pedagogical aspect of continuous education). In social and educational practice, the key to the implementation of continuing education is the continuity of the educational system and the multiplicity of informal education channels beyond primary education. Historical and pedagogical analysis of the processes of development of informatization of society and educational space, the formation of continuous education made it possible to determine the basis for periodization of the genesis of the problem of preparing students for the design of an inclusive information and educational environment: 1) degree of expansion (interest and involvement of subjects and society as a whole); 2) degree of identification of conceptual and terminological field; 3) degree of conceptual generalization. In the information society, not only production changes but also the whole way of life and the system of values. The material and technological base of the information society are various systems based on computer equipment and computer networks, information technology, telecommunication communication. The Information Society is a society in which most workers are engaged in the production, storage, processing and realization of information, especially its highest form - knowledge. Characteristic features of the information society are: solving the problem of information crisis (solving the contradiction between information avalanche and information hunger); ensuring the priority of information over other resources; the main form of development is the information economy; the society is based on automated generation, storage, processing and use of knowledge through the latest information technology and technology; information technologies cover all spheres of human social activity; information technologies cover all areas of social activity. The complexity and multilevel nature of the inclusive competence of teachers of educational organizations of professional education require adequate theoretical and methodological tools for the study of this problem. Such an instrument may be a synthesis of comparative (general scientific basis), cluster (specific scientific level) and participative (methodological and technological level) approaches. Combination of approaches that make up the methodological regulation of the inclusive competence of teachers of educational organizations of professional education allows: to form a given standard of personality, due to the integration of Russian education in the European and world community, the development of inclusive education; to ensure the active involvement of the individual in an inclusive society; to build a network of subjects preparing teachers for the implementation of inclusive education; to increase motivation for the teacher in education. The final product of the education system is a competent specialist, represented by the structure of society, its many characteristics, which defines the demo culture of the region as part of the social component of its development, including "a set of socio-psychological attitudes, automatism and habits of consciousness that form the ways of seeing the world and representing people belonging to a particular socio-

cultural community", i.e. mentality. Many of these characteristics of society are only indirectly formed by the education system, which does not diminish the role of the educational cluster in the regional economy.

3. CONCLUSION

Thus, we believe that the prospect and success of building the inclusive competencies of educators in professional education organizations as a factor ensuring the implementation of the crucial needs of the individual in lifelong learning and the quality of inclusive higher education determine:

1. Integration of andragogical (general scientific level), competency (specific scientific level) and modular (methodological and technological level) approaches, which make up the methodological regulation of inclusive competence development of teachers of professional education organizations.
2. Structural and functional model of inclusive competence development for teachers of educational organizations, which provides for successful use in conditions of dynamically developing professional education, which includes target, methodological, substantive, procedural, functional and practical blocks.
3. A set of organizational and pedagogical conditions, which takes into account the purpose and content of teachers' professional activities, the prescriptions of an inclusive society and the regulatory framework of new educational activities, the possibility of andragogical, competent and modular approaches.

Synthesis of approaches that make up the methodological regulation of the pedagogical concept of training teachers of educational organizations of professional education to design an inclusive information and educational environment allows: to form a given standard of personality, due to the integration of Russian education in the European and world community, the development of inclusive higher education; to ensure the active involvement of the individual in an inclusive society; to build a network of subjects of student training.

LITERATURE:

1. Batyshev, S.Ya (1998). The predictive orientation of vocational education (In Russian). S.Ya. Batyshev. Pedagogy. (No. 6). (p. 45-49.).
2. Bondarevskaya E.V, Kulnevich S.V (1990). Pedagogy: Personality in humanistic theories and educational systems (In Russian). E.V. Bondarevkaya, S.V. Kulnevich. Rostov: Creative Center "Uchitel".
3. Bordovskaya N.V, Rean A.A (2000). Pedagogy: Textbook for high schools. (In Russian) N.V.B ordovskaya., A.A. Rean. St. Petersburg: Piter.
4. Interactive methods in the system of advanced training of scientific and pedagogical workers. Information technology in the activities of a modern teacher (2016). (In Russian) Collection of scientific articles, Chelyabinsk, Chelyabinsk State University.
5. S. A. Kurnosova., N. A. Kokanov (2017). Psychological and pedagogical foundations of preparing students for the design of an inclusive information educational environment (In Russian). S.A. Kurnosova, N.A. Kokanov. Materials of the International scientific-practical conference "Social and pedagogical support for people with disabilities: theory and practice", Ukraine, Yalta.

VALUE AND PRICE OF NETWORK COMMUNICATIONS OF PERSONNEL

Yuri Startsev

*Chelyabinsk State University, Chelyabinsk, Russia
uns47@mail.ru*

Alexander Taradanov

*Chelyabinsk State University, Chelyabinsk, Russia
taradanov@csu.ru*

ABSTRACT

Formation of network communications of the personnel occurs on the basis of network competences of heads, that is their ability purposefully to form networks from workers, organizing horizontal communications of the necessary quality and quantity in parallel with the technological communications caused by production processes. Purposeful formation of horizontal links is actually one of the forms of increasing organizational capital, as it allows you to save a variety of resources, including time. Thus, there is an increase in the value of network communications of production personnel as an individual measure for each employee on the scale of "good-harm" of production communications. When working in the network, employees also form specific network competencies – their ability to use the technological and personal horizontal connections between individual subjects and their groups arising in the production processes to unite into a production network. The effectiveness of information interaction on network platforms is ensured by performing the main communication functions: increasing the efficiency of production communications; manifestation of communicative creativity in individual employees and their groups; easing the space-time constraints of production processes; using modern humanitarian high-Hume technologies to stimulate workers. On the network platform there is a convergence of necessary network services: transmission control data (data must come in the right place at the right time); network security (with the exception of the leak data with the specific network platform in unwanted directions); the formation of efficient and affordable network infrastructure; connect to the required network applications (must be able free connect/disconnect of individual participants and individual contacts). To manage these processes, systems should function to assess and adjust the main parameters of these processes: analysis of the effectiveness of mutual contacts; analysis of communication losses; analysis of transaction costs; assessment of the degree of satisfaction of its platform participants; analysis of the prospects for individual development of individual platform participants; analysis of the prospects for the development of the entire platform; assessment of the degree of attractiveness for external entities. The cost of forming network connections of personnel is determined by the cost of training / retraining of production managers and their working time spent on the formation of network competencies of performers and the creation and maintenance of the network platform.

Keywords: *personnel, value, price, network communications*

1. INTRODUCTION

Communication as a process of information transfer (communication, exchange of thoughts, information, ideas, etc.) from one person to another is a mandatory element of human activity /1/. This is especially true of production activities, when two or more people work together to achieve a specific result. Moreover, the more complex the activity, the more people are involved in the production process, the higher the requirements for communication processes by its participants in terms of the speed of information transmission, the clarity (unambiguity) of the

transmitted information, the volume, timeliness, accuracy of the address of the arrival of information, the cost of the transmitted information, etc. A. Cockburn, based on the "theory of information wealth" /2/, leads in his book "Agile Software Development" scheme of interaction of different ways of communication that people can use in the process of their activities (quoted by: /3/). At the same time, he argues that the most effective communication process takes place at a direct meeting of the participants with the possibility of fixing the right moments on something (usually on paper). In the case of non-personal communication and without fixing all the main and intermediate results of communication, the effectiveness of communication decreases rapidly (A. Cockburn calls this process "cool" channel of communication) as the communication parties lose the ability to feel each other to see gestures and facial expression, hear the tone and volume of voice, emotions, etc. this eliminates the opportunity to respond to those request in real time, thus preventing the discussion, which usually generates the most effective results /4/.

2. RESEARCH

The transition to sustainable communications is accompanied not only by the exchange of information, but also by other exchanges generated by this exchange (material, energy, personal, etc.), which contributes to the transformation of communication links into appropriate production links: production networks as a form of communication of individual workers engaged in production activities at functionally close workplaces, which increases its efficiency. At the same time, the analysis of modern scientific approaches to the interpretation of the concept of production network and its definition allowed to establish, firstly, the lack of integrity of scientific ideas about the essence of this concept, and, secondly, to formulate a number of features required for such a definition (its imperative):

- the presence of separate entities with their own interests;
- the presence of real or hypothetical links between these subjects;
- the presence of at least one objective, common to all subjects with a functionally close to the workplace.

Bases of formation of production networks, follow both from the formulated imperative, and from the institutional theory of firm as the direction of the economic theory which is not limited to the analysis only of economic categories, and offers to consider actively in production processes various non-economic factors, including, public and personal interrelations of concrete workers in processes of joint activity. Quality of formation of production networks of the personnel essentially depends on network competences of heads of production representing specific group of the competences allowing to use spontaneously and inevitably arising horizontal communications between workers for increase of economic efficiency of production by Association them in a production network. The peculiarity of this provision is that the formation of the appropriate behavior of employees is due to the network competencies of managers, that is, their ability to purposefully form networks of workers, organizing horizontal connections of the desired quality and quantity in parallel with the technological connections caused by the production processes. Purposeful formation of horizontal links with the use of such a tool as the network competence of managers is actually one of the forms of increasing organizational capital, as it allows to significantly save various resources, including time. Thus, there is an increase in the value of network communications of production personnel as an individual measure for each employee on the scale of "good – harm" /5 / production communications. The psychological background of the Association of workers in production networks is their transition in their actions from the basic conceptual concept of "struggle for..." to the basic conceptual concept of "contract for...", which stimulates the development of stable horizontal links between them, that is, networking.

Thus, the production network is an organizational incentive for the Association of employees, as thanks to the "contract of..." allows them to agree on certain working conditions (the amount of earnings, the fairness of the recognition of contribution to the common cause, creativity, initiative and creativity). On the basis of a positive assessment of these incentives in the form of approval by the network, the employee is motivated to work effectively /6, section 2.3/.

3. CONCLUSION

Of course, as history shows, networking is an objective process that takes place without purposeful actions of managers. However, ignoring this fact by the management system leads to significant losses of various resources (working hours, downtime, etc.) and actions of outright restrictionism and, as a consequence, loss of competitiveness of the organization. When working in the network, employees also form specific network competencies – their ability to use the technological and personal horizontal connections between individual subjects and their groups arising in the production processes to unite into a production network. These advantages of networking and the availability of network competencies of personnel are most effectively implemented on network platforms-communication tools (virtual, software or instructional, but not material), which are a system of principles, norms, rules, mechanisms and technologies that together provide effective information interaction of network participants to create competitive products. The effectiveness of information interaction on network platforms is ensured by performing basic communication functions:

- increase the efficiency of production communications (speed and accuracy of message transmission);
- manifestations of communicative creativity in individual employees and their groups ("work as a dialogue»);
- easing the space-time constraints of production processes (to minimize transaction costs);
- use of modern humanitarian high-Hume technologies to stimulate employees (environment, behavior, opportunities, beliefs, values, identity, mission)./7/.

The network platform is the part of the technological platform in which the creation of promising solutions and products provide the above advantages of networking. Therefore the convergence of necessary network services takes place on the network platform:

- data transfer management (data should come to the right place at the right time);
- network security (preventing data leakage from a particular network platform in undesirable directions);
- the formation of an efficient and non-burdensome network infrastructure (should be);
- connection of necessary network applications (there should be a possibility of free connection/disconnection of separate participants and separate connections).

To manage the processes occurring on the network platform, the following systems must function, allowing to evaluate and adjust the main parameters of the processes:

- analysis of the effectiveness of mutual contacts;
- analysis of communication losses;
- transaction cost analysis;
- assessment of the level of satisfaction of its platform members;
- analysis of the prospects for individual development of individual participants of the platform.
- analysis of the development prospects of the entire platform;
- assess the degree of attractiveness to external stakeholders.

Accordingly, the cost of forming network connections of personnel is determined by the cost of training / retraining of production managers and their working time spent on the formation of network competencies of performers and the creation and maintenance of the network platform.

LITERATURE:

1. Communication: a Linguistic encyclopedic dictionary. URL: <https://les.academic.ru/518/Коммуникация> accessed 02.10.2019.
2. Daft, R. L. Organizational information requirements, media richness and structural design /R. L. Daft, R. H. Lengel // Management Science. - 1986. - No. 32 (5). - Pp. 554-571.
3. Bushmanov, A. What is the most effective communication /A. Bushmanov / URL: <https://agilemasters.ru/2018/06/23/kakaya-kommunikaciya-naibolee-effektivna/> 23.06.2018. Date of access: 01.10.2019.
4. Cockburn, A. Agile Software Development / A/ Cockburn. – Addison-Wesley Professional. - 2001. - 304 p.
5. Taradanov, A. A. Logic of social / A. A. Taradanov. – Chelyabinsk: Publishing House. Chelyabinsk state University. – 2018 – 132 C.
6. Belkin, V. N. Organizational capital of the enterprise / V. N. Belkin, O. A. Antonova, V. D. Gorbunov. - Yekaterinburg: Institute of Economics, Ural branch of RAS, 2011. - 164 p.
7. Schwab, K. the Fourth industrial revolution / K. Schwab. - Moscow: "Eksmo", 2016. - 138 p.

APPENDIX

Four characteristics of the means of communication

According to the theory, the determination of the wealth of possibilities of the means of communication takes place in accordance with four criteria[5]:

1. ***Instant feedback capability:*** communication is considered complete when feedback is received on the transmitted message. Feedback can also show whether a message has been correctly understood. Feedback allows you to instantly correct errors when sending a message[6].
2. ***Ability to transmit different types of messages:*** information can be transmitted in different forms, such as text, audio and/or video messages. The more types involved in the transmission of a message, the more information will reach the recipient of the message.
3. ***Diversity of languages used:*** Daft and Lengel divide languages into two types: high and low diversity[7]. Languages with a high degree of diversity are not limited in the use of symbols, convey a wide range of ideas and are open to interpretation, such as natural languages, music or art. Languages with low diversity include limiting symbols, convey a narrower range of ideas, are factual, and are not open to interpretation (such as mathematics or statistics). The richer means of communication, according to the theory, will be those that use languages of a high degree of diversity.
4. ***Media focus on the individual:*** each communication channel has a different degree of focus on the individual. Thus, the greater this focus, that is, if the communication medium can convey, for example, personal feelings or emotions, the more information in the message will be conveyed.

The more of the above characteristics is observed in the communication channel, the more it is rich in its capabilities. Accordingly, the following types of communication can be distinguished: personal communication (face-to-face), communication through visual, auditory or textual means[5].

METHODOLOGY FOR ASSESSING WORKER'S BEHAVIORAL OPPORTUNISM IN RUSSIAN CORPORATIONS

Elena Kozlova

*Chelyabinsk State University
Chelyabinsk, Br.Kashirinykh St., 129, Russia
kozlova@csu.ru*

Dmitri Pletnev

*Chelyabinsk State University
Chelyabinsk, Br.Kashirinykh St., 129, Russia
pletnev@csu.ru*

ABSTRACT

Modern corporations strive to find new tools to improve the efficiency of their activities. Traditional approaches aimed at reducing costs, modernizing production, improving the organizational structure are being rethought. One of the new directions in this area is increasing the productivity of corporation employees by stimulating their involvement and better motivation and reducing behavioral opportunism. There is a need for a methodology for assessing the level of behavioral opportunism, combining accuracy and simplicity, for analyzing the effectiveness of corporate culture development programs, and increasing employee motivation. At the same time, many different techniques are presented that meet these requirements only partially. The aim of the study is a comparative analysis of existing methods for assessing the behavioral opportunism of employees in a corporation and the proposal of an author's methodology that meets the requirements of accuracy and simplicity. The information base of the study is scientific publications devoted to the analysis of methods for measuring behavioral opportunism in a corporation. The study established the interdisciplinary nature of the problem of behavioral opportunism, summarized the methods for assessing forms of behavior relevant to behavioral opportunism from economics, sociology, and psychology, and gave a comparative description of them. An author's method is proposed, an algorithm for its application is determined, and a model calculation of the method is carried out on the data obtained during a local economic experiment. As a result, the possibility and effectiveness of applying the author's methodology to the analysis of behavioral opportunism of workers of corporations are substantiated.

Keywords: *assessment methodology, behavioral opportunism, corporation, workers*

1. INTRODUCTION

A long-term bilateral contract represents the relationship between employer and employee in a modern corporation. The incompleteness of existing contracts aggravates the problem of opportunistic behavior of workers. High costs to the employer accompany such behavior on the part of workers. This behavior includes not only direct costs but also the costs of opportunity costs (what a pun!), as well as additional costs caused by the inefficient use of resources. The hidden nature of the opportunistic behavior of workers leads to problems of its measurement. An assessment of worker opportunism is necessary to measure the individual and general level of opportunism in corporations. Determining the level of opportunism allows us to develop mechanisms to limit it and increase the efficiency of the corporation. The purpose of the article is to present the results of the development and testing of a methodology for assessing workers' opportunism.

2. LITERATURE REVIEW

Opportunism in economics has the classical definition given in (Williamson, 1975). It is self-interest-seeking behavior with guile. In applied researches, scientists use cunning, duplicity, deceit markers as an attribute of "guile." Wathne and Heide (Wathne and Heide, 2000) suggested distinguishing between active and passive forms of opportunism. They based selection on a different result of their action. In the first case, it is related to wealth creation, and in the second, about wealth distribution. At the level of concrete manifestations, active opportunism is opportunism of commission, which involves the use of lying (Lee, 1998), breaching formal and informal agreements (Achrol and Gundlach, 1999), altering facts (John, 1984), making false accusation (Jap and Anderson, 2003), exaggerating difficulties (Anderson, 1988), and also using unexpected events to extract concessions from partners (Rokkan, Heide, and Wathne, 2003). Passive opportunism implies the realization of self-interest through omission, including through not doing as promised (Jap and Anderson, 2003), hiding information (Dahlstrom and Nygaard, 1999), telling incomplete truths (Anderson, 1988), neglecting to fulfill obligations (Lee, 1998). Seggie, Griffith and Jap (Seggie, Griffith, Jap, 2013) conducted an empirical analysis of the differences between active and passive forms of behavioral opportunism. They identified six possible strategies of an economic agent that encountered opportunistic behavior on the opposite side of the relationship: passive acceptance, constructive discussion, venting, neglect, threatened withdrawal, and exit, and examined the difference in their frequency of use as a reaction to active and passive opportunism. They also conducted an analysis of tolerance for active and passive opportunism on the part of colleagues. Based on the analysis, the influence of active and passive opportunism on transaction costs, and also revealed the long-term adverse effect of opportunism on economic relations are studied.

In (Nagin, Rebitzer, Sanders and Taylor, 2002), hypotheses were tested and confirmed that individual incentives have a significant impact on the manifestation of opportunism in firms, while opportunism measured by the difference in the quality of work - a change in the proportion of spoilage with a relatively simple and monotonous work when workers informed that are under complete control, recognized as an indicator of opportunism. Several works are devoted to the cultural characteristics of opportunism (Chen et al., 2002; Furrer et al. 2011; Johnson, Cullen and Sakano, 1996; Sakalaki, Kazi, & Karamanoli, 2007). (Ganesan et al., 2010) compared opportunistic and "unethical" behavior, with comparisons also being made in the context of two behaviors — commission and omission. The crucial area of study of behavioral opportunism is the analysis of motivations corresponding to it. (Cagne et al., 2010; Posch et al., 2019). A rather large number of empirical works are presented in this direction, in which specific survey methods proposed that allow quantifying the motivation of employees. In (Cordes et al., 2011) proposed analytical tools to explain the relationship between opportunism and the size of firms. It assumes that opportunism is measured in a natural way and is an attribute of the company and its employees. Popov and Simonova (Popov, Simonova, 2006) and (Popov, Ersh, 2016) revealed a direct correlation between the degree of manifestation of opportunism in the form of using one's official position and the level of wages, as well as an inverse relationship between its level and shirking. The level of opportunism in the form of withdrawal can be considered as the ratio of changes in output as a result of employee shirking to a possible output. Opportunism in the form of negligence and abuse of office assessed as the ratio of changes in the level of costs as a result of such opportunism to a minimum possible level of costs. In (Belkin, Belkina, Antonova, 2015), a methodology proposed for assessing the level of opportunism based on a point system, where one point corresponds to the complete absence of opportunism in the enterprise, three points mean the average level, and five points mean a high level. The basis was the results of a sociological survey of employees of enterprises and an assessment of opportunistic behavior by such indicators as the degree of control at the enterprise, workload, lateness, breakaway, initiative.

Assessment of the overall level of opportunism in the enterprise corresponds to the average score among all indicators. When analyzing the labor opportunism of workers in (Krasikov and Roshchina, 2018), it is proposed to consider the reasons internal to the person, and highlight the employee's labor potential and his psychological portrait. The proposed methodology includes an assessment of five key parameters: emotional intelligence, character traits, general emotionality, emotional work, and emotional exhaustion. Evaluation of each of the parameters not only allows to evaluate the opportunism of workers but also have a controlling effect on these parameters.

Table 1: Existing approaches to opportunism assessment

Source	Opportunism markers	Kind of measurement
(Seggie, Griffith, Jap, 2013)	Ten varieties of opportunism, arranged in two groups (opportunism by commission and opportunism by omission)	Indirect measurement thru reaction on opportunism (passive acceptance, constructive discussion, venting, neglect, threatened withdrawal, and exit)
(Nagin, Rebitzer, Sanders and Taylor, 2002)	Share of spoilage / defective results of work	Changing in behavior under supervision
(Cordes et al., 2011)	Profit changes	Analytical modeling
(Popov, Simonova, 2006)	Shirking Negligence Malpractice	Quantitative assessment of each marker
(Belkin, Belkina, Antonova, 2015)	Degree of control Workload during the day Lateness Shirking Initiative	Score based on a sociological survey
(Krasikov and Roshchina, 2018)	Emotional intelligence Character traits General emotionality Emotional work Emotional exhaustion	Emotional Intelligence Scale Rammstedt B., John O.P. Scale Watson D., Clark L. Scale Grandey A. model Maslach C., Jackson S. Scale

The methods that developed earlier are oriented either toward a direct assessment of opportunism at work, or an assessment of the results of its manifestation. In the first case, it becomes difficult to identify by interrogation methods (respondents can hide their motives and behavioral patterns, not wanting to appear in an unsightly light, even in the case of anonymous surveys). In the second case, the complexity of the application determined by the fact that many factors influence the results of the work, and it is difficult to recognize and distinguish their change precisely because of opportunism. We need to develop a methodology that does not have these shortcomings.

3. METHODOLOGY AND DATA

The paper proposes an assessment of opportunism based on revealing during the survey on behavioral patterns that manifest themselves in virtual but common situations for respondents. A detailed assessment of the forms of opportunism based on classification (Seggie, Griffith, Jap, 2013) is used. Questionnaires for respondents includes three blocks: for the analysis of opportunism and its forms, for identifying factors that can determine differences in the degree

and forms of manifestation of opportunism, including education, gender, life plans, and the third part allows to assess the employee's motivation that dominates. Eleven questions have been formed to measure opportunism. Each question offers a short case problem situation where the respondent chooses one of the options for action (from 3 to 5 options). At the same time, each question presents a variant of the answer characterizing conscientious behavior in favor of the company and to the detriment of its interests, and the rest formulated in such a way as to reflect all ten variants of opportunistic behavior from (Seggie, Griffith, Jap, 2013), six for active opportunism and four for passive (see table 2).

Table 2: Examples of case question to identify different kinds of active and passive opportunism

Kind of opportunistic behavior	Case of an action identifying such a behavior
Lying (C1)	In response to a request to work on a weekend, you will refuse to help, motivating it with your obligations to your family, even if there are no such obligations
Breaching formal and informal agreements (C2)	During the issuance of the next order to you, tell your immediate boss that this is not part of your responsibilities, and you do not have time to fulfill your direct duties
Altering facts (C3)	If you will be a witness in the analysis of a situation where your colleague is accused of being rude to a client, you will come up with and tell your version of events, possibly "whitewashing" a colleague ("the client himself first started")
Making false accusation (C4)	If at your oversight the novice employee made a mistake and the bosses became aware of it, you will say that subordinates made a mistake, but you promise to take control and fix everything
Exaggerating difficulties (C5)	Indicate that the task turned out to be more difficult than you thought, and name the rush because of the tight deadlines and ask them to extend or give you more performers
Using unexpected events to extract concessions from partners (C6)	I will do my work according to the regulations, but tomorrow I will point out to my superiors the fact of my processing and ask for compensation
Not doing as promised (O1)	In the event of a bankruptcy of the company, you will demonstrate your loyalty to the company and your willingness to give all your strength to overcome the crisis, at the same time copy all the critical information, and immediately after the bankruptcy of the company, contact your competitors with a job offer
Hiding information (O2)	When planning a business trip, you will take a ticket for the evening flight in advance, and the return one the next day after negotiations, citing the fact that these are the cheapest tickets (even if this is not so, nobody will check you)
Telling incomplete truths (O3)	If a business partner you know makes a dubious offer to the company, you will refuse it, but will not tell the authorities about it
Neglecting to fulfill obligations (O4)	When more and more assignments are given to you, which are not always related to your direct duties, you will do part of the work "through the sleeves" - after all, no one will appreciate it ...

C1...C6 – kinds of active opportunism (opportunism by commission);

O1...O4 – kinds of passive opportunism (opportunism by omission).

In total, the questions contain four answer options for each option of opportunistic behavior. Thus, evaluating the options for opportunism, we can compare the number of selected specific options with their maximum number, thereby assessing the proportion of relevant answers on a scale from 0 to 100%. Also, similarly, one can evaluate the relative frequency of choosing options for good faith, active and passive opportunism. The following question included in survey to assess the factors of opportunism: gender, place of primary education, university specialty, desired salary level, plans to start a family and children, work experience, the image of an ideal career (specialist/manager/freelancer). To assess the types of motivation, we used the questionnaire proposed in (Cagne et al., 2010) - the Motivation at Work Scale. It based on the choice of one of 12 possible answers about the primary motivation at work. These answer options are associated with four types of motivation: the value of work as a process that gives pleasure (integrated regulation - Intrins), the value of work as a means of achieving life goals (identified regulation - Ident), the value of work as a way of self-realization and achievement of a position in society (introjected regulation - Intro), and the value of work as a means of earning (external regulation - Ext). Comparison of the results of evaluating opportunism among different groups of subjects will highlight the differences between them, test hypotheses about the significance of these differences and, therefore, the significance of the relevant factors. The focus group consisting of 69 graduate students (Economics, Management, Quality Management, Customs) (also with work experience) used to test the methodology. An anonymous survey was conducted, which allowed us to identify the main trends in the manifestation of opportunism, made it possible to assess the factors, and made it possible to formulate recommendations for improving the methodology for future research.

4. RESULTS

The survey involved 69 respondents - 2–5 year university students, future economists, managers, experts in the field of quality management and foreign economic activity. 51% of the respondents are women and 49% are men. The vast majority of students surveyed (89%) previously worked, while 42% work regularly. After graduation, students plan to start or continue their career in large industrial companies (23%), the service sector (23%), in government institutions (19%), and 22% of respondents expressed a desire to open a business. Only 7% of respondents postpone their careers because of military service, and 6% do not plan to work at all after graduation. In the framework of the study, the relative frequency of choosing a model of employee behavior established - conscientiousness behavior, the opportunism of commission, the opportunism of omission (Fig. 1). As can be seen, in most cases (71.3%) respondents prefer various forms of opportunism to conscientious behavior. The frequency of distributions of the choice of options for opportunistic behavior in the active (C1 - C6) and passive (O1 - O4) forms shown in Fig. 2. The most common opportunistic behaviors in the active form are C5 (31.2%) and C6 (38.0%), and in the passive form O3 (23.9%). The most common opportunistic behaviors in the active form are C5 (exaggerating difficulties, 31.2%) and C6 (using unexpected events to extract concessions from partners, 38.0%), and in passive - O3 (telling incomplete truths, 23.9 %).

Figure following on the next page

Figure 1: Relative frequency of behavior models

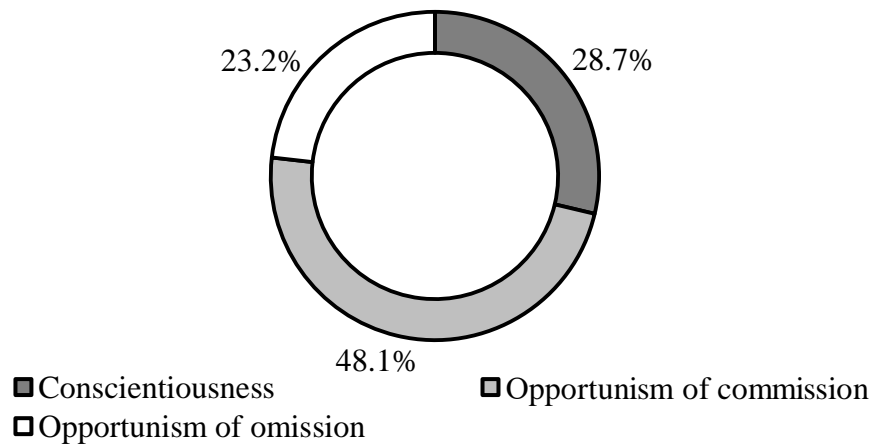
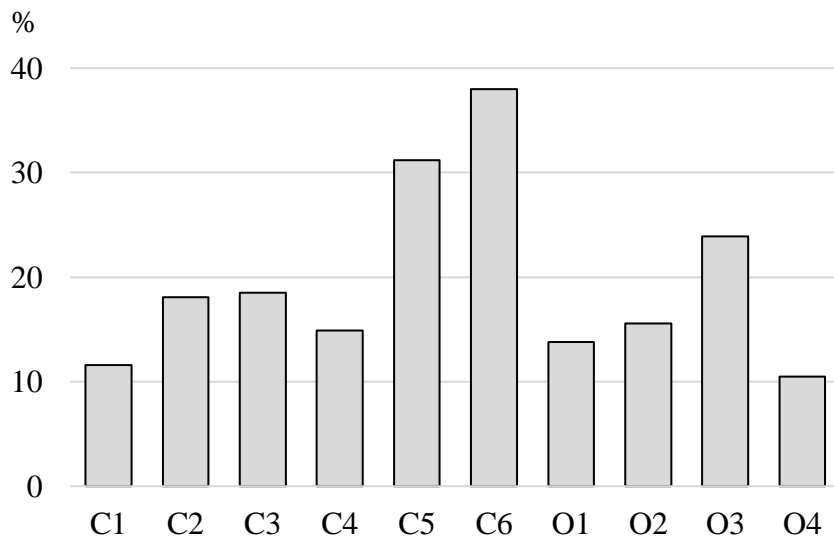
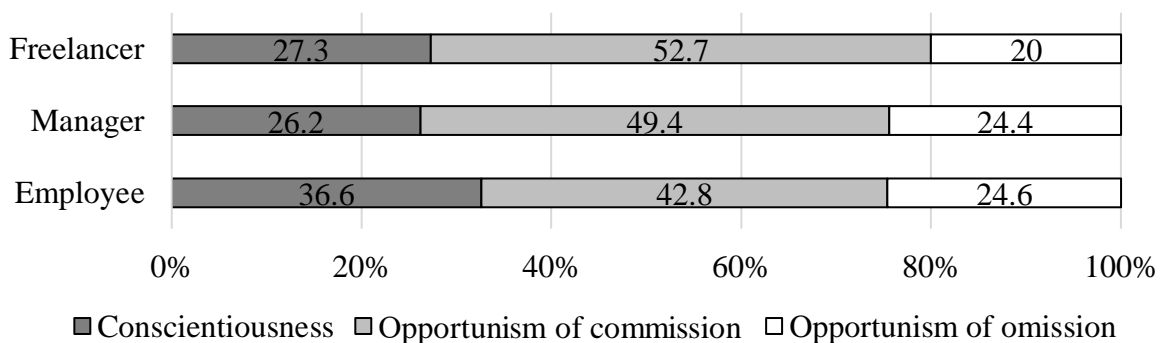


Figure 2: Relative frequency of different kinds of opportunistic behaviors



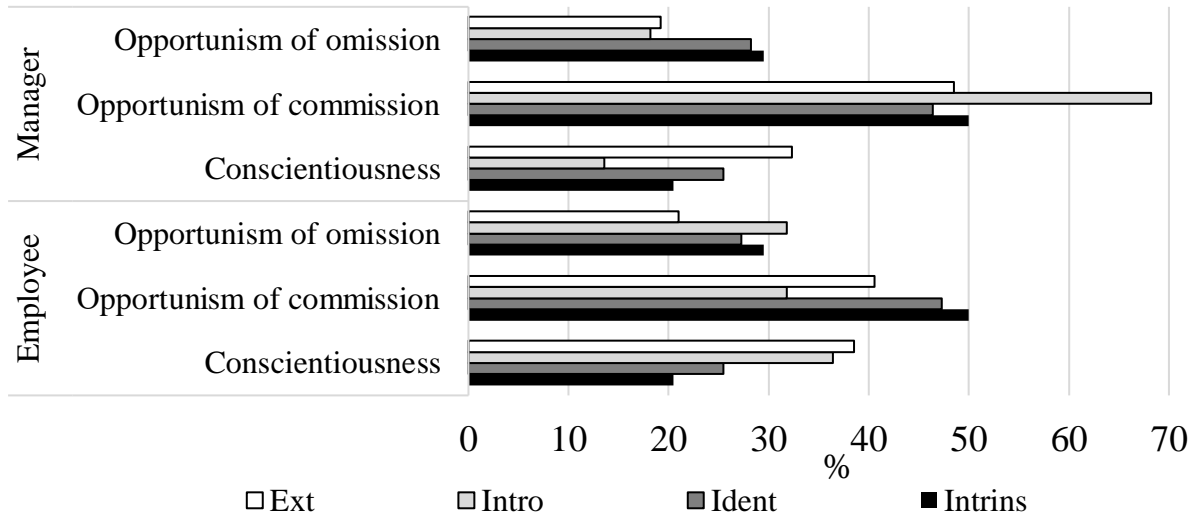
Potential employees are less inclined towards opportunism than managers and freelancers (Fig. 3); they are ready to act with conscientiousness in one-third of the situations analyzed. Future managers in half the cases are ready to show opportunism of commission and in a quarter – opportunism of omission. The behavior of workers planning to work in freelance characterized by the highest degree of active opportunism.

Figure 3: Distribution of behavior models depending on the type of career plan



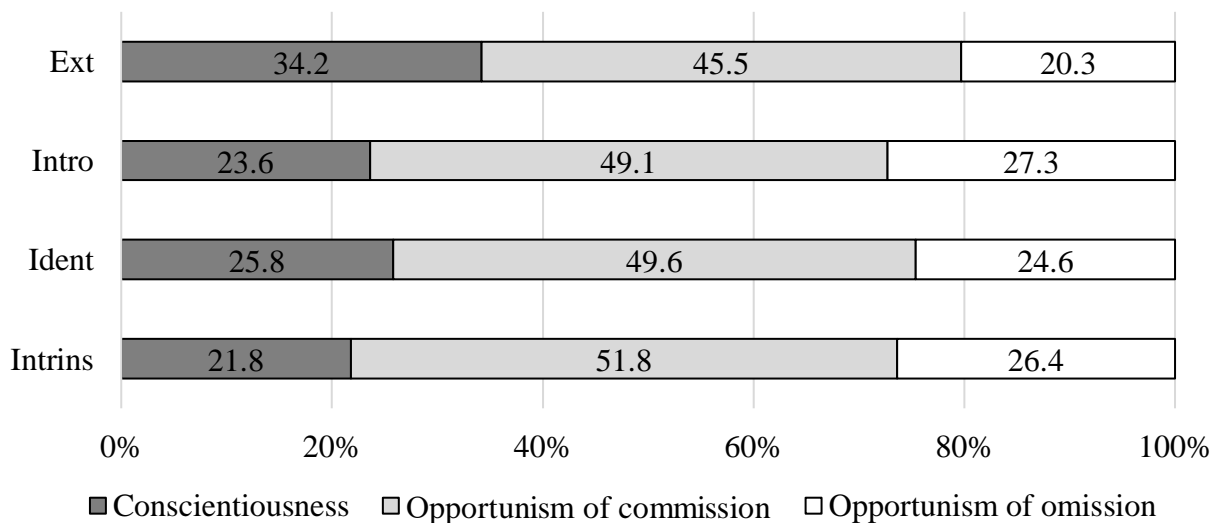
The influence of the type of motivation on opportunism is almost the same for managers and workers. External regulation, identified regulation and integrated regulation lead to similar indicators of the manifestation of opportunism, or its absence, for both workers and managers. However, managers driven by introjected regulation are generally willing to use opportunism of commission, while employees are opportunism of commission and opportunism of omission equally.

Figure 4: Motivation types and behavioral models of managers and employees



As a result of the survey, it was revealed that the form and frequency of the manifestation of opportunism substantially depend on the motivation of the employee (Fig. 5). The least inclined towards opportunism are employees for whom the main element of motivation is external regulation (Ext). The remaining elements of integrated regulation (Intrins), identified regulation (Ident) and introjected regulation (Intro) lead to the manifestation of opportunism at approximately the same level. However, regardless of the main motivation, employees are inclined toward opportunism of commission twice as much as opportunism of omission.

Figure 5: Differentiation of behavior models depending on the type of motivation



5. CONCLUSION

Possibility of the practical application of the proposed method for assessing opportunistic behavior confirmed during the study. The proposed method makes possible to identify “hypothetical” opportunism (or the tendency of workers to opportunism). This tendency may not always manifest itself and be noticeable by a supervisor, but from employees involvement point of view and the results that they show, it will affect on behavior and results. Interest for further research are:

- deeper analysis and interpretation during the survey of results, including statistical analysis methods;
- the application of the developed method to assess opportunism of employees in firms of various industries and sizes;
- verification of the methodology by comparing it with the results obtained using other methods, as well as using an expert survey of top-managers.

ACKNOWLEDGEMENT: *The reported study was funded by RFBR, project number 20-010-00653.*

LITERATURE:

1. Achrol, Ravi S., Gregory T. Gundlach (1999) Legal and Social Safeguards Against Opportunism in Exchange. *Journal of Retailing*, 1999 (75 (1)), 107-121.
2. Anderson, E. (1988) Transaction Costs as Determinants of Opportunism in Integrated and Independent Sales Forces. *Journal of Economic Behavior and Organization*. 1998 (9(3)), 247-64.
3. Belkin, V., Belkina, N., Antonova O. (2015) Opportunistic behavior of employees of Russian enterprises. *Bulletin of the Chelyabinsk State University. The economy*. 2015 (18 (373)), 105 - 113.
4. Cagne, M., Forest, J., Gilbert, M.-H., Aube, C., Morin, E., Malorni, A. (2010) The Motivation at Work Scale: Validation Evidence in Two Languages. *Educational and Psychological Measurement*, 2010 (70(4)), 628–646.
5. Chen, C. C., Peng, M. W., Saporito, P. A. (2002) Individualism, collectivism, and opportunism: A cultural perspective on transaction cost economics. *Journal of Management*, 2002 (28(4)), 567–583.
6. Cordes, C., Richerson, P., McElreath, R. and Strimling, P. (2011) How does opportunistic behavior influence firm size? An evolutionary approach to organizational behaviour. *Journal of Institutional Economics*. Cambridge University Press. 2011 (7(1)), 1–21.
7. Dahlstrom, R., Nygaard, A. (1999) An Empirical Investigation of Ex Post Transaction Costs in Franchised Distribution Channels, *Journal of Marketing Research*, 1999 (36 (May)), 160-70.
8. Furrer, O., Tjemkes, B. V., Ulgen Aydinlik, A., & Adolfs, K. (2012) Responding to adverse situations within exchange relationships: The cross-cultural validity of a circumplex model. *Journal of Cross-Cultural Psychology*, 2012 (43(6)), 943 – 966.
9. Ganesan, S., Brown, SP., Mariadoss, BJ., Ho, H. (2010) Buffering and Amplifying Effects of Relationship Commitment in Business-to-Business Relationships. *Journal of Marketing Research*, 2010 (47 (April)), 361-73.
10. Jap, S., Anderson E. (2003) Safeguarding Interorganizational Performance and Continuity Under Ex Post Opportunism. *Management Science*, 2003 (49 (12)), 1684-1701.
11. John, G. (1984) An Empirical Investigation of Some Antecedents of Opportunism in a Marketing Channel. *Journal of Marketing Research*, 1984 (21 (August)), 278-89.

12. Johnson, J. L., Cullen, J. B., Sakano, T. (1996). Opportunistic tendencies in IJVs with the Japanese: The effects of culture, shared decision making, and relationship age. *The International Executive*, 1996 (38(1)), 79–94.
13. Krasikov O., Roshchina I. (2018) Opportunism and labor opportunism of workers: general and specific features, causes of manifestation. *Tomsk State University Bulletin. Economy*. 2018 (42), 119 - 128.
14. Lee, D.-J. (1998) Developing International Strategic Alliances Between Exporters and Importers: The Case of Australian Exporters. *International Journal of Research in Marketing*, 1998 (15 (4)), 335 -48.
15. Nagin, D., Rebitzer, J., Sanders, S., Taylor, L. (2002) Monitoring, Motivation, and Management: The Determinants of Opportunistic Behavior in a Field Experiment. *American Economic Review, American Economic Association*, 2002 (92(4)), 850-873.
16. Popov E.V., Ersh E.V. (2016) Institutions for Decreasing of Employee Opportunism. *Montenegrin Journal of Economics*. 2016 (12 (2)). 131-146.
17. Popov, E., Simonova, V. (2006) Forms of Opportunism Between Principals and Agents. *International Advances in Economic Research*. 2006 (12), 115–123.
18. Posch, L. Bleier, A., Strohmaier, M. (2017) Measuring motivations of crowdworkers: The multidimensional crowdworker motivation scale. arXiv:1702.01661v3 [cs.SI] 33 p.
19. Sakalaki, M., Kazi, S., Karamanoli, V. (2007) Do individualists have a higher opportunistic propensity than collectivists? Individualism and economic cooperation, *Revue Internationale de Psychologie Sociale*, 2007 (20), 59–76.
20. Seggie, S., Griffith, D., Jap, S. (2013) Passive and Active Opportunism in Interorganizational Exchange. *Journal of Marketing*, 2013 (77(6)), 73-90.
21. Wathne, K., Heide J. (2000) Opportunism in Interfirm Relationships: Forms, Outcomes, and Solutions. *Journal of Marketing*, 2000 (64 (October)), 36-51.
22. Williamson, O. (1975) *Markets and Hierarchies: Analysis and Antitrust Implications*. New York: The Free Press.

FINANCIAL DEVELOPMENT INDICATORS AND ECONOMIC GROWTH: A COMPARATIVE STUDY BETWEEN MOROCCO, COMOROS, MAURITIUS, RWANDA, TUNISIA AND SENEGAL

Saanyane Moussa Omar

Faculty of Law, Economics and Social Sciences Sale - Mohammed V University

Laboratory of applied economies

Rabat, Morocco

saanta2020@hotmail.com

Hammes Khalid

Professor at Faculty of Law, Economics and Social Sciences Sale - Mohammed V University

Rabat, Morocco

kh.hammes@um5s.net.ma

ABSTRACT

In This Paper, we will present the analysis of the main indicators of financial development and economic growth in the Comoros, Morocco, Tunisia, Rwanda, Mauritius and Senegal for the period 1980-2016. The descriptive analysis of the statistical data shows an evolution in terms of financial aspect and economic growth, but relatively, economic growth depends not only on these indicators but on other factors too. These relationships have already been tested in other developed countries, but we are in African countries where their financial systems are organized in a capitalist way. The endogenous variable of our study is the rate of economic growth and financial development is measured through five indicators.

Keywords: *economic growth, endogenous, variable, financial development, indicators*

1. INTRODUCTION

The financial system is of paramount importance in development efforts for different countries of the world, regardless of geographic location, period and degree of industrialization. This is an observation that many economists agree on, based on both theoretical and empirical studies, which confirm the existence of a close link between the degree of development of the financial apparatus and the rate economy growth. The literature dealing with the link between the financial system and economic growth dates from the end of the 19th century and the beginning of the 20th century with, in particular, the works of Walter Bagehot(1873), Joseph Schumpeter (1912) and John Hicks (1969). Bagehot and Hick supported the idea that the financial system played a vital role in Britain's industrialization process by facilitating the mobilization of capital to finance major projects. Joseph Schumpeter also asserts that the proper functioning of banks stimulates technological innovation by identifying entrepreneurs with "new combinations". We have to go back to the 1960s to find consistent work on the economic literature on the link between the financial sector and economic growth. Goldsmith (1969), McKinnon (1973) and Shaw (1973) made the first theoretical and empirical developments. This work has shown that financial liberalization and the development of the financial sector can promote economic growth. These works are part of the endogenous growth theory. The latter considers that financial intermediation can be linked to the level of the capital stock per capita or to productivity, but it is not linked to their growth. Thus, the endogenous growth theory offered solid theoretical support to show that financial intermediation has not only a "level effect" but also a "growth effect". In this case, the aim is to identify the ability of financial intermediaries to mobilize resources and allocate them to the various investment projects through the functions of control, provision of liquidity and diversification of risks. We propose here to study the experience of these six countries (Comoros, Morocco, Mauritius, Tunisia, Senegal and

Rwanda) in terms of financial development by conducting an analysis of some financial development indicators. In this paper, we present a literature review of the main works that have dealt with link between financial development and economic growth. Next, we will try to conduct a quantitative and qualitative analysis of the main indicators of financial development.

2. LITERATURE REVIEW

Studies on the link between financial development and economic growth continue to interest economists both theoretically and empirically. The analysis of the causal links between finance and economic growth could be reassembled, at least Schumpeter (1911), but it recognized a renewed interest from the work of Gurley and Shaw (1955), Granger (1963), Patrick (1966), Goldsmith(1969), Hicks(1969) and McKinnon(1973) thanks to the introduction of empirical tests. Theoretically, Patrick (1966) proposes three hypotheses of links between finance and growth. This is first the so-called “supply leading” hypothesis where it is financial development that is the source of economic growth. Then, he proposes the opposite hypothesis called “Demand following” where financial development is a consequence of economic growth. Finally, the so-called “Stage-of-development” hypothesis states that finance causes economic growth in less developed economies, but as economies develop, causality reverses, growth taking over finance. McKinnon went on to test these hypotheses empirically and found that the causal link from financial development to economic growth is more critical. These results have had a great influence on the policies pursued by the International Monetary Fund (IMF) and the World Bank in developing countries in particular with regard to the reforms of the financial system in these countries. Several studies will later lead to the same results as McKinnon (1973), such as those of the World Bank (1989), King and Levine (1993, a,b), Pagano (1993), Neusser and Kugler (1998), Levine and al(2000); Corderon and Liu (2003). In fact, during the 1980s, several developing countries freed their financial systems from internal constraints, which hampered economic development: Capping of interest rates, high compulsory reserves, administrative credit allocations, barriers to entry of new banks.

3. ANALYSIS OF THE MAIN FINANCIAL DEVELOPMENT INDICATORS

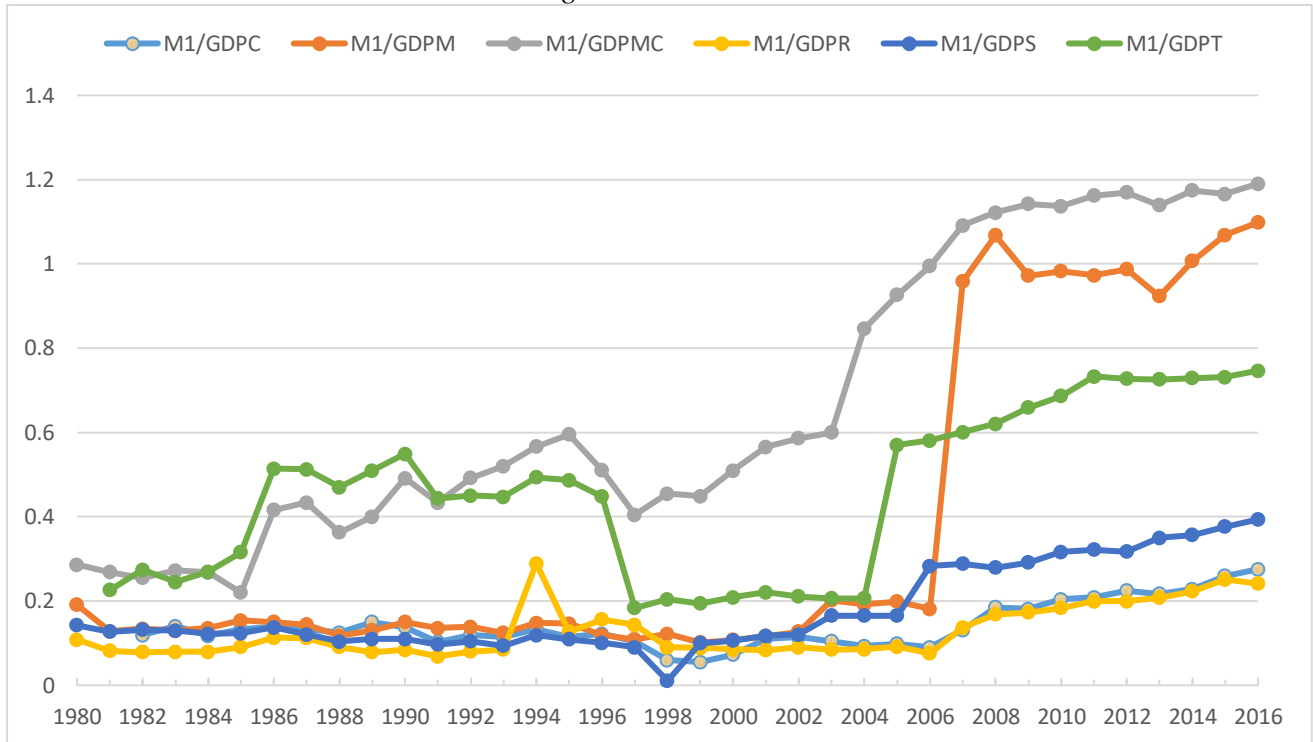
Among the indices used to determine the performance of financial intermediation in terms of resource allocation, several studies have focused on the calculation of certain ratios capable of determining the modalities of the functioning of a modern financial system.

There are six main indicators of financial development:

1. The liquidity ratio measuring the size of financial intermediaries and which corresponds to money, demand, and term deposits (M2) divided by GDP ($M2 / GDP$).
2. The ratio of banknotes, coins and cash (M1) divided by M2 ($M1 / M2$) which tells us about the ability of a financial system to attract savings and the availability of savings products. This ratio tends to decrease as the financial systems develop.
3. The ratio of domestic bank credit to GDP (CIB / GDP) which indicates the degree of participation of the banking system in economic growth.
4. The ratio of banknotes, coins and cash (M1) divided by GDP ($M1 / GDP$); which measures the size of a financial system (financial surface). A drop in this ratio reflects better management of cash by businesses and individuals who are placing their credit balances better and better.
5. The ratio of credit granted to the private sector (CSP) to GDP (CSP / GDP) which reflects the control of the crowding out effect of the public sector compared to the private sector.
6. The ratio of quasi money to GDP (QM / GDP), reflecting the increase in monetary savings.

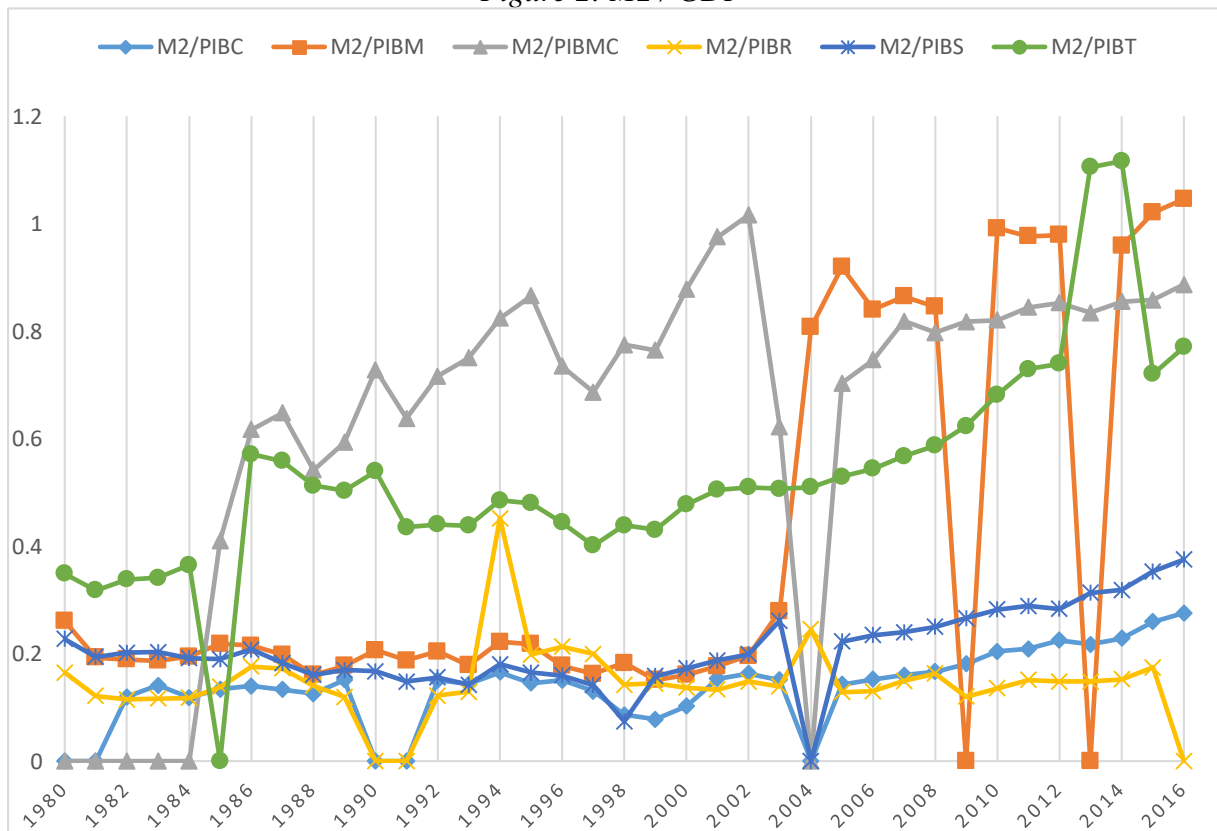
From our calculations relating to the various financial development indicators, the following results emerge.

Figure 1: M1 / GDP



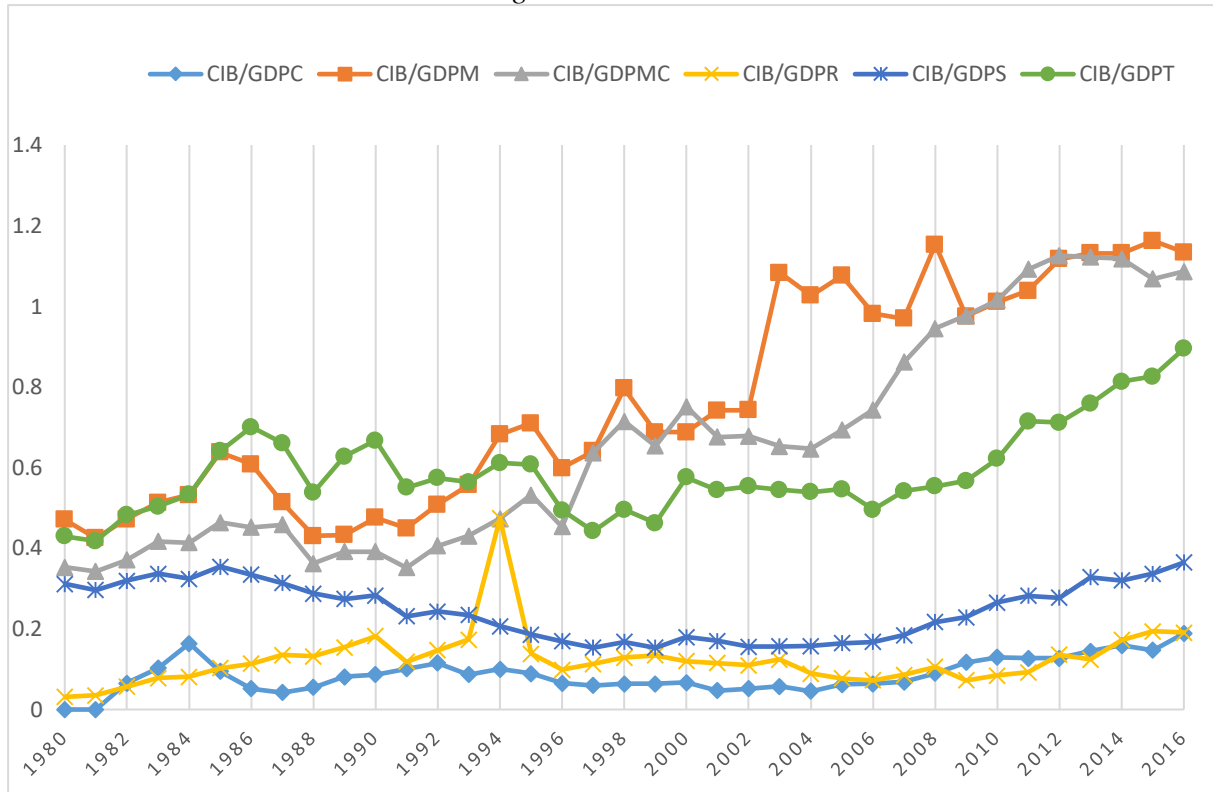
Source: produced by us using data from: BAM, BCT, BRW, BCM, BCC, BCEAO, CEA, FMI and WDI

Figure 2: M2 / GDP



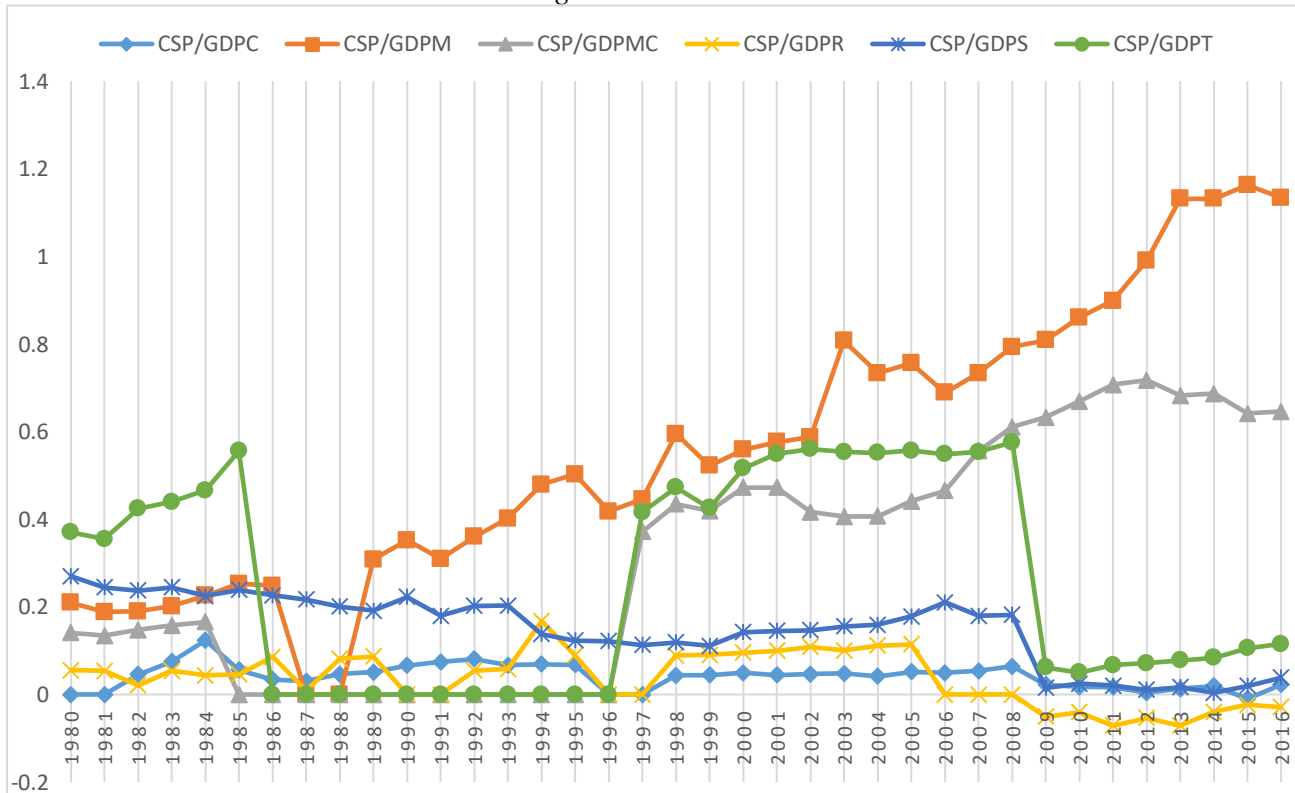
Source: produced by us using data from: BAM, BCT, BRW, BCM, BCC, BCEAO, CEA, FMI and WDI

Figure 3: CIB/GDP



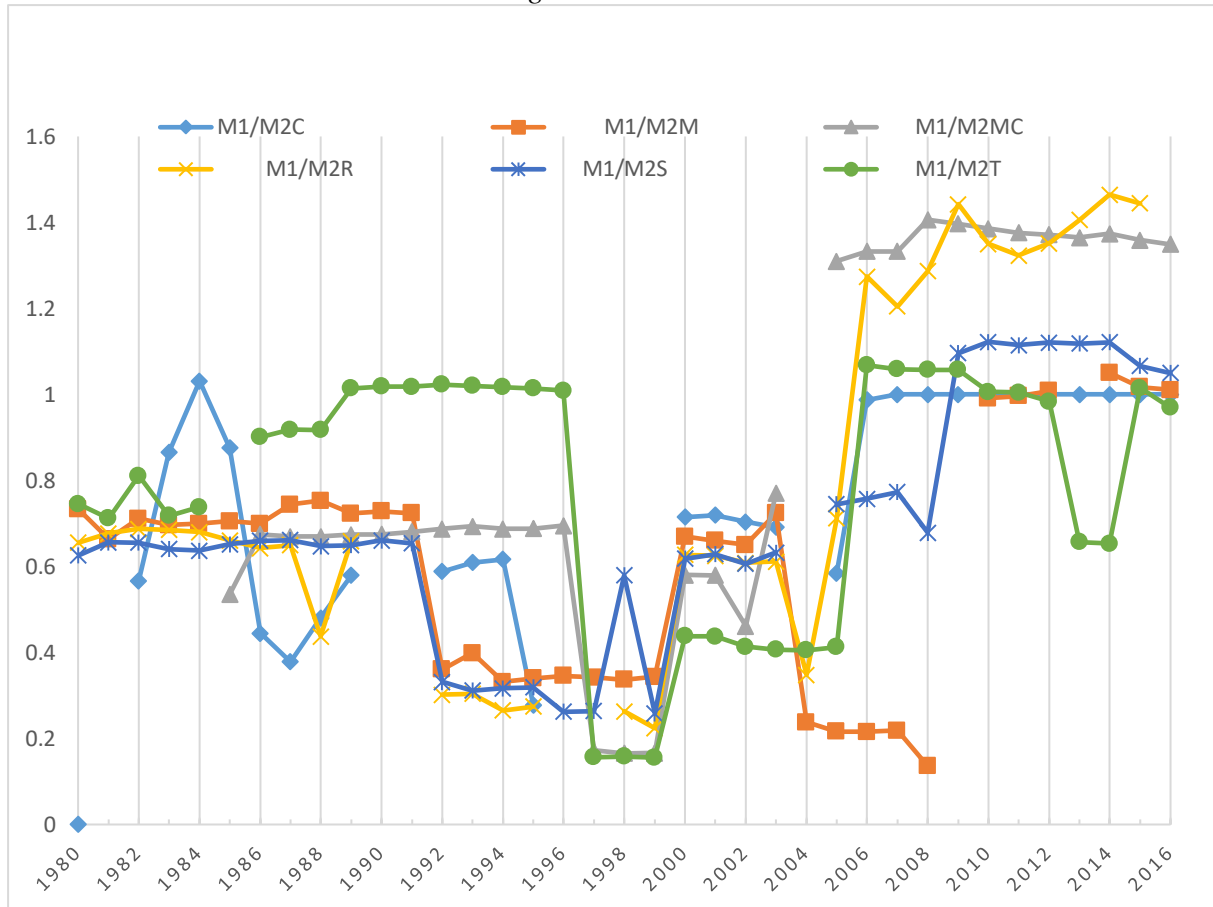
Source: produced by us using data from: BAM, BCT, BRW, BCM, BCC, BCEAO, CEA, FMI and WDI

Figure 4: CSP/GDP



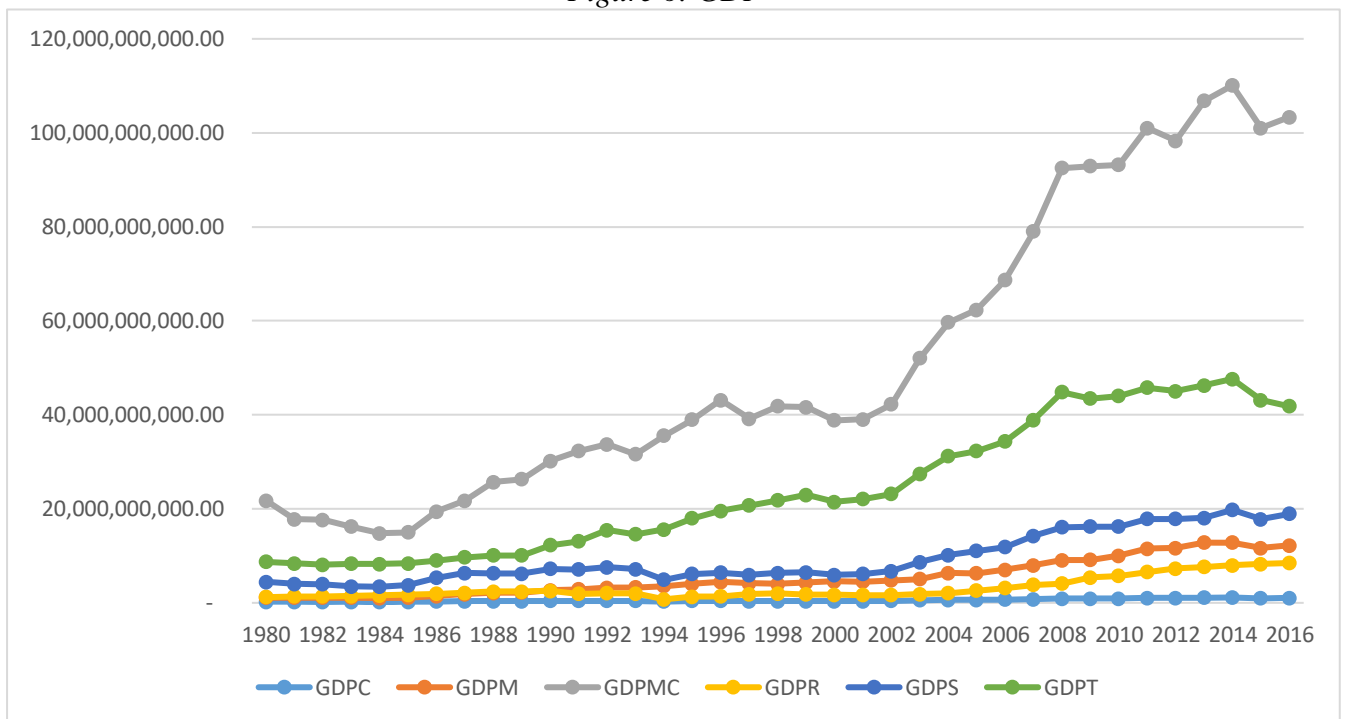
Source: produced by us using data from: BAM, BCT, BRW, BCM, BCC, BCEAO, CEA, FMI and WDI

Figure 5: M1/M2

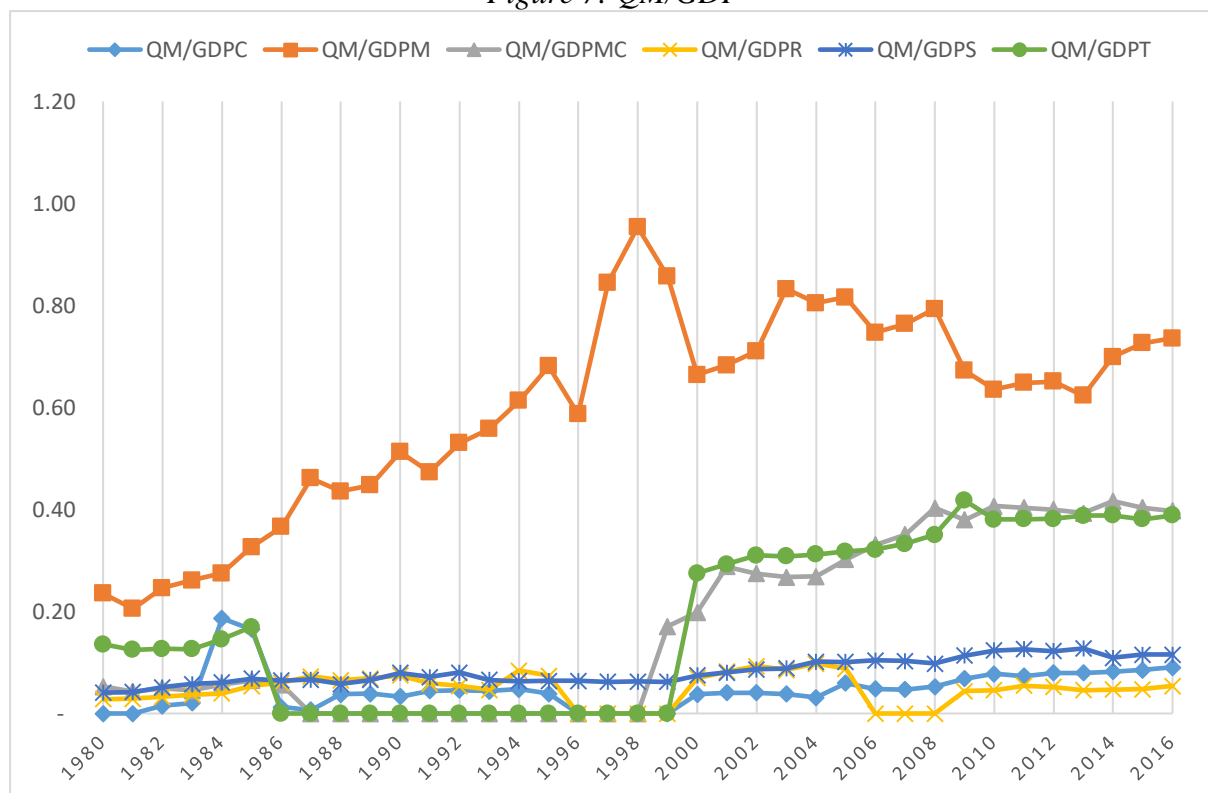


Source: produced by us using data from: BAM, BCT, BRW, BCM, BCC, BCEAO, CEA, FMI and WDI

Figure 6: GDP



Source: produced by us using data from the World Bank (WDI)

Figure 7: *QM/GDP*

Source: produced by us using data from: BAM, BCT, BRW, BCM, BCC, BCEAO, CEA, FMI and WDI

NB: The comments of these graphics will be exposed during the presentation of this paper.

4. CONCLUSION

At the beginning of the 1970s, the international economy suffered from a considerable decline in growth and many countries suffered from deficits in their balance of payments and an increase in external debt. Financial liberalization then appears to be the solution to cope with the harmful effects of financial repression and to initiate economic growth. This new financial policy has been strongly imposed by the IMF and the World Bank to remedy the lag in economic development in the world. In this paper, we have studied the experience of six African countries, in this case, Morocco, Tunisia, Rwanda, the Comoros, Mauritius and Senegal by analyzing the main indicators of financial development. Our objective was to detect the improvements and shortcomings of the financial systems of these six countries and to measure their financial development. When interpreting the data relating to financial development indicators, it should be borne in mind that the density and growth of financial circuits are two factors which influence each other: if it is true that the systems denser financials tend to boost further growth, the level of per capita income is also thought to be a key factor in the depth of financial circuits.

LITERATURE:

1. L. Abadie and C. Mercier-Suissa, International Finance: Foreign exchange markets and financial risk management. Colin, 2011.
2. B. E. Aka, "The Role of Capital Markets in Growth and Economic Development", University of Auvergne-Clermont-Ferrand I, 2005.
3. B. E. Aka, "The Role of Capital Markets in Economic Growth and Development", Theses, University of Auvergne - Clermont-Ferrand I, 2005.

4. J.-P. Allegret and S. Azzabi, "International financial integration and economic growth in emerging and developing countries: the channel of financial development", *Revue d'Économie du Développement*, p. 27-68, 2014.
5. B. Amable and D. Guellec, "The theories of endogenous growth / The Theories of Endogenous Growth", *Revue d'économie politique*, p. 313–377, 1992.
6. R. J. Barro, X. Sala-i-Martin, and F. Mazerolle, *Economic growth*. McGraw-Hill E: Ediscience International, 1996.
7. R. J. Barro, "The factors of economic growth", 2000.
8. M. D. Barry, "Financial development and economic growth: theory and evidence from WAEMU and ECOWAS areas", *Theses*, University of Franche-Comté, 2012.
9. J.-C. Berthélemy and A. Varoudakis, "Financial development, financial reforms and growth: a panel data approach", *Revue économique*, p. 195–206, 1998.
10. G. Cette, A. Epaulard, and P. Givord, "Productivity growth: the role of institutions and economic policy", *Economics and Statistics*, vol. 419, no 1, p. 3-10, 2008.
11. C. Chavagneux, *International political economy*. The Discovery, 2010.
12. F. DEISTING, F. MAKHLOUF, and A. NAAMANE, "Financial development, financial flows and economic growth", Oct-2018.
13. D. de la Croix, T. Baudin, and others, "Economic growth", *Catholic University of Louvain, Institute of Economic and Social Research (IRES)*, 2015.
14. F. Doligez, J. Bastiaensen, F. Bédécarrats, and M. Labie, "Financial inclusion, a new avatar of financial liberalization? ", *Tiers Monde Review*, no 1, p. 9–20, 2016.
15. J. C. Eggoh, "Economic growth and financial development: elements of theoretical and empirical analysis", *Orléans*, 2009.
16. H. El Malki, *Thirty Years of Moroccan Economy, 1960-1990*. National Center for Scientific Research, 1989.
17. Y. M. Z. Forouheshfar, "Financial sector development, economic growth and demography in MENA region", *Theses*, PSL Research University, 2017.
18. M. FOUDEH, "Financial Liberalization, Efficiency of the Financial System and Macroeconomic Performance", *University of Limoges*, 2007.
19. M. Frederic and others, "Money, banking and financial markets", *New Horizons*, 2010.
20. J.-L. Gaffard, *Economic growth*. Armand Colin, 2011.
21. E. Gelbard, A.-M. Gulde, and R. Maino, "Financial development in sub-Saharan Africa: the challenges for sustained growth", *Revue d'économie financier*, no 4, p. 19–42, 2014.
22. P. Granata, K. Kibuuka, and Y. Mascaró, "The cost of financing in Africa: what public policies to reduce its cost and strengthen financial inclusion? ", *Journal of Financial Economics*, Vol. N ° 116, no 4, p. 121-150, 2014.
23. P. Guillaumont, "Openness policy and economic growth: the effects of export growth and instability", *Journal of Development Economics*, vol. 1, p. 91–114, 1994.
24. S. G. Jeanneney and K. Kpodar, "Financial development, financial instability and economic growth", *Economics & forecasting*, no 3, p. 87–111, 2006.
25. C. I. Jones, *Theory of endogenous growth*. De Boeck Supérieur, 1999.
26. E. C. Jude, "Financial development, Financial instability and Economic growth: A reexamination of the relationship", *Revue region et developpement*, no 32, 2010.
27. Kangni Kpodor, Syviane Guillomont Jeanneney, "Financial development, financial instability and economic growth - financial development.pdf". [Online].
28. K. Kpodar, "Financial Development and Growth: Is Sub-Saharan Africa Marginalized? ", *African Development Review*, vol. 17, no 1, p. 106–137, 2005.
29. K. Kpodar, "Financial development, financial instability and economic growth: implications for poverty reduction", *Theses*, University of Auvergne - Clermont-Ferrand I, 2006.

30. K. R. Kpodar, "Financial development and the problem of poverty reduction", CERDI, Studies and Documents, E, 2004.
31. O. Lajili, "Financial liberalization, political openness and economic growth in developing countries", Theses, University of Toulon, 2015.
32. P.-J. Lehmann, Economics of the financial markets. De Boeck, 2014.
33. C. Mercier-Suissa and L. Abadie, International Finance: Foreign exchange markets and risk management. Armand Colin, 2011.
34. F. S. Mishkin, Currency, banking and financial markets. Pearson Education France, 2010.
35. S. Morvant-Roux, I. Guérin, M. Roesch, and J.-M. Servet, "Financial inclusion policies, microfinance and financing of agriculture. », *Developing worlds*, no 3, p. 9–24, 2010.
36. A. Nsabimana, Organization, regulation and economic efficiency of the financial intermediation system in Africa. Universal presses de Louvain, 2002.
37. M. Ouni, "Empirical study of the relationship between the monetary and financial system and economic growth", University of Neuchâtel, 2011.
38. U. Panizza, Finance and Economic Development, Vol. 3. Graduate Institute of International Studies and Development, 2012.
39. G. Turunc, "Development of the financial sector and growth: the case of emerging Mediterranean countries", *Revue Région et développement*, no 10, p. 99–120, 1999.
40. M. P. VILLIEU, "Economic Growth and Financial Development: elements of theoretical and empirical analysis", University of Orleans, 2009.
41. M. O. Williams and M. O. Adedeji, Fiscal Reaction functions in the CFA Zone: An analytical perspective. International Monetary Fund, 2007.
42. A. Yahyaoui and A. Rahmani, "Financial development and economic growth: Role of the quality of institutions. ", *Panoeconomicus*, vol. 56, no 3, 2009.

CURRENT STATE AND DEVELOPMENT PERSPECTIVES OF CSR PERFORMANCE IN AZERBAIJAN

Shahla Gahramanova

Azerbaijan State University of Economics (UNEC), Azerbaijan
shahla.gahramanova@unec.edu.az; gahramanovas@gmail.com

ABSTRACT

The concept of corporate social responsibility became one of the most discussed ethical principles to be respected by all businesses in all fields of activities. During recent years, number of companies asserting commitment to CSR around the world are growing as they recognize CSR one of the most important principles of ethics and an indicator of sustainable development. This paper aims to explore the current state of implementation of the concept of corporate social responsibility by companies in Azerbaijan and tries to analyze trends and perspectives for the future development of CSR performance in the country. The article highlights CSR related activities mainly of large companies in Azerbaijan. Increased attention and support by the government to inspire the development and implementation of CSR actions is also within the scope of the issues addressed in this study. This research work is developed on the basis of theoretical literature on CSR, sustainable development and CSR, reports of international organizations, conference materials, interviews with officials of related agencies, expert analyses and the authors own observations. Methods include logical reasoning based on the analysis of scientific literature, statistical and interview data, analysis of reports of international organizations and data that is publicly available.

Keywords: *CSR, corporate strategy, sustainable development, stakeholder orientation, social investments*

1. INTRODUCTION

In modern economic conditions, sustainable development of any business is closely connected to sustainable development and social well-being of the society as concentration of large financial and material resources in the hands of a large business enables them to significantly influence the development of society. Society, on the other hand, understanding the significant role businesses can play for the public welfare becomes more exacting towards it [business] calling to act in a socially responsible way in terms of careful use of natural resources and the environment, creating good working conditions, caring for the labor force, investing in the development of society at large, etc. XXI century society pays an increasing attention to the non-financial reputation of businesses. Along with industrial, commercial and economic indicators, non-financial signs are also becoming increasingly important for stakeholders. In this connection, impact of Corporate Social Responsibility on the attractiveness of a business for customers, government, potential investors and partners, and other stakeholders is hardly to overestimate. In our days, any investor, deciding on a serious step of purchasing shares of a company, will scrupulously evaluate the full range of risks. Under such conditions, a company that is attractive in terms of its current commercial and economic indicators, but unstable from ethical, social or environmental perspectives will not appear such an attractive and competitive partner for cooperation. Reputation also becomes extremely important from the perspective of entering in international markets because reputable companies recognized for their responsible and ethical conduct will not allow themselves to cooperate with those who ignore or are indifferent to the ethical components of doing business even such a cooperation would seem economically inviting. Modern business history has faced number of cases when consumer behavior and pressure from international community forced companies to alter their production practices, business strategies, and sometimes even their corporate philosophy.

A good example may serve here global consumer boycott and pressure from international community that forced Nike to reconsider its standards towards its subcontractors in some Asian countries; in the early 1990's due to the malpractice with a focus on low wages and harsh working conditions of workers in its subcontractor factories located in China, Vietnam and Indonesia Nike had to take major steps to turnaround their overseas practices. Initially refusing to be held responsible for the actions of its independent subcontractors the company later had to modify its policy, code of conduct and environmental responsibilities publicizing a detailed 108-page report describing the conditions and salary pay of their subcontractor factories abroad. However, it took the company years to rebuild its reputation and hold a place in the list of top 100 in the global sustainability rankings. CSR is important in building relations with governmental agencies. World economic (financial) crisis of 2008-2009 demonstrated that companies who had integrated CSR principles in their activity and proved themselves as ethical and socially responsible survived the crisis with minimal losses. During the crisis US government supported several big companies, among them General Motors, Chrysler, Citigroup, with positive reputation bailing them out from bankruptcy while companies having proved themselves as unethical by deceiving stakeholders with false financial, economic and sustainability statements faced court cases with fatal outcomes. As mentioned earlier businesses in progressive world largely benefits from being socially responsible. Companies in developing countries who had not yet made CSR principles an integral part of their activity also started to understand the advantages of being ethical and socially responsible for their sustainability and positive image in the society. In this connection, businesses in Azerbaijan, particularly big companies, gradually demonstrate commitment to integration of CSR in their activity.

2. CSR IN MODERN ECONOMIC CONDITIONS

Before examining development and activity of the CSR oriented businesses in Azerbaijan, let us give a short overview on how the CSR conception is developed worldwide and integrated in corporate activities of companies. To begin with, we would like to restate that the practice of conducting responsible and ethical business goes back to the ancient civilizations of both West and East, particularly after the recognition of monotheist religions calling people to mercy and help those in need. Some authors even tend to evaluate ancient practices of charity and other related activities as a predecessor of modern concept of corporate social responsibility. However, those traditional initiatives were more a question of morality than responsibility and the movement for the ethicalness and responsibility of business became widespread only in the late XIX - early XX centuries. As a conception, CSR has around half-century history of formation and development. Intensive discussions about the social responsibility of enterprises started after the World War II and as a term CSR was coined by American scientist Howard Bowen in his book «Social Responsibilities of the Businessman» where he stated that entrepreneurs carry out responsibility towards the environment they live in and had to contribute to social development of society surrounding them (Bowen 2013). Decades later, in 1991 Archie Carroll, an American scientist and the author of the CSR Pyramid, supporting the social responsibility concept of H. Bowen in his article “CSR: Evolution of the Term” (Carroll 1999) emphasised the significance of social responsibility in the sustainable development of business and society. Modern conception of social responsibility of businesses has shaped under the influence of certain important factors:

- **Increased social awareness and requirements of communities to businesses**

By the development of society, the character of requirements posed to businesses also changes. As stated by W. Shaw, professor of San Jose State University and author of the book “Business Ethics”, in our days “The list of corporate responsibilities goes beyond such negative injunctions such as “Don’t pollute,” “Don’t misrepresent products,” and “Don’t bribe.”

Included also are affirmative duties like “See that your product or service makes a positive contribution to society,” “Improve the skills of your employees,” “Seek to hire the disabled,” “Give special consideration to the needs of historically disadvantaged groups,” “Contribute to the arts and education,” “Locate plants in economically depressed areas,” “Improve working conditions.”, etc. (Shaw 2016)

- **Industrial disasters and accidents:**

- 21 September 2001 explosion at the AZF chemical plant in the French city of Toulouse, the consequences of which are considered one of the largest technological disasters (exploded 300 tons of ammonium nitrate that were left in the finished goods warehouse). According to the official version, the management of the plant is to blame, which did not ensure the safe storage of explosive substances. All these (and numbers of others) disasters were a significant hit on reputation and hopefully on conscience of those who were responsible.
- 19 March 2007 a methane explosion at the Ulyanovskaya colliery in the Kemerovo region killing 110 people;
- Deepwater Horizon oil spill in April 2010 leading to extensive damage to marine and wildlife habitats in the Gulf of Mexico;
- And the most latest: Boeing Max 737 accidents taking hundreds of lives which involves risky design choices and negligent safety assessments

- **Major corporate scandals shaking the world economy**

Though major companies of the US and some large corporations in other countries had declared CSR as an integral part of their activities demonstrating commitment to it the World faced a shock when huge corporations such as **WorldCom**, Enron, TYCO, Lehman Brothers, Satyam and many others were found guilty and admitted the fact of deceiving the public and stakeholders. These massive corporate failures and scandals leading to the world financial crisis of 2008-2009 clearly demonstrated the after-effects of conducting unethical business and made the governments and international organizations to reconsider and modify norms and regulations regulating business activity towards all their stakeholders. It was also a sign to governments, particularly for super powers such as US to develop internal regulating mechanisms to track the social activity of companies to see whether it is a decisive PR company to avoid taxes and other responsibilities or a noble CSR policy. The crisis also revealed the necessity of making corrections/modification to the definition of CSR making clear that it cannot be categorized as “voluntary activity”.

- **Overall rising international standards**

Companies willing and becoming internationally certified have to follow certain requirements - among them reports on careful use of natural resources, limitations of pollution permission, other kinds of social and environmental reports. From one side this certifications contributes to company's international recognition while apply certain limitations in the activity: in the capacity of a member the company undertakes certain obligations to stay within expected behavior norms.

- **Other factors**

Overall during the last two decades, CSR concept has been given a great attention both theoretically and empirically. Having gained theoretical recognition and approval by academicians like A. Carroll, E. Freeman, R. Kotler, M. Schwartz and others CSR is given a due importance and became an integral part of the sustainable businesses across the globe. Studies of modern tendencies in the development of CSR conception shows that since more than 20 years CSR has been integrated in the activity of all modern reputable companies. Several regulatory documents such as ISO 26000 (particularly), GRI, SA 8000, A 1000, Dow Jones Sustainability Indices have been developed and now businesses try to build their social

reporting system and the entire structure of corporate social responsibility according to standards of these regulating mechanisms. Although general approach toward CSR conception is still missing most of them concludes that CSR is a voluntary activity conducted by businesses for the well-being of society. Majority of these definitions doesn't include or consider stakeholders while most universally recognized definition stated in ISO 26000 underlines importance of recognizing expectations of all stakeholders without categorizing CSR as a voluntary activity. One can conclude from ISO definition that thinking of CSR conception as a voluntary activity is outdated. If we compare the ISO 2600 definition of CSR established in 2010 against the European Union's Official Definition of CSR publicized 9 years earlier in the EU Green Paper we see that the ISO definition avoids the word "voluntary" and brings the stakeholder perspective on the agenda underlining the importance of recognizing expectations of all stakeholders.

EU Green Paper definition of CSR: "The voluntary integration of companies' social and ecological concerns into their business activities and their relationships with their stakeholders. Being socially responsible means not only fully satisfying the applicable legal obligations but also going beyond and investing 'more' in human capital, the environment, and stakeholder relations."

ISO 2600 definition of CSR: "The responsibility of an organization for the impacts of its decisions and activities on society and the environment, resulting in ethical behavior and transparency which contributes to sustainable development, including the health and well-being of society; takes into account the expectations of stakeholders; complies with current laws and is consistent with international standards of behavior; and is integrated throughout the organization and implemented in its relations."

Based on the foregoing, we can say that having a half-century history of formation and development, the concept of corporate social responsibility (CSR) has long been recognized as one of the key components of successful business at various levels, both abroad and in our country.

3. CURRENT STATE AND DEVELOPMENT PERSPECTIVES OF CSR IN AZERBAIJAN

The concept of corporate social responsibility is a relatively new phenomenon for Azerbaijani companies. In its modern perception, CSR in Azerbaijan has become popular since the end of the first decade of the XXI century though the manifestation of philanthropy was part of Azerbaijani entrepreneurs at all times in the form of charity, which is considered the predecessor of CSR. Brief overview of the history of social responsibility and ethicalness of business in Azerbaijan is given below. Evolution of social responsibility of businesses in Azerbaijan went through long and contradictory stages. In old times, donating some part of the wealth to those in need was cultural and religious component of the national thinking. The early XX century Azerbaijan experienced more systematic form of being socially responsible: clearly addressed social contributions directed to the development of education, healthcare, art and architecture, road building and other similar directions. Thanks to social contributions of the prominent Azerbaijani Maecenas such as Haji Zeynalabdin Tagiyev, Murtuza Mukhtarov, Aga Musa Nagiyev, Shamsi Asadullayev, Nabat khanum Ashurbeyli and others a significant progress has been made in the country in the areas of education, healthcare, architecture, music and other fields. To note that Nobel Brothers are also in the list of Maecenas who contributed to the well-being of the Azerbaijani society and are glorified among those who laid the foundation of responsible and ethical business in Azerbaijan.

Starting from the third decade of XX century Azerbaijan continued its existence [for the next 70 years] as part of the Soviet Union being one of the 15 Soviet Socialist Republics. Changes in the political system had its impact on the notion of social responsibility by changing and modifying its character according to the requirements of the existing political regime. The centrally planned economy of the communist system (so called “Five-Year Plans”) was hardly conducive to the social development of society though being socially responsible was on the agenda of soviet ideology. The outline of social responsibility and conducting ethical business or activity in soviets was different from its modern meaning, first of all because there were no private business and everything belonged to and ruled by the government. The idea of having no single poor person in the country and a popular motto “One for all and all for one” was expecting and encouraging to be ethical and contribute to common good and for the well-being of the whole nation without discriminating none of its members. Though not named CSR, there were understanding of social responsibility, safety and harmfulness of production for environment and people. There were messages with social responsibility content providing emotional support that were delivered to the minds via the books, slogans, movies and cartoons, community workdays, collective games and contests. It is difficult now to judge on the degree of effectiveness and implementation scope of those initiatives though the idea behind was definitely positive. Soviet animated film called “Gena the Crocodile” where the main hero - the 50-year-old crocodile [Gena] volunteers as a community activist by building houses for homeless, fighting against manufacturers who carelessly pollutes the environment, particularly the local lake, may serve an example used in 70th to attract attention to social responsibility. (<https://www.youtube.com/watch?v=lOh330MbTag&t=5s>). After the collapse of the Soviet Union Azerbaijan, gaining its independence in 1991, entered in a new epoch of its existence with chaotic transformation period extremely complicated by the involvement in the Armenian-Azerbaijani Nagorno-Karabakh conflict. Experiencing an ongoing war, struggle for protection of the independence that the country gained after 70 years, the transformation crisis of the 1990s, poor economic conditions, demographic crisis and other challenges neither the government nor the society or emerging businesses were ready and able to think about social responsibility in its broad meaning. All these factors suspended the attention of both the government and the society from sustainable development and social responsibility making them busy to fight against symptoms of transformation crisis of the 1990s. Accordingly, during around 15-20 years of long-running and difficult period of state-building process, a systematic approach to CSR related activities were not given a due attention. More than 60 years long history of modern CSR concept shows that attention to the social responsibility of businesses increases in parallel to the economic development of a country or an entire region, i.e. CSR is paid attention when the economy grows. This was the case in the US, in developed countries of Europe and Asia. So the reason why CSR concept in post-soviet countries, including Azerbaijan, became actual only during the last 10 years (almost 20 years later than in developed countries) can be explained by the conditions mentioned above. However, even after the state stepped into more stable development period, on the whole, qualitative and rational ideas of social significance did not always find their due place in the activity of all businesses. Not fully understanding the philosophy and importance of being socially responsible companies were not striving integrating CSR in their activity. Giving just a superficial treatment to this important responsibility by spontaneous events of philanthropic character they were preferring to avoid their responsibilities to various stakeholders. Having in mind to be liked by the government rather than to contribute to social well-being and sustainability these philanthropic initiatives could not last long. From the studied materials, we can conclude that the first serious attempt of the Azerbaijan Government for the development and promotion of Corporate Social Responsibility was made in October 2008 as part of the "Azerbaijan Corporate Governance Project" jointly implemented by the International Finance Corporation (IFC) and the Ministry

of Economic Development. In 2011 Azerbaijan Corporate Governance Standards was developed within this project thanks to the joint efforts of the Ministry of Economic Development and the International Finance Corporation (IFC). Over the past decade, situation has positively changed and certain improvements are observed in the field of CSR activity thanks to the attention of government and initiatives taken by some large companies (mostly banks, mobile operators, oil companies having international cooperation). Government has repeatedly voiced the importance of being socially responsible calling business people to consider CSR as an important and serious component of their activity and prioritize contribution to the well-being of society and environment. With the support of government some regulatory and encouragement mechanisms (though not comprehensive) have also been developed to name a few:

- “The Code of Corporate Ethics” developed by the Ministry of Economic Development in cooperation with IFC;
- Establishment of National CSR Award;
- Reforms carried out by the Council on State Support to NGOs;
- Establishment of the Agency for the Development of Small and Medium-Sized Enterprises;
- Activity of the State Agency for Sustainable development under the Ministry of Economics and
- Other similar activities.

One of the biggest events underlining the importance of CSR and trying to raise the CSR awareness of society, businesses, related public associations and media was the First Azerbaijan Sustainable Development & Corporate Social Responsibility Conference held in Baku on 15 October 2015. Gathering leading governmental and non-governmental organizations from Azerbaijan and the region, as well as international organizations supporting CSR activity, the event focused on a comprehensive evaluation of the current situation in the country, including development opportunities, and promoted dialogue and cooperation among the state and private sectors. Government initiative to recognize and appreciate companies who runs a sustainable and ethical business was a positive sign and made a significant impact to encourage businesses to integrate CSR in their activity. A group of large corporations in Azerbaijan began to integrate CSR conception in their activity in accordance with international norms and standards considering interests of various stakeholders such as employees, customers, society and environment. For several years, considerable attention has been paid by the government to the development of various sustainable social programs. One of them is establishment of the National CSR Award the main objective of which is to increase the number and quality of sustainable Corporate Social Responsibility projects undertaken by entrepreneurial entities in the country, and to reaffirm the commitment to social responsibility at a larger extent. The first ceremony of the award took place in January 2019 appreciating the initiatives of seven socially responsible private businesses: four commercial banks, one mobile operator, one insurance company and one development centre. Several large national companies whose activity was surveyed within this research has provided an open social report, which was mainly at the self-initiative of the companies. Some large companies have already institutionalized CSR and established their own CSR Committees. Most of them have been implementing sustainable social projects lasting since several years. For example, since 2008 Bakcell, one of the 3 leading mobile operators in the country has been running a sustainable project called “Bakcell Stars” focusing on the creation of opportunities for vulnerable children supporting their integration to the society and creating for them opportunities for education and employment. In June 2019 Bakcell received an award in the “Corporate Social Responsibility” nomination for its 10 years long sustainable project. Earlier the company had received the “National CSR Award 2018”.

Establishment of such initiatives is commendable while there is a need to establish a non-financial reporting mechanism and a CSR rating agency that has a proper evaluation system developed according to the requirements of recognized international standards. Currently, the number of companies in Azerbaijan seeking to improve their CSR reputation has been rising. However, they need a guidance in developing their CSR strategy and CSR reporting standards. From this perspective development of national CSR strategy and CSR reporting standards would increase the credibility and visibility of CSR and provide a guidance for organisations in building their CSR strategy and reporting system. There are various internationally recognized standards and guidance on social, environmental and economic responsibilities such as GRI reporting system, Dow Jones Sustainability Indices (DJSI), SA 8000, ISO 26000, AAA1000 to name a few. These standards provide comprehensive approach and guidance for developing national SCR strategies and standards that will integrate universally accepted norms of socially responsible activity. However, although ready and proved Western CSR standards will positively influence CSR development in the country it is important that national CSR standards consider and adapt certain cultural and historical specificities of the nation.

4. SUMMARY

The paper defines the evolution of CSR development in Azerbaijan and specifies the main period of its development after Azerbaijan gained independence in 1991. First period covers end of 1990's and first years of XXI century when the nation became slightly familiar with the CSR concept in its modern meaning. During this period, there were unsystematic charity activities by many businesses. Second period covers roughly 2005-2015 noticed with the acceleration of mostly quantitative development processes with big number of large companies trying to integrate CSR in their activity. The third period starts since 2015 and can be defined as the period of gradual understanding the philosophy of CSR concept, with large companies institutionalizing CSR and attempting to realize it according to the universal standards. One of the main conclusions made as a result of this research work is that CSR in its modern understanding is relatively a new notion for Azerbaijan and other post-soviet countries and it can be assessed as one of the factors delaying its integration in the activity of businesses. Surveying the activity of large companies and related agencies in the country allows to make another conclusion - currently CSR is in the process of nationwide integration as it has been a topic of wide discussions by commercial and non-commercial organizations, state agencies, public associations, media and society. Media, as well as researchers publish news and articles about CSR activity in the country. However, majority of these publications tend to criticize rather than appreciate the CSR initiatives and efforts put by the related agencies and responsible companies. Establishment of CSR Award by the government is another promising and important steps for encouraging businesses to more seriously and widely engage in CSR related activities. Recognition of CSR on the governmental level will definitely boost its integration, however establishing a CSR rating agency that has a proper evaluation system based on the requirements of recognized international standards would be more advisable. Establishment of a non-financial reporting mechanism is another important step in helping businesses to reconsider their CSR policy and benchmark it with the world practice. The research found that only some of the large companies whose activities are researched publish CSR report while the content of the publicized reports are well behind of the existing international standards. It shows that companies need methodological guidelines and expert support for developing CSR report. The most important conclusion is connected to the necessity of developing national CSR strategy and CSR reporting standards in conformity with internationally recognized standards such as GRI reporting system, Dow Jones Sustainability Indices (DJSI), SA 8000, ISO 26000 while considering and adapting certain cultural and historical specificities.

LITERATURE:

1. Achieving Sustainable Development through Corporate Social Responsibility. Research Report by CESD (2013). Available at http://cesd.az/new/wp-content/uploads/2011/05/CSR_Research_Paper_CESD_KAS.pdf
2. Bakcell receives an award from the Ministry of Economy (2019) https://www.bakcell.com/en/06/2019/bakcell_award_from_ministry_of_economy_2019
3. Brink A. (2012). Corporate Governance and Business Ethics. SAGE Brief Guide to Business Ethics series. UK: SAGE Publications.
4. Business Ethics by Annual Editions (2012). Delhi: McGraw-Hill Education.
5. Carroll, Archie. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business & Society*. 38. 268-295.
6. Corporate Social Responsibility (CSR) – Definition, History and Evolution <https://youmatter.world/en/definition/csr-definition/>
7. CSR in Azerbaijan: Business in the Society. IMPACT Azerbaijan Magazine. 2012. Issue 14. Available at <http://amcham.az/wp-content/uploads/2016/11/impact14.pdf>
8. Davis Marc. (2019) U.S. Government Financial Bailouts. Investopedia. <https://www.investopedia.com/articles/economics/08/government-financial-bailout.asp>
9. Ferrell O.C., Fraedrick J., Ferrell L. (2018). Business Ethics: Ethical Decision Making and Cases (12th edition). USA: South-Western Cengage Learning.
10. Gahramanova S. (2019), The Role of the Corporate Social Responsibility in Sustainable Development of Small and Medium Enterprises in Azerbaijan, Economic and Social Development: Book of Proceedings, p. 1254-1260
11. How Consumer Behavior Shifts Forced Nike to Become a Leader in Building an Ethical and Sustainable Supply Chain. <https://medium.com/@gjohnston2/abstract-b7019511142e>
12. J. Sullivan. (2009) The Moral Compass of Companies: Business Ethics and Corporate Governance as Anti-Corruption Tools. IFC publication. https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/publications/publications_handbook_cg-focus7
13. Mercy Ejovwokeoghene Ogbari et al. (2016) Entrepreneurship and Business Ethics: Implications on Corporate Performance. *International Journal of Economics and Financial Issues*, 6(S3) 50-58.
14. Məsuliyyətli Banklarımız (2015) <https://banco.az/az/news/mesuliyyetli-banklarimiz>
15. National CSR Award was presented to the 2018-year winners (2019) <http://ask.org.az/en/2019/01/31/national-csr-award-was-presented-to-the-2018-year-winners/>
16. Porter, M.E., Kramer, R.M. (2006). The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84 (12), 78-94.
17. Samuel O.Idowu et al (2018) Current Issues in Corporate Social Responsibility. Springer International Publishing AG 2018
18. Shaw W.H. (2016). Business Ethics: A Textbook with Cases (9th edition). USA: Wadsworth Cengage Learning.
19. Şirkətlər könüllü olaraq korporativ sosial məsuliyyətli olmağa dəvət edilir (2012) <http://cesd.az/new/?p=4423&lang=az>
20. Taylor J., Simpson J. (2013). Corporate Governance, Ethics and CSR. Great Britain: Kogan Page Limited.
21. The World's Most Reputable Companies For Corporate Responsibility (2018) <https://www.forbes.com/sites/vickyvalet/2018/10/11/the-worlds-most-reputable-companies-for-corporate-responsibility-2018/#4d5fb6413371>
22. Yerli şirkətlər və korporativ sosial məsuliyyət (2017). Media report available at <https://sia.az/az/news/economy/623367.html>

TRENDS AND CONTRADICTIONS OF ECONOMY GLOBALIZATION

Shafa Guliyeva

Azerbaijan State University of Economics (UNEC)

Baku, Istiqlaliyyat str.6, AZ1001, Azerbaijan

shafa.guliyevaa@gmail.com

ABSTRACT

Globalization is a manifestation of the modern post-industrial stage of economic and social development in relations between the countries of the world. The economic self-determination of countries is inseparably linked with their entry into the world economy, with finding their place in the globalization processes. Acquiring its own logic, globalization, has an increasing impact on the economic development of the world's different countries. The main economic globalization sources are a small group of countries with new industrial economies, and a larger number of countries are experiencing the contradictory effects of globalization. Arising from the end of the Cold War and the collapse of the "bipolar" system, globalization creates a new stable bipolar system between developed and developing countries. At present, globalization is in a very tense situation with contradictory economic development trends. The further evolution of globalization requires the identification of its components and making the globalization controllable on the common interest's basis of the world community, taking into account all countries. It should be noted that in these circumstances, the issue of control will increasingly head to the macro level, because at the national level it is impossible to eliminate certain subjectivity, and besides, it is much more difficult to cover the entire global picture. It is quite obvious that globalization is objectively determined by a specific historical situation, but this does not mean that everything that is happening on the world stage is justified. Some contradictions are inherent in the very essence of globalization, while others arise against the background of the aggravation of these contradictions and they should be regulated.

Keywords: *contradictory trends, globalization of the economy, globalization processes, regulated nature, the origins of globalization*

1. INTRODUCTION

Globalization is a qualitatively new phase in the history of economic life's internationalization, the world economy's most significant development cycle on the verge of the XX-XXI ages. Globalization is the integration of national economies into a single, global system, the foundation of which is the rapid movement of capital, the new openness of the world to knowledge, the technological revolution, the contribution of developed industrial countries to the process of liberalizing the movement of goods and resources, the rapprochement of communication, the planetary science revolution [1]. The values of the so-called Washington Consensus form its ideological foundation. Central to this was the Globalization Era thesis. It was supposed to be a free market victory, eliminating government intervention in the economy and all the obstacles that the state generated to the movement of goods, resources, and citizens around the world [2]. Globalization's movements derive primarily from the economy. The main argument that supports the objective essence of globalization is missed, without taking into account the economic dimension. The rise of transnational corporations, i.e. technological globalization and rapidly growing foreign coalescence and money capital movement, has given the idea of "economic globalization" a qualitatively new meaning. The evolution of internationalization is reflected in economic globalization, based on the requirements of the modern stage of productive forces growth. The development of the productive forces has led to the creation of a vast number of new technologies and the nature of manufactured products, which has resulted in the economic inefficiency of producing different types of products even

in large industrialized countries. Due to the growth of the multinational division of labor the global economy has grown. It initially plays an enormous role in speeding up global economic growth and increasing its efficiency. In essence, international economic trade is focused on the comparative advantages of the participating countries in providing different development factors. Unlike the world economy, however, which was formed based on daily trade of goods between industries, the basis of the global economy is the international division of labor between sectors. It involves releasing any ready to consume the product. Therefore, in comparison to the world economy, the regional or transnational economy, according to famous American scientist M. Castells 'can operate on a global scale as a single system in real-time'[3]. Deepening internationalization with the advancement of demand globalization lies at the root of the rising world trade growth rate. Consequently, the reliance of all countries' economies on the global market is greatly enhanced. The internationalization of production is an objective and positive process; it increases the productivity of production and helps speed up the dissemination of scientific and technological advances throughout the world. Internationalization has created a powerful incentive for international trade in services to grow. At first, manufacturing was the primary focus of globalization due to its structural features. Yet globalization has also brought in businesses, due to the obvious economic advantages. The degree to which the internationalization of production has a positive effect on the economy of individual countries depends on the position of those countries in the global economy. Industrialized countries are the major winners here. We will reduce production costs, manufacture the most competitive, science-intensive goods and export to developing countries environmentally dirty industries. Many developing countries are raw materials sources and labor-intensive goods. They turn out to be reliant on advanced states, with lower and unpredictable revenues. As we see, globalization's disparity creates a paradox between the core and the periphery of the global economy. The propagation of the Washington Consensus, coupled with this predominance of the "golden billion" nations, contributed to the rise of the "end of history" concepts [4]. As G. Kissinger pointed out, "the international order faces a paradox: its development depends on globalization's progress, but the mechanism of globalization creates a political reaction, which often operates against its aspirations" [5].

2. GLOBALIZATION OF REGIONALISM

In parallel with the globalization process, a tendency to regionalize the world economy is emerging, which leads, at first glance, to the separation of the common economic space and the independence of its parts [6]. In the global economy, globalization and regionalization complement each other. The current stage of development of the world economic system raises the complexity of the geo-economic and geopolitical environment being further developed [7]. After the collapse of the USSR in the first years, the main development was unipolar imperialism, which secured Western countries' predominance at the head of the United States. Eventually, China's rapid economic growth and other leading "emerging markets" reversed this trend of globalization, and new economic poles began to form. Today, "dispersal of world geopolitical power" is one of the main features of the current global economic and political configuration [8]. The function of the Integration Units is growing today. Regional economic alliances, the main ones being the European Union (EU), the North American Free Trade Association (NAFTA), the Association of Southeast Asian Nations (ASEAN), the Asia-Pacific Economic Cooperation (APEC), have arisen at different times and reflect different degrees of regional economic cooperation. In some cases, these are pure agreements of purpose, for others-trade and customs policy cooperation, and in third-real steps towards economic integration. Moving on from Z. Bauman, the world's unification and division, globalization and "territorialization" are intertwined and are different sides of a single process. Therefore, the word "globalization" together with it can be considered appropriate, which is understood as a

mechanism that combines globalization and localization trends [9]. Important changes in the foreign economic policy of developing countries are taking place under the influence of the internationalization of trade and resources— the barriers to the flow of goods and capital from one country to another are reduced. The colonial powers ' acquisition of political independence in the middle and at the end of the 20th century did not lead to their international economic relations being liberalized. On the opposite, developing countries started pursuing protectionist policies to protect their industries. We imposed quantitative constraints and high customs duties on goods, similar to which national industries started to manufacture. Many economists from different countries have consistently opposed protectionism, though appealing to the principle of comparative advantages and claiming that this would allow third world states to enter the world economy more rapidly and achieve economic growth. Nevertheless, developing-country scientists and experts believe a free play of market forces does not lead to economic equality across countries. To date, some of the developing countries, such as India, Brazil, South Africa, Poland, and Turkey, have developed significantly, producing globally competitive industries. Integration trends have also intensified: there are several hundred integration groups in Latin America, Asia, and Africa ("common markets," "associations," etc.) in which participants ' economic rapprochement processes take place, duties are mutually reduced, etc. The resulting difficulties are explained by the general relatively low level of the third world countries ' economic development, the major divergence of national economies ' parameters, political inconsistencies, etc. Nevertheless, the development of the demand for the new national industries is a common interest in developing countries. On the one hand, regional integration is included in the content of globalization, because the direct prerequisites for involving participants in global processes of rapprochement are the within the context of integration groups, but on the other hand, integration groups have also been developed as a means of collective defense against those elements of globalization that can damage national integration [10].

3. THE MAIN PHENOMENA IN GLOBALIZATION PROCESSES

The economy's globalization is correlated with growing countries ' economic transparency, liberalization of national trading regimes and capital flows, development of a global financial market and a global information network. Some fundamentally new phenomena became inevitable as a result of the globalization processes. First, the world economic community is transformed into an integrated economic system from a mere set of countries. The further countries are moving along the path of industrialization, the denser the connection between the elements of the global system, the more organically national economies enter a single global economy. When globalization intensifies, economic relations are becoming increasingly complicated, causing mutual dependency on the economic system [11]. Secondly, national and world economic relations are beginning to change roles in the context of globalization. In the past, national economic relations and the most developed national economies in one period or another had a leading role in determining the nature, forms, and mechanisms of international relations, as if they were imposing on other countries and the world community as a whole way of economic communication. But world economic relations acquire defining and leading roles through the formation of supranational financial markets and distribution structures. Domestic relations are forced to adjust to global economic realities. Global economies have increasingly become more powerful over the past decades. The global economy is becoming a common arena for big business sports. Third, globalization objectively leads to the erosion and depreciation of the nation-state's regulatory functions which can no longer protect the national economy from unwanted external economic impacts [12]. International economic processes develop into non-country, that is, global, almost or wholly unfit for state regulation. National states are increasingly losing the ability to use traditional macroeconomic regulation levers

effectively, such as import barriers and export subsidies, the national currency, etc. One has to deal with the actions of powerful non-state actors in international economic affairs-transnational corporations (TNCs), transnational banks (TNBs), and investment funds globally. By reacting, they can negate the expected effect of the actions taken. The state is no longer in the position of an omnipotent and sovereign arbiter of the fate of its national economy but as one of the ties in the global economy's complicated process. It should be remembered that the major factor in China's steady and rapid growth over the last quarter of a century was the internal change, which effectively combined market reform with targeted state regulatory activity.

4. THE PLACE AND ROLE OF THE STATE AND TRANSNATIONAL CAPITAL IN THE GLOBAL WORLD

The key spring of the world economy's growth is the battle of the two largest institutions: the state and the sector. With the emergence of mega economics, the fight for power shifts mainly to the realm of finance, and national states and transnational capital are the main actors in this struggle. At the same time, both are trying to enlist population support, which is necessary under the democratic government regimes that are developed in most countries. As a buyer, the population is inclined to support transnational capital, as it sells goods at lower prices and seeks liberalization of international economic relations. In an age of globalization, states are falling into a different kind of trap: following a tough course to uphold their sovereignty, they are constantly competing in the battle for investment capital, turning the ties that connect the state and nation into an obstacle to political innovation [13]. The State power system is becoming ever more amorphous. The nation-state is under pressure from above, from globalization, and from below, owing to the rise of ethnic nationalism and the citizens' desire to expand their rights [14]. States aim to control their external economic environment and world markets. The world market is a source of volatility and states are keen to defend domestic markets against its sharp fluctuations. As a result, developed countries have well-regulated domestic markets and an open, unregulated, and hence dysfunctional world market. A paradoxical tendency arose with the formation of the independent transnational capital. It turned out, along with organizing the countries' economic blocs, that the economic situation of small countries can be quite satisfactory in the mega-economy. The insufficiency of the scale of production within the context of one country is now balanced by transnational production possibilities, and transnational integration replaces intra-national output. Examples of small but rich countries, such as Singapore, Israel, and Hong Kong, are contributing to the increasing striving for independent development of small countries. Today transnational capital has liberated itself from nation-state tutelage. He started moving around the world openly searching for the most lucrative markets. There is enough money that is free from state control and used in various global operations. If the state could regulate the national currency market under the conditions of tight financial regulation, while liberalizing the financial markets and easing currency control, transnational capital was given the opportunity, if desired, to disrupt financial markets in any country. An integrated international trading and financial structure are being developed, compared to which individual state systems function as secondary values. In connection with the growth of globalization processes, the transition from a state-regulated economic system to a system where TNC-dominated capital markets dominate is becoming ever more apparent. TNCs also consider foreign exchange transactions as the most lucrative source of profit. In this case, TNCs only function more coherently and effectively in the same way as individual speculators do. It creates an incredibly "complicated world order." TNCs favor repression of national production in an attempt to conquer markets abroad. Extracting high incomes by manipulating cheap labor and natural resources, major transnational corporations also prefer spending profits outside of those nations.

Globalization modifies the previously established system of economic regulation by influencing the structure of economic growth and the distribution of world productive forces. Expanding the scope of world economic relations, globalization is undermining the national state's managerial capabilities, forcing it to reckon with TNCs, the situation in other countries and the global economy as a whole. This significantly increases the dependence on international forces in state decisions. It does not, however, exempt him from the tasks associated with allocating resources and developing the institutions concerned. In the context of globalization, the state's important role is primarily associated with adjusting market issues and ensuring social justice. Considering the State-Market relationship as complementing one another, J. Stiglitz notes: "I always upheld a balanced view of the role of the State, acknowledged the limitations and failures of the market mechanism, the State, but always assumed that they act together as partners, and the exact scope of these partnerships are defined differently for different countries depending on the level of their political and economic development"[15].

5. CHALLENGES AND CONTRADICTIONS OF GLOBALIZATION IN THE MODERN WORLD

It is quite clear that globalization is an objective mechanism of social development, in its economic manifestation. The fight against globalization, the desire to curb it, is meaningless. This does not, however, at all mean that all that happens in the world needs only a good appraisal. The real globalization processes are inconsistent. Some contradictions are inherent in the essence of globalization, and some arise because of the complex picture of the modern world either. We would divide the variety of interpretations of the process of globalization into two concepts. The first definition is that globalization refers to the process of creating a single world economy, a single world market for goods, resources and services and, to a certain degree, labor. An acknowledged international economic relations expert, D. In his famous work "In Defense of Globalization," Bhagwati writes that globalization "means the integration of national economies into the global system through foreign trade, foreign direct investment (by transnational corporations), short-term flows of capital, resource labor, and population movements, as well as international technology exchange"[16]. Globalization, according to another definition, is just another term for America's dominant role. The objective process of globalization is often perceived as synonymous with the artificial planting of the United States through its "new world order," since it is generated in its present forms by the global expansion of American capital through transnational corporations and banks with their coverage of most modern world countries [17]. The US proposed understanding of the new reality is sometimes referred to as the "ideology of globalism." Globalism is the state's foreign policy, claiming global influence; now they often speak of globalization concerning the United States [18]. The creation of international financial organizations following the project proposed by the United States has led to the management of one of the constituent elements of the world order, namely financial globalization, by two major institutions: International Monetary Fund (IMF) and the World Bank [19]. J. On this occasion Stiglitz notes: "Unfortunately, we don't have a world government responsible for controlling the globalization process for the peoples of all countries. Instead, we have a system that without a global government can be called global governance, one in which there is the World Bank, IMF, WTO"[15]. J. Stiglitz concludes his book, *Globalization: Disturbing Trends*, with an appeal: "Developed countries need to do their part to reform the globalization governing international institutions. We have built these structures, and we have to work to restore them"[15]. Therefore, all of the above indicates that the weak policies implemented by the IMF and the World Bank on the economies of most developing countries proved extremely successful for the United States, allowing them to lay the foundations for new world order. This world order state contains socio-economic threats to humanity as a whole and requires a radical reform [19].

Modern world economic transitions mirror a new stage of development associated with a transition in processes of globalization. The State was the dominant focus of economic globalization at one time, then a transnational company. Hence another fundamental certainty: the systemic bifurcation of modern processes of globalization [20], based on the foundations of a double logic-not just centralization, but also decentralization. The logic of a homogeneously holistic system matches the principles of industrial globalization, and a post-industrial civilization corresponds to the logic of a complex heterogeneous system. Homogeneous integrity takes on the leading role of systemic (integral) quality, and consequently of systemic unification and hierarchical subordination [21]. Describing the specifics of such a system, K. Marx pointed out that "its development in the direction of integrity consists precisely in subordinating to itself all the elements of society or creating from its bodies that are still absent in it. In this way, the system in the course of historical development turns into integrity." The specificity of the synergetic economy's heterogeneity lies in the growth of self-sufficiency of certain global economic system structural units, and the loss on this basis of the systemic quality of globalization. The global economy is acquiring signs of dissipativity on those premises-systemic dispersions. The importance of not only globalization's functional nucleus but the whole system of functional institutions as a whole is devalued. Synergetic concepts form the basis for the growth of the global system. The global economy begins to develop according to the logic of economic convergence, on the principle of heterogeneity of its systemic formations. The structural specificity of the synergetic economy's heterogeneity lies in the formation of functional entities that are systemically contradictory. Globalization, resulting from the end of the Cold War and the collapse of the bipolar system, is creating a new yet stable bipolar system between developed and developing countries. There is a process of denial by another system of one contradictory heterogeneous system which is even more contradictory and stable. The deepening of the 'golden' billion and 'beggarly' abyss is becoming the world economy's main problem. The cause of poverty, however, is not only associated with globalization but also with the distance from modern processes. The center of the mega-economy is made up of developed countries where transnational capital is based and developing countries are the peripheries. The center focuses largely on humanity's main intellectual, information, and financial resources, which affect their production. The peripheral countries are mainly engaged in the mass production of standard goods, agriculture, and mineral extraction and processing. A community of developed countries predetermines the world economy's structure and pace of development, and also serves as a natural "heart" concerning the developing economies that make up the periphery of the global economy. The global risk profile is calculated in such circumstances primarily by the interaction of a community of developed and developing countries. The increasing complexity of economic-system relationships has a major impact on the global economy's risk profile. On the one hand, the increased diversification of trade and investment ties leads to a fall in systemic risk levels. On the other hand, the spread of the global economy's crisis signal can take a longer, more complex path and cause no less damage. There are more systemically significant players and, therefore, the potential for mutual risk multiplication has increased, and the geography of their contagious distribution has expanded [22]. The dynamism of the global economic development processes does not allow us to talk about the steadiness of the hierarchy of leadership. At the end of the twentieth century, it was possible to speak about the unconditional dominance of the world economy's three main centers-the the USA, the European Union, and Japan. A relative share of global GDP was about three-quarters. However, their position was reduced to a second at the beginning of the XXI, making room for one new global economic leader-China. In the global economic system, leadership is automatically translated into additional gains for the state in terms of economic development. This is a "rent of scale," that is to say, additional revenue gained by the nation (its residents) by recognizing the opportunities associated with its place among the world's largest economies.

However, "scale rent" as a share of potential gain can be useful when combining the advantages of scale with certain qualitative characteristics and the country becomes a leader not only in quantitative but also in qualitative indicators of the level of economic, financial and social development. Such again is called "leadership rent." As you know, most of the "leadership rent" is extracted from the United States, the largest economy in the world in the last decades. One of the foundations of US economic power is the ability to issue the world's dominant reserve currency. The European economy, Japan and China's gains are much lower for different reasons. In Europe, this is weak economic growth, the high debt burden of several states and structural problems, the current monetary and financial constraints and the ongoing profound transformation of the economic system in Japan-the stagnation-deflation trap and demographic decline, in China. By raising the chances of catching up on growth, the distance between the leading countries and the big group of countries can be minimized. In this scenario, the main task is to optimize the positive aspects of integration into the global economy and to neutralize its negatives. China's experience confirms that implementing financial policies that take into account the factor of globalization has a positive effect on economic development. Within emerging market economies, China has become the largest recipient of foreign investment. An important, but still secondary, condition for economic growth was the growth of merchandise exports and the inflow of capital from outside. The secret of the "Chinese miracle" is the stable domestic market expansion due to a systematic increase in the population's standard of living [23]. In the light of further globalization of world space, the issue of regulation should go to a greater extent to the macro level, because it is impossible to eliminate a certain subjectivity and prejudice at the national level [24]. The world market, world economic ties, and organizations are not just a continuation, their number, of national economic structures.

6. CONCLUSION

Globalization opens up many opportunities but carries serious risks as well. Today, the nature of globalization is creating an increasingly unstable global environment; the gap between the global economy's center and periphery is widening. The further evolution of globalization, based on the common interests of the world community and taking into account all countries and peoples, should be linked with a democratic and controlled existence. With this option, concerted efforts can be made to quickly overcome the underdevelopment of the world's countries, centers of poverty and poverty. This requires an increase in the international financial organizations' responsibility to regulate the process of globalization and to observe some of its facets for the benefit of the integrity of global peace.

LITERATURE:

1. Global Studies: Encyclopedia. M., "Raduga", 2003, p. 181
2. K.Gadzhiev On the inversion of the vector and globalization functions. *World Economy and International Relations*, 2015, No. 7, p. 16
3. Castells M. *The Information Age. Economics, societies, culture*, M., 2000.
4. Fukuyama F. At the "End of History" Still Stands Democracy // *Wall Street Journal*-2014, 6 June
5. Henry Kissinger on the Assembly of a New World Order. *The Wall Street Journal*, 29.08.2014
6. V. Obolensky. Globalization of regionalism: challenges and risks for Russia. *World Economy and International Relations*, 2015, No. 9, p. 5
7. A. Arkhipov, A. Yelets. Multipolarity of the global economy. *Russian Economic Journal*, No. 3, 2014, p. 44
8. Z. Brzezinski. *Strategic look. America and the global crisis*, M., Astrel, 2012, p. 41

9. Bauman Z. Globalizacja czyli komu globalizacja, a komu lokalizacja. *Studia socjologiczne*, 1997, no 3 (146), pp 54-68.
10. I. Faminsky. Economic globalization: the basis, components, contradictions, challenges for Russia. *Russian Economic Journal*, No. 10, 2000, p. 51
11. A. Golubev. Economics as an organism. *Economic Issues*, No. 2, 2011, p. 141
12. Y. Shishkov. Is globalization an enemy or an ally of developing countries? *World Economy and International Relations*, No. 4, 2003, p. 5
13. Ulrich Beck. The transformation of politics and the state in the era of globalization. *Free thought*. No. 7, 2004, p. 3
14. A. Dynkin. The global system at the turn: the path to a new normality. No. 8, 2016, p. 7
15. Joseph E. Stiglitz. Globalization and its discontents. Translation from English, and note from G. G. Pirogova, M., *Thought*, 2003, pp. 255, 41, 290
16. Bhagwati D. In Defense of Globalization. Ed. V.L. Inozemtseva. M., Lodomir, 2005, p. 6
17. Trofimenko G.A. On the globalization of international relations. *USA - Canada: Economics, Politics, Culture*, No. 6, 2003, p. 75
18. Pyatakov A.N. The Latin American side of global alter globalization. *Free Thought*, No. 7, 2007, p. 57
19. O.N.Baburina. Financial institutions for managing the new world order or J. Stiglitz's arguments "Globalization: disturbing trends". *Finance and Credit*, No. 23, 2008, p. 64.70
20. A. Galchinsky. The methodology of complex systems. *Ukrainian Economy*, No. 8, 2007, pp. 4-18
21. Marx K., Engels F. *Op.* 2nd ed. T46, p. 229
22. O. Buklemishev, Yu, Danilov. Economic Leadership and Leadership Rent. *World Economy and International Relations*, No. 10, 2015, p. 7
23. S. Menshikov. The global economy as the most important phenomenon of our time. *Economic issues*. No. 1, 2004, p. 149
24. D.Ansimov Issues of global regulation. *Finance and Credit*, No. 7, 2009, p. 80
25. Bogomolov O.T. Anatomy of the global economy. M., Academic Book, 2003, pp. 7-8

SOCIAL MEDIA COMMUNICATION STRATEGY FOR HEALTH AND WELLBEING PROVIDERS – MAJOR ELEMENTS THAT KEEP CONSUMERS ENGAGED

Orindaru Andreea

*The Bucharest University of Economic Studies, Romania
andreea.orindaru@mk.ase.ro*

Caescu Stefan-Claudiu

*The Bucharest University of Economic Studies, Romania
stefan.caescu@mk.ase.ro*

ABSTRACT

As a widespread communication tool, social media has expanded its impact in amazing ways breaking the frontiers of entertainment towards making a real impact on all types of consumers in a various range of topics. On the other hand, there is an increasing interest of people worldwide to care for their health starting from choices in terms of food, physical activity's importance in overall wellbeing, towards spiritual choices that determine in the end the quality of all aspects of people's lives and ending up with health care providers and how to make wise choices when choosing such a service. Given this context, evaluating how different actors in the wellbeing industry use social media communication to communicate unilateral or engage in two-ways conversations with their consumers can unravel winning social media communication strategies that lead to a consumers' increased engagement. In order to discover the elements of such a social media communication, a research based on content analysis was developed and its findings are presented in the current study. The results show that emotional communication and language adaption to consumers' interests and needs are crucial for achieving a greater impact. These findings build on the idea that staying permanently in contact with the consumer generates higher results in any social media communication in the long run.

Keywords: health communication, marketing, social media, strategy, wellbeing

1. INTRODUCTION

As it appears, the only constant of human life on this planet is change, and in the last years, everything changes faster than ever before. In this setting, the way people communicate has seen an enormous shift of paradigm, moving towards freedom and power to influence people wherever you are, whoever you are. On the other side, there is a growing interest in discovering and implementing a healthstyle with everything that such a lifestyle includes: food, exercise, mental health and peace of the soul. Given this framework, there is a growing interest and expansion for the wellbeing industry, and the first choice in terms of information source on this subject seems to be the internet and, especially, social media networks. For this reason, discovering the best strategy to communicate on such platforms is of major importance for any wellbeing provider aiming at developing a strong image and further develop an even stronger marketing strategy.

2. LITERATURE REVIEW

Social media has become an integrated part of our day-to-day life, and more and more often it becomes the first choice in terms of gathering information on any subject that might interest us. When referring to social media coverage, such platforms are used by one-in-three people in the world, and more than two-thirds of all internet users (Ortiz-Ospina, 2019). When defining social media, Ventola (2014) referred to it being Internet-based tools that allow individuals and communities to gather and communicate; to share information, ideas, personal messages,

images, and other content; and, in some cases, to collaborate with other users in real time. In this particular context, social media represent a new and challenging environment that companies need to adapt to when it comes to communicating with consumers, considering their availability and prevalence (Constantinescu, et al., 2019). This perspective is also confirmed by Hanna, et al. (2011) who argued that despite the debates in the recent years, this new social media landscape of communication has also led a new approach in doing business and a new set of business models, which challenge traditional business operations and processes. When referring to health-related communication, since health care is such an intimidating service, Hackworth and Kunz (2010) argue that it is more important for marketer to establish relationships with their customers, not just marketing services to individuals. In order to build such relations, a two-way symmetrical communication is typically privileged as the ideal model of public relations (Hether, 2014). When evaluating the market reality, Shan, et al. (2015) shows that the process of communicating health-related food-messages to the public has traditionally been depicted as a 1-way, top-down flow of information in which public authorities and experts seek to convey objective scientific information to the lay public. But inherent in dialogic communication is the need for organizations to let go of their expectation of control - which can be risky, especially for conservative organizations (Hether, 2014), an expectation that has led many organizations to use social media so far as a 1-way communication tool, neglecting to embrace the social and interactive capabilities of these platforms (Shan, et al., 2015). Coming back to the purpose of building a relationship with the customer, such a relationship is based on trust and honesty, a base that is now easier to build and maintain thanks to social media networks and other online communities that are available for use by health care providers (Hackworth, and Kunz, 2010). Moreover, communication practitioners need to engage with the public to discover their level of knowledge, attitudes, behavior patterns, and information needs (Shan, et al., 2015). In this context, a pressing issue for public health institutions is to determine how to strategically get health information across to its target audience (Bannor, et al., 2017). And social media can prove of great usefulness, taking into account its advantages as Burnett Heldman et al. (2013) classify them:

- Social media can work best when integrated with traditional public health communication channels;
- Through social media, we can target and reach diverse audiences;
- Social media allow us to share public health information in new spaces;
- We can listen and collect feedback in real-time;
- Social media permit us to increase direct engagement.

Taking into account these advantages, as social media offer increased opportunities regarding interactivity compared with more traditional communication channels, they have the potential to transform the public from passive information recipients to more active and interactive players in the process of food-related education and intervention (Shan, et al., 2015). This way, social media platforms provide an important opportunity for physicians to distribute evidence-based information to counter inaccurate material on the Internet (Ventola, 2014). Despite the potential of social media to influence public health and generate insights, monitoring and analyzing the way health-related messages get across on social media was evaluated as difficult (Huber, et al., 2020). Such an analysis is needed especially given the big amount of misinformation promoted on unverified sources as social media platforms. Wang et al. (2019) show that misinformation, generated intentionally or unintentionally, spreads rapidly. A leading cause for this effect might relate to the fact that the health communication environment is not static and has therefore changed significantly over time (Bannor, et al., 2017). First of all, the communication channels available for the communicators has expanded in reach and range, including social networking platforms, blogs, microblogs, wikis, media-sharing sites, and

virtual reality and gaming environments (Ventola, 2014). Second of all, consumer demands have faced an increase and expansion searching for more and better quality health information, as well as an increased sophistication of marketing and sales techniques, including the internet have emerged (Bannor, et al., 2017). In this given context, an increased risk of misinformation or untrustworthy sources is gaining more and more attention (Wang, et al., 2019). Regardless of the risks involved in social media communication, wellbeing providers can take advantage of its entire set of positive outcomes that relate to users' enabling of achieving higher communication results. So, social media platforms' communication can lead to better results if they are used for (Burnett Heldman, et al., 2013):

- Listening to social media conversations;
- Engaging with influencers and their conversations;
- Responding to questions or comments received via social media channels;
- Creating opportunities for users to engage with your organization, and for your users to engage with each other;
- Welcoming and solicit user-generated content;
- Creating opportunities to integrate online and offline engagement;
- Leveraging social media for community engagement.

Even though there is an increasing conversation on how social media is used by health care providers, there is very little conversation on other types of wellbeing providers that constitute a growing market and an increasingly reliable source of information for people worldwide. In this respect, the current paper addresses also wellbeing providers that promote a nutritious lifestyle, exercising or spiritual and personal growth as major pillars for human health and growth. In order to address this gap in the literature, the current paper aims to analyze all four types of wellbeing providers on the market with the research described in the following section.

3. RESEARCH – METHODOLOGY AND RESULTS

Since social media is here to stay and communication on such platforms are growing in terms of expansion and impact, discovering winning strategies of social media communication for wellbeing providers can bring impressive outcomes in terms of population's general health and wellbeing. With this aim in mind, the current research was developed as one way of analyzing the communication approach of wellbeing providers from four different areas: nutrition, physical exercise, spiritual growth and healthcare.

3.1. Research methodology

In order to discover the most common strategy used in social media communication by the providers of health and wellbeing, a content analysis was developed. For this, for each of those four categories of wellbeing providers, 3 major actors on the global market with a consistent presence on social media were identified, as they follow: Skinny Taste, Everyday Health, Fit Bottomed Girls, My Fitness Pal, Noom, Fitness Blender, Tony Robbins, Grant Cardone, Deepak Chopra, Apollo Hospitals, Cleveland Clinic, Mayo Clinic. Then, for each of those actors, the last few longer text-posts were taken out of their Facebook page and were included in the analysis document. The choice for relating only to Facebook for this research is motivated by the fact that Facebook accounts for over 45% of monthly social media visits (Omnicores, 2020), making it the most popular social media platform in the present. After gathering all the content needed to perform pe content analysis, the software AntConc (developed by Laurence Anthony, it is a corpus analysis toolkit for concordance and text analysis) was used and the major findings are included in the next section.

3.2. Main findings and discussion

Based on the corpus built out of social media messages launched by providers from the four areas of interest (promoters of a healthy nutrition plans, exercise promoters, spiritual and personal growth specialists and health care providers), the third most common word was ‘you’ (and the ninth most common was ‘your’), proving that a direct approach of the customer of potential customer is the most preferred strategy of any wellbeing provider. When reviewing the most common cluster in the analyzed corpus, a confirmation arises of the wellbeing providers focus on a direct approach of the customer, empowering them to take control over their destiny (as seen in Figure 1).

Figure 1: Most common clusters including the word ‘you’

Concordance	Concordance Plot	File View	Clusters/N-Grams	Collocates	Word List
Total No. of Cluster Types 64			Total No. of Cluster Tokens 130		
Rank	Freq	Range	Cluster		
1	17	1	you\xd		
2	9	1	you have		
3	7	1	you can		
4	6	1	you need		
5	5	1	you may		
6	5	1	you think		
7	5	1	you're		
8	5	1	you've		
9	3	1	you are		
10	3	1	you get		
11	3	1	you love		
12	2	1	you could		
13	2	1	you do		

Source: Corpus analysis using AntConc

Then, as it was expected, the word ‘healthy’ is among the most frequently used words, except for linking words or prepositions. One interesting enough finding is that, based on the most common words (‘do’, ‘know’, ‘get’, ‘make’), we can conclude that all of those wellbeing providers focus on action and they actually encourage to action. In addition to that, all wellbeing providers seem to focus on positive words like ‘good’, ‘best’ or ‘great’, maybe as a result of the motivational side of their Facebook pages. This perspective is also confirmed by the extensive use of words like ‘passion’, ‘inspire’ or ‘fulfilled’. When looking in the depths of the use of the word ‘good’ (as seen in Figure 2), an appetite for motivation seems to be present in any communication of wellbeing providers, leaning most probably on the idea that people lack only the motivation to get into action based on the knowledge they already have.

Figure following on the next page

Figure 2: Collocations using the word 'good'

Concordance	Concordance Plot	File View	Clusters/N-Grams	Collocates	Word List	Keyword List
Concordance Hits 13						
Hit	KWIC	File				
1	cucumber and avocado salsa, so good !! Greek Chicken Meal Prep	Wellbeing pr				
2	Start here. Chickpeas are put to good use in this vegan, Indian-ir	Wellbeing pr				
3	ut exceeding your calorie goals. Good news: Dark chocolate is ric	Wellbeing pr				
4	fect; just do your best to eat for good health.\xD3 One of the mc	Wellbeing pr				
5	ver will impact your health (in a good way): Try this heart-health	Wellbeing pr				
6	at Burn and Energy Boost - Feel Good Total Body Cardio? The ro	Wellbeing pr				
7	ady finishing up that program - good job!! It really makes me ha	Wellbeing pr				
8	?? I hope that you've all had a good , restful weekend! Enjoy thi	Wellbeing pr				
9	nt off that roller-coaster ride for good ." \xCA \xD2Embrace what r	Wellbeing pr				
10	skills and empathy to work for good . "The secret to living is givi	Wellbeing pr				

Source: Corpus analysis using AntConc

But it might seem that wellbeing providers might also slip into believing and arguing that they do have the best option, an observation based on the collocations in which the word 'best' is used (as seen in Figure 3).

Figure 3: Collocations using the word 'best'

Concordance	Concordance Plot	File View	Clusters/N-Grams	Collocates	Word List	Keyword List
Concordance Hits 10						
Hit	KWIC	File				
1	have to be perfect; just do your best to eat for good health.\xD3	Wellbeing pr				
2	doctor about what might work best for your specific health situ	Wellbeing pr				
3	hat if you stay positive, do your best , and focus on the idea of nc	Wellbeing pr				
4	t that healthy, whole food is the best preventative medicine out t	Wellbeing pr				
5	ed as you get more fit! Find the best type of yoga for you with o	Wellbeing pr				
6	choose the variation that works best for you today. There are no	Wellbeing pr				
7	Work is a great thing - I feel my best when I am working and bei	Wellbeing pr				
8	medical world uses it to find the best cure. However, myths and s	Wellbeing pr				
9	An oncologist shares tips on the best way to approach alternative	Wellbeing pr				
10	provide heart patients with the best possible care. An undescen	Wellbeing pr				

Source: Corpus analysis using AntConc

Based on further observation of each of those Facebook pages, a few extra points can be made including the fact that:

- Most of the wellbeing providers use Facebook as a platform to promote any other platform they use: their own website, or their own Youtube channel;
- Most wellbeing providers focus on also self-promotion, and this is particularly visible in the case of spiritual and personal growth providers that use extensive and almost aggressive promotion on their Facebook page (focusing more on promoting their own live events or books, than on delivering free value);
- Short and impactful messages or titles used together with videos or high-quality photos seem to be the favorite way of expression on Facebook for wellbeing providers;
- Detailed explanations in simple language seem to also be the approach of most wellbeing providers for both their Facebook page and other communication platforms they might use;
- The posts frequency tends to be high or very high for each example studied, as an average of 5-6 posts a day is common on the pages included in this research;
- Wellbeing providers (at least those included in the present research) tend to get involved in two-way communication with their customers through comments on their posts.

Based on the results of the current research, it can be argued that a move towards focusing on customer is more and more visible in any wellbeing provider's communication approach on Facebook. The care for the customer and the wish to bring a wide range of information can be found in every channel subject of this research. This is also confirmed by the fact that each wellbeing provider shares information also from other areas than their main area of expertise, proving their belief in holistic approach of wellbeing: exercise experts share spiritual advice also, health-care institutions also share nutrition and exercise advice and spiritual and personal growth providers also share advice on meals' preparation.

4. CONCLUSION

The results of the current paper open a conversation about the winning strategies in social media communication of wellbeing providers. As these results is far from being an comprehensive research, this research can be deepened building a more extensive corpus for each of those four categories of wellbeing providers and getting into the depth of how their communication has evolved in time, together with expanding the range of providers included in the analysis. The limits of the current research relate to the subjective flavor added when choosing the wellbeing providers included in the current analysis. Still, developing a clever and impactful communication strategy on social media platforms can have major benefits for both the expansion of wellbeing providers, as well as long-term health for the entire population.

ACKNOWLEDGEMENT: *This work was cofinanced from the European Social Fund through Operational Programme Human Capital 2014-2020, project number POCU/380/6/13/125015 'Development of entrepreneurial skills for doctoral students and postdoctoral researchers in the field of economic sciences'.*

LITERATURE:

1. Bannor, R., Asare A. K., Bawole, J. N. (2017). *Effectiveness of social media for communicating health messages in Ghana*. Health Education, 117(4), pp. 342-371.
2. Burnett Heldman, A., Schindelar, J., Weaver III, J. B. (2013). *Social media engagement and public health communication: implications for public health organizations being truly 'social'*. Public Health Review, 35(1), 13.
3. Constantinescu, M., Orindaru, A., Pachitanu, A., Rosca, L., Caescu, S. C, Orzan, M. C. (2019). *Attitude evaluation on using the neuromarketing approach in social media: matching company's purposes and consumer's benefits for sustainable business growth*. Sustainability, 11, 7094.
4. Hackworth, B. A., Kunz, M. B. (2010). *Tweet yourself to better health: how social media is changing communication in the health care industry*. Arden: Allied Academies International Conference. Academy of Health Care Management. Proceedings, 7(1), 12.
5. Hanna, R., Rohm, A., Crittenden, V.L. (2011). *We're all connected: The power of the social media ecosystem*. Business Horizons, 54, pp. 265–273.
6. Hether, H. J. (2014). *Dialogic communication in the health care context: a case study of Kaiser Permanente's social media practices*. Public Relations Review, 40, pp. 856-858.
7. Huber, J., Woods, T., Fushi, A., Duong, M. T., Eidelman, A. S., zalal, A. R., Urquhart, O., Colangelo, E., Quinn, S., Carraso-Labra, A. (2020). *Social media research strategy to understand clinician and public perception of health care messages*. JDR Clinical and Translational Research, 5(1), pp. 71-81.
8. Omnicore. (2020). *Facebook by the Numbers: Stats, Demographics & Fun Facts*. Available online at: <https://www.omnicoreagency.com/facebook-statistics/> [Accessed on 20th of February 2020].

9. Ortiz-Ospina, E. (2019). *The rise of social media*. Available online at: <https://ourworldindata.org/rise-of-social-media> [Accessed on 20th of February 2020].
10. Shan, L. C., Panagiotopoulos, P., Regan, A., De Brun, A., Barnett, J., Wall, P., McConnon, A. (2015). *Interactive Communication with the public: qualitative exploration of the use of social media by food and health organizations*. Journal of Nutrition and Behavior, 47(1), pp. 104-108.
11. Ventola, C. L. (2014). *Social media and health care professionals: benefits, risks, and best practices*. Pharmacy & Therapeutics, 39(7), pp. 491-520.
12. Wang, Y., McKee, M., Torbica, A., Stuckler, D. (2019). *Systematic literature review on the spread of health-related misinformation on social media*. Social Science & Medicine, 240, 112552.

CRISIS MANAGEMENT IN TOURISM – LITERATURE REVIEW

Dora Smolcic Jurdana

Faculty of Tourism and Hospitality Management, University of Rijeka, Croatia
doras@fthm.hr

Daniela Soldic Frleta

Faculty of Tourism and Hospitality Management, University of Rijeka, Croatia
danielas@fthm.hr

Romina Agbaba

Faculty of Tourism and Hospitality Management, University of Rijeka, Croatia
romina.agbaba@fthm.hr

ABSTRACT

Tourism is particularly sensitive to external shocks, which are very often unpredictable and therefore need to be addressed through effective crisis management processes. In that context, it is of a great importance to raise awareness among the stakeholders and destination management as well as to gain knowledge regarding different approaches, models and strategies that could be used in times of crises. These can be learned from the previous researches and past practices. This paper provides a literature-based theoretical basis concerning the crisis management and its application within tourism. Moreover, by reviewing the literature relating to crisis management, the paper identifies the models that have been developed in tourism context. Therefore, this paper presents the results of the literature review whereby scientific papers dealing with crisis management strategies, with an emphasis on those used in tourism context, were analysed and discussed. Only scientific papers published in journals indexed in the Web of Science and Scopus in the last decade were included in the analysis. The review of past research provide an outline of the practical suggestions based on tourism crisis management past practices and policies. The review findings confirm the necessity of encouraging tourism destination managers to actively engage in preparing for eventual crisis situations and developing appropriate management strategies.

Keywords: *Crisis management, Literature review, Tourism*

1. INTRODUCTION

This paper examines the literature focused on crises and crisis management in tourist destinations with the aim of gaining better understanding the causes and the circumstances of different disruptive events, as well as the competencies needed to address them. Given the fact that literature on crisis management in tourism context is insufficiently explored area, one of the aims of this study is to get destination managers familiar with for the complexities that emerge before, during and after crises and disasters. Global tourism industry has been exposed to different types and ranges of crisis including terrorism (i.e. September 11, 2001 airline-hijacking, Bombings in Bali in 2002 and 2005, Tunisian beach resort and Paris terrorist attacks 2015...), disease pandemics (i.e. SARS, Avian influenza...), civil unrests (i.e. Israel, Greece, Turkey, Egypt...), natural disaster (i.e. earthquakes, tsunamis, hurricanes, volcanic eruptions) as well as a global financial and economic downturn (2008-2010) (Gurtner, 2016). Given the caused instability and uncertainty when tourism is concerned, each crisis impacts were most significant at the local or tourism destination level. Since the beginning of mass tourism in the 1960s, such events have an effect on the decision regarding travel, as well as on the destination choice (Abd El-Jalil, 2013). Crisis can be seen as a turning point that create both, loss and opportunity.

Very often crisis can cause tourist destinations many losses i.e. drastically reducing the number of visitors and consequently their expenditures, moreover, it can damage a tourist destination's overall reputation and safety. On the other hand, crisis events can generate certain opportunities, since they sometimes increase global attention on tourist destinations and create new tourist landscapes. Crisis, as a serious event which has natural, political, financial or technical causes, has a potential to ruin the ability of operating normally, affecting long-term confidence in an organization or a product (Abd El-Jalil, 2013). Ghaderi et al. (2014) define tourism crisis as unexpected event of sufficient magnitude which has the circumstances manifesting in the everyday tourism functioning. Crises are usually classified as natural (hurricanes, earthquakes, epidemic or pandemic diseases, tsunamis) or man-made (financial and economic crises, wars, terrorist attacks, political instability, social movements, industrial accidents). The results of this study are in line with recent literature reviews which showed that the researches on the capacity of the industry to handle complex and critical situations in terms of crisis management is limited (Chen et al., 2019).

2. METHODOLOGY

This paper takes a systematic approach to reviewing the literature in the field of crisis and crisis management in tourist destination. The review included studies published in the scientific journals indexed in the Web of Science and Scopus from 2009 up to 2019. Book chapters, industry reports and conference papers were not included in the review.

Table 1: Journals publishing studies in this review

Journal	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
A Pathmaking Journal										1		1
Annals of Disaster Risk Sciences										1		1
Annals of Tourism Research					1			1			2	4
Asia Pacific Journal of Tourism Research							1					1
Cornell Hospitality Quarterly	1		1									2
Current Issues in Tourism		3			1	2					1	7
Industrial and Commercial Training											1	1
International Journal of Disaster Risk Reduction										1		1
International Journal of Environmental Research and Public Health											1	1
International Journal of Hospitality Management											1	1
International Journal of Sustainable Development and Planning						1						1
Journal of Destination Marketing & Management				1				1				2
Journal of Economic Geography							1					1
Journal of Hospitality and Tourism Insights										1		1
Journal of Hospitality and Tourism Management								2				2
Journal of Sustainable Tourism										1		1
Journal of Travel & Tourism Marketing						1				1		2
Journal of World Business			1									1
Tourism Management	1				1			2	1			5
Tourism Planning & Development						1						1
Tourism Review International					1							1
Total	2	2	3	1	4	5	2	6	1	6	6	38

Key search terms used included ‘tourism crisis’, ‘destinations and crisis’ and ‘crisis management’. In total, 38 appropriate and relevant studies were selected for the analysis. The review included the analysis of the type of crisis that was investigated, methodology used, main conclusions, recommendations as well as the future research suggestions.

Table 1 shows the list of journals that published the studies considered in this literature review. It is evident that majority of the analysed papers (42%) were published in top scientific tourism journals: 18.4% of the analysed studies were published in *Current Issues in Tourism*, 13.1% in *Tourism Management* and 10.5% in *Annals of Tourism Research*. It can also be noticed that, within the observed period, with the exception of the 2017, researchers' interest on this topic has been increasing indicating that crisis management is of high relevance and importance for tourism destinations.

3. FINDINGS

Analysis of the chosen studies indicate that, considering type of crises, authors mostly research the crisis and disasters in general. As seen in the Table 2, 18.4% of the studies included literature review to identify crises and disasters types as well as their impacts on the tourism and define the nature of crisis and disaster management in tourism, to, as well as to provide recommendation for future researches. Moreover, 47.4% studies conducted interviews with different types of stakeholders and 13.5% conducted surveys for the purpose of gaining in depth information on the crises management. Some of the analysed studies proposed framework and models, with inclusion of new concepts or theories from other disciplines (i.e. Rittichainuwat, 2013; Chan et al., 2019). In terms of data analysis authors conducted Structural equation modelling (SEM) and the confirmatory factor analysis (CAF), ANOVA and some other econometric analyses. This finding indicates that there is no common method used when it comes to crisis and crisis management research in tourism. Summarizing the conclusions of the analysed studies, it can be concluded that tourism has a reciprocal relationship with disruptive events (i.e. wars, terrorist attacks, epidemics, economic and business collapses) which are often unpredictable and uncontrolled, due to a high degree of uncertainty (De Sausmarez, 2013). Usually, when those crises happen in the destination they affect tourism operations and cause permanent destruction of tourist attractions. Therefore, there is an urgent need to incorporate crisis management in the tourism development process (strategic planning, marketing, and management strategies) to protect and rebuild the image of safety (Abd El-Jalil, 2013). Some of the main contributions of the analysed studies include the identification of the crisis stages, as well as proposed crisis management strategies (Table 2). According to the length of the crisis' first stage, crisis can be discrete or continuous. The discrete crisis is the one that has very little warning but considerable impact (i.e. tsunami or collapse of a tour operator), while the continuous crisis requires a long period before the full damage appears (i.e. financial crises) (De Sausmarez, 2013).

Table 2: Review's findings

Authors/ year	Type of crisis	Methodology	Conclusions, recommendations and further research
Racherla & Hu (2009)	Not specified	Survey (48 logging managers)	Improvement of crisis management requires collaborative knowledge management systems that include active preparation through training and exercises as well as active participation in common knowledge platforms (sharing best practice experiences and knowledge in order to be able to better respond to future crises). Further research should include investigation of the tourism stakeholders' attitudes on crisis and the knowledge networking as well as identification of the main obstacles that can impact the knowledge management implementation in the tourism.
Wang (2009)	Asian financial crisis (1997), earthquake (1999), attacks in the US (2001), SARS (2003)	Tourist flows and tourism expenditures	The results indicate the decline in the number of incoming tourists during the analysed crises (SARS, earthquake in 1997 and the September 11 attacks). It is necessary to policymakers to understand how crisis events affect the tourism demand as well as to make them aware that the past experiences related to crisis management as well as the actions done in relation to them should be basis for crises management in the future.
Hall (2010)	Not specified	Literature review	Crisis can be a significant problem in small and developing economies depending on tourism. However, crisis events can also be used in a positive business sense in terms of the term "any publicity is good publicity". It is recommended to research the changes that lead to crisis recognition as well as the crisis events and their impacts.
Jóhannesson & Huijbens (2010)	Global credit crunch in Iceland (2008)	Interviews (6 tourism stakeholders in Iceland)	The best way to be prepared for future challenges considering tourism is through open communication and discourses and active engagement of all stakeholders. authors recommend the research of the effects of creating positive atmosphere in terms of sustainable tourism development policy.

Li et al. (2010)	Global financial crisis in China (2008)	Computable general equilibrium (CGE) modelling	As the economic slowdown has brought down the annual growth rate of domestic tourism expenditure, it is recommended that in times of crisis private tourism sectors should respond to it quickly and effectively. Further research is recommended in terms of exploring this topic by applying CGE modelling in different countries' context and generating more strategies to crisis response.
Jallat & Shultz (2011)	Crisis in Lebanon (2005)	Interviews (key tourism stakeholders)	Due to the crisis, the number of tourists dropped and the hotel occupancy rate declined 50% in comparison to the previous year. Authors recommend the extension of this research to other countries of the Middle East.
Pennington-Gray et al. (2011)	Not specified	Interviews (155 tourism leaders)	Results indicate a necessity of top management active involvement in crisis preparedness planning. Past crisis experience and resource allocation were proven to be predictors for crisis planning and communication procedures. Weather-related crisis and natural disasters were identified as a main concern. Authors recommend adding more variables in the models explaining the crisis preparedness in order to identify its additional predictors.
Sharpley & Speakman (2012)	AH1N1 influenza crisis in Mexico (2009)	Interviews	Authors recommended exploration of the relevance of chaos theory to other tourism crises as well as the development of more valid framework for anticipating and appropriate responding to crises.
Paraskeves et al. (2013)	Crisis in organizations	Interviews (21 tourism executives)	It is underlined when responding to crises, organizations should employ different knowledge management strategies. Moreover, procedural knowledge alone can become an issue in crisis situations since it lacks flexibility and may lead to less optimal decisions. It is necessary to develop an appropriate performance measurement methodology for the organization's crisis knowledge management system.
De Sausmarez (2013)	Post-election unrest (2008)	Interviews (23 key tourism stakeholders)	Author emphasised the need of developing certain national crisis management structure in Kenya as well as the development and implementation of the crisis plans. Given the facts that many crises are unexpected, being prepared with a previous established plan/strategy to follow enables timely reaction.
Rittichainuwat (2013)	Tsunami	Survey, interviews	The crisis management framework was proposed which includes risk retention, risk transfer, risk reduction, and risk avoidance. More research is recommended that include management in case of a beach safety and addresses different crisis concerns.
Abd El-Jalil (2013)	Earthquakes and flooding; the Nile cruise sinking and terrorism attacks	Interviews (10 key tourism stakeholders)	It was underlined that the Luxor attack (1997), the US attack (2001), the global financial crisis (2009), and the Egyptian revolution (2011) were the most damaging crises that strongly influenced tourism activity. The crises negatively influence the tourist expenditure and that converted Egypt to a cheap tourist destination attracting low standard tourists. It is necessary to establish the crises management policy in other destinations and incorporating it into its development, marketing, and management strategies to protect tourism activity.
Boukas & Ziakas (2014)	Economic crisis	Interviews	It is concluded that crises can occur any time, unannounced, simultaneously, without any schedule and linearity, and with different consequences. Since each crisis is unique it requires customised responses. Further research should be focused on researching the possible ways on how the sustainability can be achieved and managed in unbalanced and unpredictable environments.
Mair et al. (2014)	Not specified	Literature review (64 publications)	Authors underlined the need of the quick and effective responses to crises, development of relationship marketing with loyal customers as well as fast repair of the destination image. Following positive actions for destinations in case of crises are identified: relationship marketing, knowledge regarding the benefits and drawbacks of price discounting and the importance of knowledge sharing and cooperation with all tourism stakeholders.
Orchiston & Higham (2014)	Christchurch earthquakes	Interviews (6 key tourism stakeholders)	This study results indicate that, in order to accelerate tourism recovery, knowledge management is essential as well as the effective stakeholders' cooperation and communication since they are vital to the tourism response and recovery. Mapping and evaluating the dissemination of crisis knowledge across the tourism industry is required.
Gamez, et al. (2014)	The Subprime crises in 2008, World economic crisis (Thailand and Mexico)	Interviews (58 high-level hotels executives)	The personnel management is recognised as one of the key features for crisis resilience and to further competitiveness therefore is very important to develop efficient human resource policies and plans. Developing proactive strategies and proposing the ways for cooperation between countries in times of crisis is needed.
Ghaderi et al. (2014)	Crisis events in organizations	Interviews (25 tourism key stakeholders)	It is underlined that the crisis should be managed by using accumulated knowledge, formulated action plans, and contingency planning. It is also recognised that crises can generate large and negative effects but also they can encourage positive change and learning. Evaluation the response strategies effectiveness and actions in different crisis events is required.
Palaskas et al. (2015)	Economic crisis in Greek	Spatial econometric analysis techniques	It was found that the impact of the crisis on regional labour markets is statistically heterogeneous. Moreover, the best pre-crisis performers (mainly urban driven growth economies) turned to be less resilient during the crisis compared with the less developed regions. In order to upgrade this research personal attributes of unemployed people and structural characteristics of local economies should be included.
Ghaderi et al. (2015)	Floods in Thailand	Interviews (11 key stakeholders)	The results indicated that it would be useful to develop an official tourism disaster management plan with machinery for its implementation as well as crisis communication centre for transmitting clear messages. Further research should be focused on the crisis' effects on destination image and on the effectiveness of government strategies used for restoring market confidence.
Gurtner (2016)	Terrorist attacks on Bali island	Interviews (tourists, local community, key stakeholders)	Tourism crisis management is seen as ongoing system that includes prevention, preparation, mitigation, adaptation, and recovery strategies. It was found that package deals and the growth of the domestic market are successful strategies for enhancement of tourist arrivals.
Jones (2016)	Volcanic eruption in Toya-Uso geopark	A case study approach	The author emphasizes the necessity of including the stakeholder networks into the crisis planning, management and response strategies. It was found necessary to evaluate whether crisis management models have improved as well as identifying the impacts and operational response strategies when volcanic destinations at different stages of the crisis are concerned.

Mikulić et al. (2016)	Short-term risks for Croatian tourism (bad weather, terrorist attack, natural disasters)	A panel of industry experts using a Delphi approach	Authors see the strategic crises management as one of the most important part of sustainable tourism development management. It is underlined that is vital to develop prevention plans for crisis situations when there is significant demand drops (i.e. in times of economic downturn). It is recommended to propose different strategies and action plans aiming to reduce the risk occurrence likelihood or to minimise the effects in case the risks occur.
Boztug et al. (2016)	Travel cancellations	Online survey (887 Australian residents); conjoint analysis	The study confirms that an effective combination of preventive actions (adjusted to the nature of crisis) have the possibility of reducing travel cancellations. In that context, some effective approaches are detected, i.e. upgrading the accommodation and providing information updates and the provision of security devices or security staff. Authors recommended further exploration of travel cancellations in the context of the business trips.
Choi et al. (2016)	Migration	An online survey; SEM; CFA	In order to change eventual negative tourists' perception of a destination, destination management can employ mass media to disseminate information about actions carried in order to make tourists feel safer. Replication of this research to understand differences in perceived security forces effects by long stay visitors and permanent residents is recommended.
Krieger et al. (2016)	Norovirus outbreaks on cruise ships	A between-subjects experiment (169 participants); an online survey; a two-way ANCOVA	Study findings indicate that past experience may influence peoples' perceived safety as well as that individuals' risk perception is related to their evaluation of the safety and travel decisions. Replication of the research within different settings, transferring it into a cross-sectional design and/or incorporating a segmenting approach with analysis of the difference between first-time and repeated cruise tourists.
Liu & Pratt (2017)	Terrorism	Tourist arrivals and Global Tourism Index (95 countries); Autoregressive distributed lag (ARDL)	Study results reveal that the terrorism influence varies across tourism destinations due to the different political instability, income levels and tourism intensities. It was found that terrorism does not have an unfavourable impact on tourism demand in the long run. It is necessary that all tourism stakeholders collaborate in operationalizing their risk and crisis management plans. Future studies should include a longer time series and a regional terrorism index covering the spill-over effects.
Khazai et al. (2018)	The Bohol earthquake; tropical cyclone Haiyan in the Philippines (2013)	Interviews (40 key tourism stakeholders)	Authors underlining that the restoring the destination image and reputation is the key element of managing tourism destinations recovery after the crisis. Media reports (that sometimes can be inaccurate) can have a great influence on tourists' perceptions of destinations that are affected by certain crisis and present a challenge to the destination marketability and sometimes they can result in a collateral marketing crisis in neighbouring destinations.
Barbe & Pennington-Gray (2018)	Alligator snatching (Disney property), the mass shooting at Pulse night club, Zikavirus concerns	ANOVA	Authors found that in their crisis communication most hotels are not using Twitter. Additionally, it was found that given that certain organizations are not responsible for the incidents they may see that communication is not necessary, or that it will cause an increase in risk perceptions. Further research should take into consideration a broader timeframe or sites to provide more data, as well as the crisis communication on multiple platforms.
Kelemen et al. (2018)	Great East Japan Earthquake and Tsunami (2011)	Interviews (22 stakeholders)	Authors indicate that destinations that have experienced crisis or disasters can be experienced in different ways, however, qualitative interaction between all stakeholders is essential in order to ensure positive post-disaster visitors' experiences. Exploring the community resilience in post-disaster destinations is recommended.
Çakar (2018)	Forest fire (2008), refugee crisis (2010), diplomatic crisis with Russia (2015) and the Netherlands (2017), a tour bus accident (2017)	Interviews; content analysis	Author identifies the stages regarding the tourist destination marketing and management after a crisis as well as the consolidation crisis management and the implementation of a recovery program after the crisis is over. Author underlines the need of strategy development to enhance post-crisis recovery and to minimize or remove the damaging crisis impacts, which could negatively impact tourists arrivals.
Vargas-Sanchez (2018)	Not specified	Literature review	Authors pointed that tourists are more vulnerable than residents, given that tourists are less familiar with the area and experience the language barrier. Authors found that in a case of tourists becoming victims of a disaster, in addition of the risk caused by overcrowding, the negative impact on the destination image multiplies.
Čendo Metzinger & Janeš (2018)	Not specified	Literature review	It is concluded that different crisis types require specific ways of communication as well as different communication strategies. In crisis situations it is necessary to adequately manage the communication process given that those situations require rapid response and high-quality communication with all target groups before, during and after a crisis.
Aliperti et al. (2019)	Not specified	Literature review (113 publications)	Literature review confirmed that crises and disasters cause significant loss and damage when it comes to tourism destinations. Studies suggest the necessity of continuous monitoring of the process leading to crisis and disaster so that appropriate actions can be identified and adopted. More studies form the different parts of the word, along with addition of other hazards should be included in the review analysis.
Chan et al. (2019)	Kumamoto earthquake in Japan	Interviews (11 tourism stakeholders)	Authors are pointing that tourism contributes differently considering the various disaster phases however, it is mainly significant when it comes to information provisions, communications and emergency accommodations for tourists. Widening the proposed framework including a different disaster-prone destinations (i.e. Japan, Taiwan and Southeast Asia).

Chen et al. (2019)	Wenchuan earthquake in China	Survey (556 participants); CFA; SEM	The findings indicate that benefit perception, community attachment and resilience have a positive effect on crisis response and community participation. The local community gradually transforms the negative disasters aspects into development opportunities. Further research could include negative factors (perceived costs, psychological trauma, population socioeconomic losses, etc. and could be focused on the degree of tourism industry involvement, degree of crisis impact and tourism destination life cycle.
Kim, et al. (2019)	Crisis in hotels	Performance data (287 hotels)	Authors confirm the importance of crisis-coping strategies effectiveness in enhancing organizational actions and better preparations for future crises since various crises can threaten tourism and hospitality sustainable profitability.
Jiang & Ritchie (2019)	Not specified	Literature review (42 publications)	Literature review results, among others, indicate that some crisis are over very fast and communities are experiencing short recovery periods, while others (i.e. natural disasters) can result with heavy damages and therefore are taking years to recover. Three key strategies for effective tourism recovery are identified: crisis communication, recovery marketing, and stakeholder collaboration.
Hirudayaraj & Sparkman (2019)	Not specified	Literature review	In order to destination managers to be prepared for crisis situation they need to understand the crisis processes and factors that can be known as well as to develop a mind-set that allows them to address those factors which cannot be known beforehand. Expanding similar models/frameworks within other industries.

According to Hirudayaraj & Sparkman (2019), every crises goes through pre-event/prodromal, emergency, intermediate/long-term recovery and resolution stage. The pre-event/prodromal phase considers competencies of planning and the development of crisis management, relationship building and communication. During the emergency stage, crisis impacts people and the property, hence previously developed strategic plans must be implemented. In this phase managers play a key role since they are obliged to make quick decisions and actively communicate with various stakeholders (Hirudayaraj & Sparkman, 2019). The intermediate/long-term recovery stage is focused on the returning to the normality. In occasions when destinations are facing very often with different crises, in the last stage of crisis management process, developing good strategies is essential (Chen et al., 2019). Some crises are inevitable because early warning signals are often unclear. That is the reason why response and recovery phase are likely to be different, based on the nature and impact of the crisis. The destination ability to manage a crisis always depends on its skills and knowledge for the plan's implementation (Abd El-Jalil, 2013). Crises management has been recognized since the 1960s, as the strategy, processes, and measures, planned and put for a reason to prevent and cope with crises. It grew out of the field of conflict resolution and diplomacy (Abd El-Jalil, 2013). Four crises management strategies (Reduction, Readiness, Response, and Recovery) used by tourist destinations and businesses in managing the crises and recovering the tourism product, have been developed by the United Nation Disaster Relief Organization (UNDRO). The destination ability to manage a crisis always depends on its skills and knowledge for the plan's implementation (Abd El-Jalil, 2013). Çakar (2018) highlighted three main stages of crisis management in tourism. A post-crisis stage concentrates on minimizing the crisis' negative effects, while the second stage focuses on the recovery. The third stage consider the pre-crisis phase experiences from which tourism stakeholders can learn and therefore better prepared for eventual future crises. Additionally, Çakar (2018) proposed a crisis management model that connect crisis management with strategic planning that provides flexibility and includes detailed contingency plans preparation, defined roles and responsibilities. Tourism managers need to be well equipped, as well as be able to anticipate and prepare their teams for eventual crisis situations, through mapping of potential threats, risks and vulnerabilities, and training the process of preventing and minimizing damages (Chen et al., 2019). Crisis management plan suggested by Abd El-Jalil (2013) consists of six stages. The preparation phase includes establishment of an independent committee, identification of the sources of funds, collection and analysis of the data. Crises prediction is very important since the action plans will be based upon the specific crisis type and its threat to the tourism activity. The crises management stage consists of proactive and reactive phase. The proactive crises management phase is taking place before a crisis and focuses on the monitoring in order to be able to prevent its occurrence, while the reactive one concerns crisis management during and after crisis with a purpose of managing

its impacts. In the damaging limitations phase, when crisis is over, detailed information on how it has affected people, facilities, infrastructure, and operations is essential for crises management team in order to make decisions and decide upon priorities. During the fifth phase, crises should be well managed by different procedures that will help to recover their negative consequences in the short and long term. This stage considers tourism activity rehabilitation and its return to full functioning. The last, learning stage, refers to the experience and knowledge that can be gained in every stage of crisis management and are useful for managing crises in the future (Abd El-Jalil, 2013). Based on this study findings, it can be concluded that there is an increasing number of authors dealing with crisis and crisis management. However, it is evident that further research should be done focusing on their suggestions and recommendations presented in this literature review.

4. CONCLUSION

This paper presents the results of the review of the literature concerning crisis and crisis management in tourist destinations. A total of 38 studies on this topic published in the high ranking scientific journals indexed in Web of Science and Scopus between 2009 and 2019 were included in the review. These studies were written on a number of different crisis and disaster contexts, including weather-related events, natural disasters, economic downturns and other crisis events. With improved transportation and new emerging markets, tourism continues to be one of the world's largest and fastest growing industries, however tourism development also faces a number of challenges among which are different crisis and disaster incidents (Gurtner, 2016). Globally, economic crisis, various terrorist attacks, outbreak of diseases were among those events that affected travel and tourism. Since tourist destinations are often defenceless against threats that affect its safety and market perception, it is necessary for them to develop crisis strategies and contingency plans in response and therefore be prepared in advance (Çakar, 2018). Findings of this literature review indicate the need for further research of this topic given that many authors are recommending development of effective crisis-coping strategies for a proactive management of crisis situations in a tourist destination based on previous experiences related to different types of crisis. This review finding confirms the necessity of encouraging tourism destination managers to actively engage in preparing for eventual crisis situations and developing appropriate management strategies. With integration of all community stakeholders, tourism crisis managers require understanding all the phases of crisis in order to be able to prevent eventual crisis situations, as well as to effectively manage those that occur. Comprehensive discounting and promotions, expansion into new regional market sectors, “package deals”, and the growth of the domestic market, proved to be successful strategies for stimulating tourist arrivals. Moreover, crisis situations in tourism destination require different communication strategies and management of the communication process since those situations require rapid response and high-quality communication with all target groups before, during and after a crisis (Čendo Metzinger and Janeš, 2018). Adopting some of existing practices will help tourism destinations to become more prepared for future crisis situations and more flexible to change. In that way destination management will be able to effectively manage the crisis by using accumulated knowledge through formulated and contingency action plans in crisis management process. One of the main limitation of this study lies in the fact that the book chapters and conference papers were not included in the review as well as that only scientific papers published in journals indexed in WoS and Scopus were included. Therefore, inclusion of other type of publications and other databases would provide more information on crisis management in the tourism context.

LITERATURE:

1. Abd El-Jalil, S. G. (2013). Crises effects management: A new policy to manage tourism crises in Egypt. *Tourism Review International*, 17, 1–17.
2. Aliperti, G., Frey M., Garschagen, M., Hagenlocherb, M., Sandholzb, S. (2019). Tourism, crisis, disaster: an interdisciplinary approach. *Annals of Tourism Research*, 79, 1-5.
3. Barbe, D., Pennington-Gray, L. (2018). Using situational crisis communication theory to understand Orlando hotels' Twitter response to three crises in the summer of 2016. *Journal of Hospitality and Tourism Insights*, 1 (3), 258-275.
4. Boukas, N., Ziakas, V. (2014). A Chaos Theory Perspective of Destination Crisis and Sustainable Tourism Development in Islands: The Case of Cyprus, *Tourism Planning & Development*, 11 (2), 191-209.
5. Boztug, J. Dolnicar, S., Hajibaba, H. (2016). Preventing tourists from canceling in times of crises. *Annals of tourism research*, 60, 48-62.
6. Çakar, K. (2018). Critical success factors for tourist destination governance in times of crisis: a case study of Antalya, Turkey. *Journal of Travel & Tourism Marketing*, 35 (6), 786-802.
7. Chan, C. H., Nozu, K., Cheung, T.O.L. (2019). Tourism and natural disaster management process: perception of tourism stakeholders in the case of Kumamoto earthquake in Japan. *Current Issues in Tourism*, 1-22.
8. Chen, X., Li, D., Nian, S., Wu, K., Yang, L., Zhang, H., Zhang, J., Zhang, J. (2019). Two Sides of a Coin: A Crisis Response Perspective on Tourist Community Participation in a Post-Disaster Environment. *International Journal of Environmental Research and Public Health*, 16 (12), 1-19.
9. Choi, W., Cruz-Milan, O., Simpson, J. J., Simpson, P.M. (2016). Reassurance or reason for concern: Security forces as a crisis management strategy. *Tourism Management*, 56, 114 – 125.
10. Čendo Metzinger, T., Janeš, H. (2018). Management of communication processes in crisis situations. *Annals of Disaster Risk Sciences*, 2, 151-155.
11. De Sausmarez, N. (2013). Challenges to Kenyan tourism since 2008: crisis management from the Kenyan tour operator perspective. *Current Issues in Tourism*, 16 (7-8), 792 - 809.
12. Gamez, A., Ivanova, A., Campiranon, K. (2014). Tourism and economic crisis management within apec. cases: Phuket (Thailand) and Los Cabos (Mexico). *International Journal of Sustainable Development and Planning*, 9 (2), 143-157.
13. Ghaderi, Z., Mat Som, A. P., Henderson, J. C. (2015). When Disaster Strikes: The Thai Floods of 2011 and Tourism Industry Response and Resilience. *Asia Pacific Journal of Tourism Research*, 20 (4), 399–415.
14. Ghaderi, Z., Mat Som, A. P., Wang, J. (2014). Organizational Learning in Tourism Crisis Management: An Experience from Malaysia. *Journal of Travel & Tourism Marketing*, 31 (5), 627-648.
15. Gurtner, Y. (2016). Returning to paradise: Investigating issues of tourism crisis and disaster recovery on the island of Bali. *Journal of Hospitality and Tourism Management*, 28, 11-19.
16. Hall, C. M. (2010). Crisis events in tourism: subjects of crisis in tourism. *Current Issues in Tourism*, 13 (5), 401–417.
17. Hirudayaraj, M., Sparkman, T.E. (2019). Building leadership capacity: a framework for disruptive events in tourism. *Industrial and Commercial Training*, 51 (1), 114-124.
18. Jallat, F., & Shultz, C. J. (2011). Lebanon: From cataclysm to opportunity—Crisis management lessons for MNCs in the tourism sector of the Middle East. *Journal of World Business*, 46 (4), 476–486.

19. Jiang, Y., Ritchie, B.W. (2019). A review of research on tourism risk, crisis and disaster management: Launching the annals of tourism research curated collection on tourism risk, crisis and disaster management. *Annals of Tourism Research*, 79, 1-15.
20. Jóhannesson, G. T., Huijbens, E. H. (2010). Tourism in times of crisis: exploring the discourse of tourism development in Iceland. *Current Issues in Tourism*, 13 (5), 419–434.
21. Jones, T.E. (2016). Evolving approaches to volcanic tourism crisis management: An investigation of long-term recovery models at Toya-Usu Geopark. *Journal of Hospitality and Tourism Management*, 28, 31 - 40.
22. Kelemen, M., Lin, Y., Tressider, R. (2018). Post-disaster tourism: building resilience through community-led approaches in the aftermath of the 2011 disasters in Japan. *Journal of Sustainable Tourism*, 26 (10), 1766-1783.
23. Khazai, B., Mahdavian, F., Platt, S. (2018). Tourism Recovery Scorecard (TOURS) – benchmarking and monitoring progress on disaster recovery in tourism destinations. *International Journal of Disaster Risk Reduction*, 27, 75-84.
24. Kim, M., Lee, S.K., Roehl, W. (2019). Effect of hotels' price discounts on performance recovery after a crisis. *International Journal of Hospitality Management*, 83, 74-82.
25. Krieger, J., Liu, B., Pennington-Gray, L. (2016). Tourism crisis management: Can the Extended Parallel Process Model be used to understand crisis responses in the cruise industry? *Tourism Management*, 55, 310 – 321.
26. Li, S., Blake, A., Cooper, C. (2010). China's tourism in a global financial crisis: a computable general equilibrium approach. *Current Issues in Tourism*, 13 (5), 435–453.
27. Liu, A., Pratt, S. (2017). Tourism's vulnerability and resilience to terrorism. *Tourism Management*, 60, 404–417.
28. Mair, J., Ritchie, B. W., Walters, G. (2014). Towards a research agenda for post-disaster and post-crisis recovery strategies for tourist destinations: a narrative review. *Current Issues in Tourism*, 19 (1), 1–26.
29. Mikulić, J., Sprčić Miloš, D., Holiček, H., Prebežac, D. (2016). Strategic crisis management in tourism: An application of integrated risk management principles to the Croatian tourism industry, *Journal of Destination Marketing & Management*, 7, 36-38
30. Orchiston, C., Higham, J.E.S. (2014). Knowledge management and tourism recovery (de)marketing: the Christchurch earthquakes 2010–2011. *Current Issues in Tourism*, 19 (1), 64 – 84.
31. Palaskas, T., Psycharis, Y., Rovolis, A., Stoforos, C. (2015). The asymmetrical impact of the economic crisis on unemployment and welfare in Greek urban economies. *Journal of Economic Geography*, 15 (5), 973–1007.
32. Paraskeves, A., Altinay, L., McLean, J., Cooper, C. (2013). Crisis knowledge in tourism: types, flows and governance. *Annals of Tourism Research*, 41, 130-152
33. Pennington-Gray, L., Thapa, B., Kaplanidou, K., Cahyanto, I., McLaughlin, E. (2011). Crisis Planning and Preparedness in the United States Tourism Industry. *Cornell Hospitality Quarterly*, 52 (3), 312–320.
34. Racherla, P., Hu, C. (2009). A Framework for Knowledge-Based Crisis Management in the Hospitality and Tourism Industry. *Cornell Hospitality Quarterly*, 50 (4), 561–577.
35. Rittichainuwat, B.N. (2013). Tourists' and tourism suppliers' perceptions toward crisis management on tsunami. *Tourism Management*, 34, 112 – 121.
36. Sharpley, R., Speakman, M. (2012). A chaos theory perspective on destination crisis management: Evidence from Mexico. *Journal of Destination Marketing & Management*, 1 (1-2), 67–77.
37. Vargas-Sanchez, A. (2018). Crisis situations in tourist destinations: how can they be managed? Enlightening Tourism. *A Pathmaking Journal*, 8 (1), 47-69.

38. Wang, Y. S. (2009). The impact of crisis events and macroeconomic activity on Taiwan's international inbound tourism demand. *Tourism Management*, 30 (1), 75 – 82.

HUMAN PERSONAL TIME: APPEALING TO ITS DUALITY AND HARMONIZATION

Svetlana Sotnikova

*Professor at Novosibirsk State University of Economics and Management, Russia
s.i.sotnikova@nsuem.ru*

Elena Razomasova

*Associate professor, candidate of Economic Sciences at
Novosibirsk State University of Economics and Management, Russia
e.a.razomasova@edu.nsuem.ru*

Elena Mikhailova

*Associate professor, candidate of Economic Sciences at
Novosibirsk State University of Economics and Management, Russia
e.m.mihajlova@nsuem.ru*

ABSTRACT

Along with the traditional factors of production, time relates to the main economic resource that contributes to improve the quality of life and human competitiveness in the labor market. It is not enough for people to eat and dress well, to live in conditions of material comfort. They also must have time to satisfy their spiritual needs, increase their level of knowledge, expand their scientific horizons, etc. The digitalization of the economy as a result of the Fourth Industrial Revolution blurs the boundaries between personal space and working time, expanding the area of responsibility and obligations of each employee towards related areas. This process is accompanied by a reduction in the majority of worker's rest time, especially free time. An analysis of the structure of the actual use of personal time indicates that the vast majority of time is spent on labor time, and for this reason present-day employees practically do not have free time to improve their skills in accordance with dynamically changing market demand. In article the factors that contribute to filling the paradigm of employee's personal time with new socio-economic content are discussed.

Keywords: *Personal time, working time, free time, presence at work, work attendance, modernization, consumer services sphere, social outsourcing*

1. INTRODUCTION

The modernization of the Russian economy requires constant adaptation of human resources, which are its driving force to the dynamically changing demand for their proficiency. It is clear that each individual, at least, should rationally use personal time for this. Only in this context we can get a clear answer to such question as: who exactly and how will be carrying out the modernization? The man's perception of personal time has been changing on different stages of cultural and historical development, depending on the peculiarities of sociocultural relations. In this context, it is no accident that the concept of time is one of the central ones for philosophy¹ [Tretyakova L.A., Podvigailo A.A., 2014; Sotnikov N.Z., Sotnikova S.I., Mikhailova E.M., 2019, pp.1302-1315; Patrushev V.D., 1978; Strumilin S.G., 1957; Klimov N., 1961; Tsvelev R.I., 1996], psychology [Khokhlova T.P., 2012, p. 19], sociology [Sotnikov N.Z., 2016, pp. 126-135; Vinokurov M.A., Gorelov N.A., 2004], economics [Zanin, 1962; Patrushev, 1966; Prudenskiy, 1972], as well as in the process of cognition and comprehension of art culture.

¹ Regions of Russia: socio-economic indicators, 2017 [Electronic resource] / Federal state statistics service. – URL: https://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1138623506156 (accessed 29.08.2019).

So, for primitive man's perception of time it was based on the rhythmicity and recurrence of natural events as a necessary condition for successful life activity. The time models of Antiquity were focused on the present and carried the idea of infinity of eternity. Time did not have much value. The ancestral (or dynastic) time of the Middle Ages with more accurate event fixation and religious interpretations was replaced by reflection over the time, the development of historical consciousness and thinking in the Renaissance. Masterpieces of Renaissance art demonstrate man's desire to resist destruction, to overcome time by preserving the present for eternity. The growing speed of development of urban culture in Modern times determines a qualitatively different attitude to time. As Zh.V. Gorkaya fairly specifies, «a common urban time becomes prepotent, independent, autonomous category, the measuring standard the eventfulness of life» [Dolinin A.Yu., 2009, p. 247]. The anthropocentric nature of centuries-old ideas about time makes us recall O. Spengler's statement: «...We ourselves are time» [Prudinsky G.A., 1972, p. 327]. Modern man is clearly aware of time as an irreparable resource and tends to draw maximum benefit from its use. The concepts «time as a resource», «time as opportunities», «time as capital», «non-existent time» and etc. are reflections of contemporary cultural values. Personal time appears as the most important condition for maintaining the competitive position of a person in work based on personal interests, improving the quality of life in a changing socio-economic realities [Sotnikov N.Z., Sotnikova S.I., Mikhailova E.M., 2019, pp. 1302-1315]. In today's context, personal time cannot be an idle, non-busy time, but must be filled with activities that promote comprehensive human physical and cultural development. For this reason, personal time is not only daily temporary resources for working and meeting physiological needs (sleep, food intake, hygiene), but also individual time resources for solving everyday issues, maintaining of kinship and friendship communications, parenting, education and self-education, recreation and recuperation, ensuring the optimal level of health, self-realization, achieving the current life goals and other needs. In fact, it is a time of work, a time of spending mental and physical strength, and a time of rest, a time of recovery of mental and physical strength. Time of work is usually consists of a labor time, an out-of-duty time and a time of domestic work. Rest time is mainly consists of a free time and a self-service time. Of course, in some cases it is quite difficult to allocate time of work and rest time in their «pure form» as various types of activity have different subjective value for people. For example, the mother's time associated with caring for children, their education, playing with them, walking, is represented as based on the external form, by the time associated with the performing of domestic service work during an out-of-duty time. And judging from the content of the inner feelings of these time expenditures, then it could be one of the kinds of free time associated with the satisfaction of physical, intellectual and social needs. In this regard, the focus of the research interest aims to identify the imperative of achieving harmony between work time and rest time, which contributes to improving the quality of life and human competitiveness in the labor market. In order to achieve this goal, the following research problems have been solved: the architectonics of a human's personal time is justified, which allows to understand its duality; the methodical approach to personal time harmonized taking into account sociocultural environment is proposed and tested. The scientific novelty consists in justification of the modern concept of working time, development of theoretical and applied bases of increasing human's free time by determining of vectors of an entrepreneurial initiative in services sector, searching of mutually acceptable models of solutions for consumers and representatives of small business. The research methodology is based on the theoretical analysis of the results of scientific works, which present the main points about the dual nature of human's personal time, work time and rest time of an employee. The research was conducted using sociological methods. The questionnaire was developed for this purpose (it consisted of three parts, two of which were aimed at obtaining specific information in accordance with the working hypothesis, the third part summarized the personal data of respondents) and was posted

on Google Forms Internet site in December 2018. The first part of the questionnaire allowed us to consider consumer services in the context of economic opportunities for residents of the metropolis. The second part focused on the opportunities and potential limitations of entrepreneurial initiative in the field of consumer services. The subject of the research is the personal time of the employee.

2. WORKING TIME AS A STRATEGIC RESOURCE FOR THE DEVELOPMENT OF ECONOMIC ACTORS

In present conditions of formation of the digital economy, of labor-saving and intellectually capacious nature of scientific and technological progress, business is forced to reduce costs and to increase competitiveness. «The ability to create and maintain the competitive advantage of human resources is a vital growth factor of any economic actor» [Sotnikov, 2016, pp.126-135]. Any improvement in organizational competitiveness is ultimately reduced to working time savings. Working time is becoming one of the main intangible assets of the economy, the means of achieving high socio-economic results. In this context, Russian companies are beginning to realize more clearly that working time is an irretrievable, but regulated resource of the organization. Its effective use is a continuous and purposeful process that creates opportunities to reduce the influence of stochastic factors determining labor costs for organizational goals, the rhythm of production and commercial activity, the quality of labor, the cost, the profit. Working time is «the time during which an employee must performs working duties in accordance with the rules of internal labor regulations and the terms of an employment contract, as well as other periods that relate to working time in accordance with the Labor Law, other federal laws and normative legal acts of the Russian Federation» (article 91)². According the legislation of Russia, other time's periods include: forced downtime, associated with technical, economic and other reasons; meal time without leaving the workplace, if separate breaks are not provided for these purposes; special-purpose breaks for heating; time for breastfeed and also the prescribed breaks for gymnastics of individual groups of employees. The development of telecommunications infrastructure, the use of digital information and communication technologies against the background of rising costs and a shortage of labor significantly changes the content of the paradigm and the fundamental principles of using the working time. The virtual space expands in the socio-labor sphere as the informatization and digitalization of the economy develops. This is accompanied by the spreading of labor processes virtualization, the increasing the number of virtual workplaces which forms virtual departments in virtual organizations, the enhancing the role of information computer technologies. Virtualization of business activity allows an employee to carry out projects and tasks for several employers in a specific period of time without his physical presence in the organization, without binding himself to it with the norms of labor legislation. As a result, the institutes of searching for counterparties and controlling the use of working time, the mechanisms of state regulation of working time are changing; the number of distractions of employees in performing work tasks, absences in the workplace is growing. The competitive business environment makes employees to be closer to potential partners by meeting with them in the regions. For this reason, ideas of self-organization of labor are becoming more widespread, in which the employee is determined by the strategic direction of the business, resources are allocated and control criteria are introduced. «The self-organization of labor is based on independence in the employee's implementation of his abilities and skills, competencies associated with self-management within the framework of his labor process, with self-planning of work functions in their specific sequence and in time, with self-regulation and self-service, self-accounting of the result of labor and self-limitation according to the conditions cooperation, with self-regulation and self-control, with self-

² Labor Code of the Russian Federation № 197-FZ, dated 30.12.2001 (as amended on 05.02.2018).
http://www.consultant.ru/document/cons_doc_LAW_34683.

criticism and moral self-stimulation» [Sotnikova, 2013, p.66]. It becomes unimportant for the manager where the employee is currently located in conditions of de-bureaucratization of the organization of labor. The main thing is to perform work tasks. The availability of mobile communications allows the employee, if it necessary, to get access the required information, and, in turn, he can provide materials in a timely manner by himself. The organization as a means of achieving business goals exhausts the resources of its development, primarily in the structural aspect. There is a redistribution of the centers of responsibility, delegating of more and more rights to subordinate links, which are becoming more autonomous. Organizational structures focused on achieving synergies among all employees are being replaced by structures that organizationally support the work and working results of an individual employee. Therefore the need for flexible placement of the workplaces is growing; the number of remote employees in the business is increasing. Ultimately, this creates the conditions for the transition from standard modes of work and rest to flexible working time. Flexible working time as a form of its organization for an individual employee and their teams allows to self-regulation of the beginning, ending and total length of the working day within certain limits. Thus, there is a legal opportunity to independently regulate (establish) an individual mode: changing the time of arrival and departure from work, from the lunch break; shortening or lengthening the working day in accordance with the employee's own needs and production requirements. At the same time, of course, the full working out of the total number of working hours established by law during the adopted accounting period (day, week and month) is mandatory (article 102)³. The spread of flexible working modes allows the employer to increase, on the one hand, the economic efficiency of business activities by reducing losses due to delays in work and short-term absence of performers at work with the permission of the administration, rational use of «dead» time between business meetings outside the organization and, as a result, significant savings and shortened lead times with serving more customers. On the other hand, making more complete use of personal resources of each employee achieves the social efficiency of business activities. It based on taking into account their working capacity during the day, satisfying their social needs thanks to the optimal combination of work time and time for performing personal affairs, upbringing children, studying, etc. So, modern Russian organizations, having gained new opportunities in the use of working time, faced numerous difficulties associated with the neediness for more technologically advanced searching and processing of information about working time against the traditional strict hourly monitoring of an employee, time- table accounting of the presence of employees at the workplace, online monitoring, analysis of information about the sites they visit and Internet traffic, e-mail control, etc. An objective necessity has ripened for the transition from hard management of the work's attendance to harmonize the interests of economic actors with respect to the lack of employees at the workplace (within the established norms of the labor legislation), from the relationship of subordination to the partnership as «employer – employee», from the registering the arrival and leaving time to work to the attendance management. The management of the work's attendance is the process of risk managing which associated with the absence of employees in the workplace to ensure business continuity. This process is focused on maintaining the labor activity of employees by providing them with the access to cooperation mechanisms and communication support for managing of work efficiency, flexible working time, to stimulating the performance of functional duties. The main thing in this process is to maintain a balance between respect and trust for employees, on the one hand, and clear control over the performance of their functional duties in their absence, on the other. The management of the work's attendance, therefore, is a combination of techniques and methods of targeted impact on the performance of functional duties by employees in the event of their physical and / or virtual

³ Labor Code of the Russian Federation № 197-FZ, dated 30.12.2001 (as amended on 05.02.2018).
http://www.consultant.ru/document/cons_doc_LAW_34683.

absence from the workplace. The concept of working time fills with new socio-economic content which is manifested in increasing of the zone and expanding the range of types of working time due to time resources associated with the performance of official functions by an employee during off-hours, for example, discussing work issues on the phone with colleagues on vacation days, finalizing projects, reports, thinking and writing articles, preparing reports, urgent tasks on weekends and holidays, etc. «The creative work of most modern employees extends beyond the usual working day and working week» [Demina, 2011, p.30]. On the one hand, there is an increase and enrichment of working time; on the other hand, there is a reduction and impoverishment of the time of non-working and domestic work and rest time. In other words, the expansion of the market for digital solutions and digital services for management in modern conditions is accompanied by the disappearance of clearly defined contours, the boundaries of working time. In this context, it is more important to reach an agreement between the employer and employees not about their physical presence at the workplace, but about the avoidance of participation (i.e., real non-participation) in the process of achieving the goals of the production and commercial system. And exactly, management of the work's attendance creates the basis for the formation of an updated and unified information space that operates with technologies for detecting and evaluating anomalies in the use of employee's free time in the conditions of economic modernization.

3. FREE TIME AND MODERNIZATION OF THE ECONOMY

The main role of free time is the reproduction of labor force. A rested and healthy employee is capable of higher labor productivity than not having slept and tired one. This is clear to anyone. The question of the necessity for free time for each of us disappears by itself. However, such an explanation of this problem can be only interpreted as a simple reproduction of the labor force. The modernization process requires a different approach. The labor force should not be reproduced in an unchanged form, but as the ability to carry out more advanced, progressive types of work's activities, which requires special additional training. According to Tsvylev R.I. [Tsvylev R.I., 1996], the main historical types of social organization of society from agrarian to industrial, gradually sought service, information status, where the growth of surplus value is not only due to the active use of extractive industries and subsequent processing of raw materials, but due to intellectual activity, the growth of the technological level of production and automation, the advisability of using working time. Intensification of the process of economic reproduction is achieved due to a significant growth in the economic mobility of the population, mainly by increasing the living comfort. The traditional Russian mentality consists in the fact that the individual is completely coalesced with everyday life and, in the future, becomes unable to change both the type of economic activity and the geographical location of the application of their efforts. In this context, the problem of free time in the conditions of a modernized society and economy becomes not at all a personal, but a public problem. The current state of affairs in this area actually is a brake on modernization. And if so, then it makes sense to solve the problem only on a large scale, in industrial way, turning the sphere of consumer services into a kind of socially significant outsourcing by analogy with industry, with the help of which most of the consumer services will be carried out by professional organizations outside the household. New classes of society, which formed on the basis of intellectual and personal differences, stand out in separate sectors of the production of information and knowledge. Such sectors are the quintessence, the driving force for the development of progress in the post-industrial economy, where a person is assigned the role of the carrier of intellectual resources. People whose intellectual and creative abilities allow creating innovations should have enough time to realize their ideas and concepts. They should not be distracted by housekeeping or trouser hemming. Modern employees has the opportunity to carry beyond the majority of social services outside of households and will be able to spend

more time on themselves, continuing their education, improving their skills and professionalism, which will invariably lead to an increase in their personal income, growing in life expectancy, and will change the image of housekeeping once and for all time. In strategic terms, it is possible to achieve the harmony of work time and rest time in the order to obtain the effect of social outsourcing by developing an economically feasible strategy for the development of consumer services sector, which leads to the price and territorial availability of services to the population.

4. HARMONIZATION OF WORK TIME AND REST TIME: CONSUMER SERVICES AND ECONOMIC OPPORTUNITIES OF THE POPULATION

According to the Labor Code (Chapter 4, Article 91)⁴ the normalized working week is 40 hours in Russia, but it is difficult to find a modern company where these standards are clearly adhered to. The average working week is about 70 hours in the business enterprise sector. This indicator of the actual time spent on the implementation of production tasks is taken as a basis in the research. Additionally, a working urban resident weekly spends for 10 hours in transport (getting to the office and back), sleeps 42 hours (based on 6 hours a day) and remain free from direct working obligations about 46 hours a week or 6.6 hours per day. It would seem that this figure is sufficient, however, during the survey, respondents complained about the absence of proper rest, the growing of chronic fatigue, lack of personal time to implement their own projects and plans. What is the reason for the discontent? It turned out that the problem of urban residents is not in the absence of free time per se, but in its irrational using. The results of research⁵ have shown that 50% (41 persons) are constantly experiencing a lack of personal time, 38% (31 persons) regularly have a situation with a lack of personal time, 5% (4 persons) rarely lack free time, 7% (6 persons) have a lack of personal time to implement their hobbies. Among the respondents, 71% (58 persons) hold senior management positions, have an university education and belong to the group of respondents with a high level of income (from 30 to 50 thousand rubles for each family member). 93% (or 46% of the total number of respondents – 38 persons) out of them are respondents who are constantly experiencing a lack of personal time (according to the answer to question number 1 of the questionnaire), which seems logical. 11% of the total numbers of respondents (9 persons) are persons with university education, but do not hold senior management positions, with a monthly income level of 20 to 30 thousand rubles for each family member. The proportion of respondents in this group who are constantly experiencing a lack of personal time is minimal – 2 persons. 4 respondents have specialized secondary education and income levels of less than 10 thousand rubles for each family member. The lack of free time is practically not felt for them. 11 persons have an income level from 15 to 20 thousand rubles for each family member and a regular situation with a lack of personal time. The conclusion is obvious: respondents with average and high levels of income constantly or regularly experience a lack of personal time being people with a high degree of professional employment, which necessitates turning this category of population to paid services in order to save time and achieve the required level of comfort. At the same time, more than half of each category of respondents (constantly or regularly experiencing a lack of personal time – 28 and 18 personas respectively) believe that the acquisition of the services that they need allows eliminating the problem of lack of personal time (question 7: «What is the main reason for you when choosing a service?»). It serves as a priority factor in making this decision. High-income respondents pay special attention to the level of quality of services and the ability to have an acceptable choice of manufacturers.

⁴ Labor Code of the Russian Federation № 197-FZ, dated 30.12.2001 (as amended on 05.02.2018). http://www.consultant.ru/document/cons_doc_LAW_34683.

⁵ The survey was conducted among residents of Novosibirsk. 120 persons took part in the survey in total; 82 questionnaires were left for research.

The percentage of this category in the group of citizens with incomes from 30 to 50 thousand rubles per family member is 56% (46 persons), in the group with incomes of 20 to 30 thousand rubles – 8,5% (7 persons). The decisive factor in choosing the necessary services for respondents with income levels of 15 to 20 thousand rubles per family member is the affordable price and the proximity of the location of enterprises providing services to their permanent places of staying (home, work, places of recreation, etc.). In the context of the above question the correlation of answers of this category of respondents (total 10 persons) was as follows: 8 out of 11 persons in the group (72,7%) bet on an affordable price, and 2 persons (18,2%) – on the convenience of location relative to their placement. The majority of respondents (63% and 52 persons) answered to the question number 5 «What kind of housework would you refuse if you had such an opportunity?» in a way, that they would gladly refuse daily cooking, cleaning and minor repairs. In second place among the undesirable types of domestic work for the residents of Novosibirsk was repair and improvement of housing – 22% (18 persons). Pet care is the least of all burdens for citizens, among whom only less than 10% (7 persons) expressed a desire to transfer this type of housework to the hands over to the professionals. It is obvious that the caring for pets is not perceived in the context of routine duties, but, on the contrary, refers to recreational and entertainment hobbies. The answers of the respondents on the question about the amount of monthly expenses for the purchase of services in the case of their transfer to professionals were distributed as follows: 60% of respondents (49 persons) spend from 2 to 5 thousand rubles, 24% (20 persons) spend amount from 15 to 20 thousand rubles, only 4% of respondents spend (and are ready to spend further!) more than 20 thousand rubles. 12% of respondents spend on the acquisition of five services collected in the questionnaire (cooking services, cleaning, repair and home improvement, purchase of food and goods, pet care) less than 2 thousand rubles. The free answer was ignored. Beyond the borders of the survey was a group of people willing to spend from 5 to 10 thousand rubles every month on the purchase of necessary services. Thus, there is a situation in which high-income households can afford to purchase the services they need, spending from 15 to 20 thousand rubles on it. It actually corresponds to the average monthly wage in the region (on the period of the research – 25401 rubles). This circumstance reflects the actual level of demand for services existing at the time of the research and leads to the idea of an uneven structure of income of the population in the city of Novosibirsk. Namely, the share of the well-off category of households prevails over the average and low-income categories. According to the results of a sample survey of household budgets, the share of households with the highest incomes region in the rank of five positions was the most significant at the end of 2017 in the Novosibirsk⁶. It was 44% of the region's residents. As the level of household income decreases, so does the share of their group in the total amount of monetary income of the population. Thus, the share of the population with average income holding the fourth and third positions in the ranking was 22,9% and 15,9% for the circulation period, respectively. Least of all in the Novosibirsk region were households with low incomes – 6,2%. The service providers target to high- and middle-income consumers what «deprives a significant portion of the urban population of the opportunity to purchase the services they need» [Razomasova, 2012] for a commensurate fee and in the desired range. Every working city dweller constantly faces a dilemma: to independently produce domestic services for themselves, or, following the principles of outsourcing, to make part of them for the redistribution of households, entrusting their production to specialized enterprises. Unfortunately, the choice is not in favor of saving the free time resource. The situation when an employee is forced to spend a lot of time on self-service every day after the completion of the working process cannot be considered the norm.

⁶ Regions of Russia: socio-economic indicators, 2017 [Electronic resource] / Federal state statistics service. – URL: https://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1138623506156 (accessed 29.08.2019).

When the costs of the so-called «free time» for organizing a public economy for women are from 3,8 to 4,7 hours a day, and for men from 1,0 to 2.5 hours, it is difficult to apply the concept of «freedom», or rather talk about the «social slavery» inherited by the modern generation from the norms of patriarchal farming that have become stronger in the mind.

5. CONCLUSION

Thus, it is possible to put forward a hypothesis according to which the way of reproducing the services necessary for a modern person by the efforts of the households themselves hinders the economic development of society as a whole. The patriarchal way of life of Russian society, which has survived to this day, impedes the creative activity of the individual, forcing everyone whose purchasing power is lower than the current prices in the consumer services market to spend all their free time on self-service.

LITERATURE:

1. Demina V.V. The boundaries of the working and leisure time for the employees today // Journal of Russian entrepreneurship. 2011. № 10 (2). Pp. 30-36.
2. Dolinin A.Yu. Problems of evaluating motivation of the staff of the criminal Executive system // Applied legal psychology. 2009. №. 2. Pp. 146-150.
3. Khokhlova T.P. Deviance and coping as a continuum of behavioral models in a modern organization // Service sector: innovation and quality. 2012. № 8. P. 19.
4. Klimov N. Working day in a society that builds communism: monograph. Moscow: Sotsekgiz, 1961. 240 p.
5. Labor and innovation: a collective monograph / edited by of Dr. Econ. of Sciences, Prof. S.I. Sotnikova. Novosibirsk: NGUEU, 2013. 172 p.
6. Labor Code of the Russian Federation № 197-FZ, dated 30.12.2001 (as amended on 05.02.2018). http://www.consultant.ru/document/cons_doc_LAW_34683.
7. Labor Economics / edited by M.A. Vinokurov, N.A. Gorelov. Saint Petersburg: Peter, 2004. 656 p.
8. Patrushev V.D. Time as an economic category. Moscow: Thought, 1966. 237 p.
9. Patrushev V.D. Using the aggregate time of society. Moscow: Thought, 1978. 216 p.
10. Prudinsky G.A. Problems of working and non-working time. Moscow: Nauka, 1972. 335 p.
11. Razomasova E.A. Theoretical and methodological foundations for the formation of an economic mechanism for the development of consumer services: monograph // KNOW VPO of the Centrosoyuz of the Russian Federation «Siberian University of consumer cooperation». Novosibirsk: Sibupk, 2012. 236 p.
12. Regions of Russia: socio-economic indicators, 2017 [Electronic resource] / Federal state statistics service. – URL: https://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1138623506156 (accessed 29.08.2019).
13. Sotnikov N.Z. Conceptual bases of strategic analysis of personnel's business career // Management in Russia and abroad. 2016. № 4. Pp. 126-135.
14. Sotnikov N.Z., Sotnikova S.I., Mikhailova E.M. Business career personal: modern management models of russian banking organizations // GCPMED 2018 – International Scientific Conference «Global Challenges and Prospects of the Modern Economic Development». 2019. C. 1302-1315.
15. Strumilin S.G. Labor economics: textbook. Moscow: Politizdat, 1957. 347 p.
16. Tretyakova L.A., Podvigailo A.A. Problems of evaluating the effectiveness of PR activities in Personnel management // Economic analysis: theory and practice. 2014. № 35 (386). Pp. 52-57.

17. Tsvelev R.I. Post-industrial development. Lessons for Russia. Moscow: Nauka, 1996. 206 p.
18. Zanin V.I. Use and planning of working time. Autoabstract. Novosibirsk: SO AN USSR, 1962. P. 24.

SOCIAL MEDIA MARKETING AS TOOL OF BUSINESS SUCCESS

Veronika Paurova

*University of Zilina, Faculty of Operation and Economics of Transport and Communications,
Department of Economics, Univerzitna 1, 010 26 Zilina, Slovak Republic
veronika.paurova@fpedas.uniza.sk*

Anna Krizanova

*University of Zilina, Faculty of Operation and Economics of Transport and Communications,
Department of Economics, Univerzitna 1, 010 26 Zilina, Slovak Republic
anna.krizanova@fpedas.uniza.sk*

Margareta Nadanyiova

*University of Zilina, Faculty of Operation and Economics of Transport and Communications,
Department of Economics, Univerzitna 1, 010 26 Zilina, Slovak Republic
margareta.nadanyiova@fpedas.uniza.sk*

ABSTRACT

The current business environment brings many challenges for entrepreneurs. Achieving success and being a successful business in today's competitive world is not easy at all. It is the reason, why businesses must constantly work to improve their competitiveness and competitive position. There are several tools and techniques through which businesses can improve their competitive position and achieve business success. The present is strongly connected with modern technologies in all areas. Online technology and social media marketing are closely related to modern technology, marketing and business success. It is a tool that has been prominent in recent years and is an integral part of the business. The paper focuses on the background of social media marketing and business success. The aim of the paper is to point out the importance of social media marketing as an important tool of business success. The practical part is focused on the analysis of secondary data that highlights the most important social media in 2019.

Keywords: *business success, marketing, social media*

1. INTRODUCTION

Nowadays, it is a time of constant changes. Nowadays, it is a time of constant changes. As a result of it, it is for companies difficult to long term stay on the market, to compete with businesses with similar offered services or products. For this reason, it is also difficult for businesses to progress and become more successful. Each company has its goals defined and one of the basic goals of each business unit is to achieve prosperity and success. From this basic goal is derived the overall corporate policy, specific activities and decisions of the company. The success of the company on the competitive markets crucially depends on competent managers (Chlebikova et al. 2015). One of the most important activity of managers in achieving success is decision-making that Valaskova et al. (2019) define as the fact that people choose from possible alternatives to maximize their expected profits. Considering the advancing and changing market conditions, it is not easy in general to set the elements that affect the success and development of a company. Ensuring effective marketing is one of the basic success factors of a business. The shared economy is the current stage of a continuous development of the economy and society that is influenced to some extent by digital technologies (Nica and Taylor 2017). One of the most important technologies of the present time has become the social media that are used by millions people all over the world (Appel 2019). Social media are excellent tool for promoting relationships with customers (Vries et al. 2012).

Retailers and consumers are currently expanding their communications through dynamic new media called social networks (Shareef et al. 2019). In the context of digital technology, social media and success through effective marketing, social media marketing getting to the front. Increase in Internet usage had an impact on marketing and it has changed marketing philosophy: the customer has become the starting point for marketing activities (Nakara et al. 2012). Given the huge potential of potential audiences who spend a lot of time a day in using social media on different platforms, it is understandable that marketers have accepted social media as a marketing channel and tool (Appel et al. 2019). Social media marketing is a type of marketing that is particularly beneficial through increasing the number of people who favorable social media. Social media marketing belongs between modern categories in internet marketing. Businesses use social media marketing to attract customers through social networks. It is necessary to pay attention to this area, as social media can have a high impact on consumers as well as the overall business environment. The aim of paper is to point out the importance of social media marketing as an important tool of business success. The paper consists of two basic parts. Theoretical part focuses on the definition of basic theoretical knowledge related to business success and social media marketing. Practical part consists of secondary analysis of data from Statista aimed at most popular social networks worldwide ranked by number of active users.

2. THEORETICAL BACKGROUND

There is no one-size-fits-all definition of success. There can be no single factor or set of factors that will ensure the success of the business. Internal subjects of the company that can ensure the success but also the failure of the company are administrative subjects such as owners and founders. In addition, external entities such as stock exchanges, investors, banks, etc. are also important. The sources of success of business entities include the contribution of individual customers, performance of operating activities and process and individual products (Veber 2009). According to Krivohlavy (1995) a prosperous enterprise should not make just a profit. The business should focus on its partners, suppliers, employees, co-workers and all the people with whom the business comes into contact with the business, not just for economically expressed final target value for its own benefit. Business success gets a broader and more complete dimension when the direction and goal of business efforts are generally defined. According to Srpova and Veber (2012) a set of tangible and intangible factors affects the success of enterprises, so-called development potential. Development potential includes factors such as customer satisfaction, innovation, environmental protection and employee motivation. The success of a business depends on several factors depends on both the external and internal environment (Szabo and Jankelova 2006). The external business environment is formed by a group of external factors. These factors have a decisive character with the possibility of minimal impact, but some of them may present opportunities or limitations for the company. This is the main reason why these factors need to be constantly monitored and reflected in management practice (Szabo and Jankelova 2006). A conceptual range requiring a set of actors and ties representing certain relationships or a set of relationships between the actors who, in practice, play the role of the source of resources which are, or can potentially contribute, to the success of the given business entity (Domanska 2018). According to Rypakova et al. (2015) success is defined by the victory, best in section – a value system. In marketing, 4P is an essential minimum for successful companies. That is why businesses should take care to effectively manage and secure their marketing activities. One of the areas of marketing that businesses should pay increased attention to is marketing within the digital environment, and hence online marketing. Internet marketing is the use of various Internet services to carry out or support marketing or broader business activities. So marketing on the Internet is much more than just advertising.

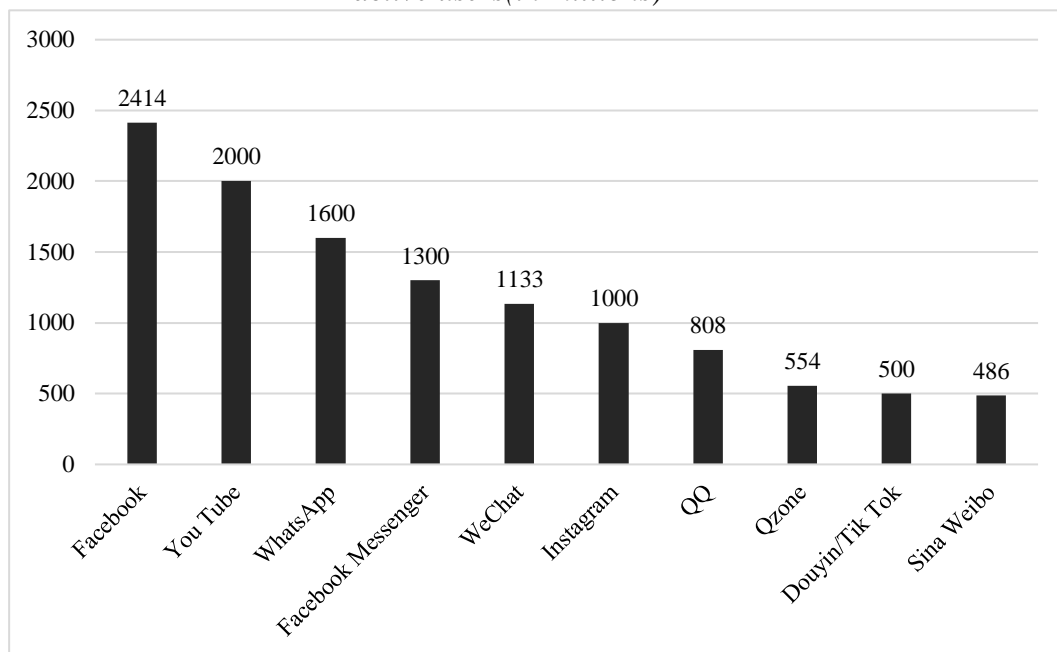
Jemala (2008) say that the internet can do without marketing, but modern marketing and especially e-business without internet do not. Marketing activities on the Internet are many and broad spectrum, concerning the components of the marketing mix, marketing communication, public relations and other activities. Among the major marketing activities carried out via the Internet Jemala (2008) include: e-mail, newsgroups, world wide web (www), search servers, specialized, professional and educational servers, business presentations, e-commerce servers, statistical servers and advertising systems, internet connection, internet advertising, e-commerce, internet marketing research, etc. In the context of Internet marketing, the using of social media as marketing channels has been widespread in recent years. This is mainly due to the efficiency to address millions of customers with branded content and engage them in conversations (Schivinski and Dabrowski 2016). In the context of Business to Customer (B2C), social media platforms are widely researched. With its developed constructs and concepts social media becoming an integral part of consumers' modern lives (Iankova et al. 2018). Social media is a group of tools that allow customers to exchange ideas and opinions, to collect site content, and to make contacts online (Scott 2010). Social media today is an important part of an individual in society. Social media is easily available to anyone, who has an access to Internet. Safko and Brake (2009) define social media as practices, behaviors and activities among communities of people who concentrate online to share facts, knowledge, opinions and information using conversation and media. Social media offers an abundance of services on the Internet. This makes it complicated for companies to know which ones to use and how to use them. The types of social media include: micro-blogs such as Twitter, Friend Feed and Plurk, social networks such as LinkedIn, Facebook and Myspace, reviews and ratings such as Amazon, Trip Advisor and Yelp and video such as Vimeo and YouTube (Karimi and Naghibi 2015). Social Media is defined in the context of the previous media paradigm. Traditional media such as newspapers and magazines, television, radio are in one direction static technologies. New web technology has made it simple for anyone to create and most highly, issue their own content. A blog position, Youtube video or tweet can be twisted and viewed by millions almost for free (Saravanakumar and SuganthaLakshmi 2012). In a practical meaning, social media is a set of software digital technologies that are usually presented as websites and applications that provide users with a digital environment in which they can send and receive digital information and over some type of online social network. In this meaning social media can be understood as the main platforms and their functions such as Instagram, Facebook and Twitter. In practice and reality, social media can also be perceived as another type of digital marketing channel that businesses can use to communicate with customers through advertising (Appel et al. 2019). Social media marketing includes activities like posting text and image updates, videos, and other content that encourages audience engagement as well as paid social media advertising. These activities are referred to as social media marketing. Social media marketing is a type of internet marketing that comprise creating and sharing content on social media networks in order to achieve branding and marketing goals. Increased communication for organizations means promoting brand awareness. Brand value managing and building is a important challenge for managers. It is mainly due to current market environment that is markedly globalized. Kliestikova and Janoskova 2017). According to Majerova (2014) is branding a systematic process that is able to confront a competitive advantage in a globalized market. It is social media that creates a space where businesses can build their brand. Kliestikova et al. (2019) point out that the basic platform of the optimally built and managed value of the brand is its coherent identity. Social media marketing is a process that allows individuals to promote their products or services and websites through online social channels and social media that may not be available to the public through traditional advertising channels. Social media marketing also involves listening to the public and establishing public relations (Weinberg 2009).

Social media marketing is a form of online advertising that takes advantage of the cultural context of social communities, including social networks, visual worlds, social news sites and opinion sharing sites, to achieve communication goals and create a brand (Tuten 2008). Staying competitive in today's fast-moving business landscape requires a solid social media strategy (Erdogmus and Çiçek 2012). Social media marketing provide to business better communication with the customers with aim to build brand loyalty beyond traditional marketing methods. It is an effective way of using time and resources. (Erdogmus and Çiçek 2012). The importance of social media can be increased by interconnecting them. Frey (2011) ranks among the advantages of using social media marketing to strengthen the company's image, enable viral marketing, build public relations, build a brand, promote loyalty to a company or brand.

3. METHODOLOGY

Social media marketing is a way for businesses to interact with their target markets over the Internet through different social media platforms. This research is based on secondary findings from Statista. Based on secondary data, we created a graph of the 10 most popular social networks worldwide as of October 2019, ranked by number of active users (in millions). This graph is shown in Figure 1. The top 10 most popular social networks worldwide include: Facebook, You Tube, WhatsApp, Facebook Messenger, WeChat, Instagram, QQ, Douyin/Tik Rok and Sina Weibo.

Figure 1: Most popular social networks worldwide as of October 2019, ranked by number of active users(in millions)



Source: own processed based on www.statista.com

4. RESULTS AND DISCUSSION

By comparing individual data, we can say that the most popular social networks worldwide as of October 2019, ranked by number of active users (in millions) is Facebook. Kucerka (2011) states that the best-known social media include blogs, b2b social networks (LinkedIn), discussion groups and forums, multimedia sharing sites (YouTube), microblogging services (Twitter), iTunes! podcasting, review and travel sites (Amazon), and social networks (Facebook). According to Shareef et al. (2019) Facebook is one of the fastest growing social media. As Thomakaew (2018) states, social media has become a major channel of business e-marketing, in particular "Facebook" and "Line", which can reach more and more existing and

new customers. It also states that social media helps reduce advertising and public relations costs. In addition, customers can also perceive information about the goods and services they purchase on demand. Social media has become an important factor for entrepreneurs in the business sector, as the use of more social media makes businesses more competitive. In marketing, social networks can be used primarily to building PR and reputation, creating a community of your supporters, active communication with supporters, content publishing space, ad campaigns with precise targeting. Through social networks it is possible to communicate current events - interesting information from internal events in society, important information - news, announcements, user guides, reviews, and more, surveys and competitions - consumer surveys and competitions, interesting photos - photos from presentations, exhibitions, company events and so on video content - information, instructional and reportage videos. Social and digital media may not have just a positive impact on business. Research shows that the negative effects of these media also appear. Fielden et al. (2018) have focused in their research on the production and proliferation of fake social media news. They have identified and provided empirical evidence on how users validate the information they encounter on digital content platforms. Ralston et al. (2018) focused on the role of digital media platforms in the production and consumption of factually dubious content. They performed analyses and made estimates regarding real versus fake news content type distribution on Facebook and prevalence of manipulation tactics on social media. Among the advantages of social media marketing is that it is a two-way communication of the company, thanks to which they receive feedback, comments and suggestions for improvement from customers. According to Sajid (2016) there are two advantages of social media that are essential to companies, they include Cost decrease by decreasing staff time and Increase of probability of revenue creation. He further states that social media allows companies to: share their skills and information, tap into the wisdom of their customers and helping clients. Social media is largely used by almost all and even the businesses despite the fact that they have started using social media to advertise and promote themselves. Big brands use the social media to convey their friendly customer relationship and strong existence (Saravanakumar and SuganthaLakshmi 2012). Social Media Marketing and more especially Social Networks are becoming increasingly important in customers' purchasing decisions, mainly because they magnify word-of-mouth. They may even become more important than advertising as a trusted source of information (Karimi and Naghibi 2015). Meanwhile, E-marketing (EM) has emerged as one of the key tools in sustaining a company's competitive advantage (Eid and El-Gohary 2013). Social media marketing is important for increasing website traffic, achieving conversion goals, engaging users and business leadership, increasing brand awareness, business growth, and community building goals. Achieving marketing goals on social networks is easy because a billion people are currently using social media platforms. So it's important that businesses use social media marketing to grow their business. Social media marketing is important for attracting regular clients and customers. All social media platforms help to reach targeted customers. That's why every business should use unique social media marketing strategies. Social media marketing is an effective way for businesses of all sizes to reach potential customers. Great social media marketing can bring a remarkable success to business, create committed brand advocates, and even lead to sales.

5. CONCLUSION

Social networks are a phenomenon of this time. Advertising on them is an obligation. They can be a great communication channel for marketing activities to support business. Social media marketing is for everyone with the right strategy. But it certainly does not need to be overestimated. This area is constantly evolving. Therefore, it should be an important complement to other forms of online marketing and overall marketing plan.

Most popular social networks usually show a high number of user accounts or strong user engagement. Social networks have a decisive significant social impact due to their constant presence in the lives of their users. Social media is now an important part of the marketing strategy. The benefits of using social media are so great that businesses that do not use them in their business lose marketing opportunities that can lead to success. Social media marketing is a key element of marketing success. Social media is constantly moving forward and evolving, so marketers need to keep track of these developments and adapt their marketing strategies and activities.

ACKNOWLEDGEMENT: *This paper is an output of scientific project VEGA no. 1/0718/18: The impact of psychographic aspects of pricing on the marketing strategy of companies across products and markets.*

LITERATURE:

1. Appel, G., Grewal, L., Hadi, R., Stephen, A. T. (2019). The future of social media in marketing, *Journal of the Academy of Marketing Science*.
2. Carlson, A., Lee, C. C. (2015). Followership and social media marketing, *Academy of Marketing Studies Journal*, 19, 80-101.
3. Domanska, A. (2018). Cooperation between knowledge-based institutions and business: empirical studies and network theories, *Forum Scientiae Oeconomia*, 6 (4), 81-94.
4. Eid, R., El-Gohary, H. (2013). The impact of E-marketing use on small business enterprises' marketing success, *Service Industries Journal*, 31, 31-50.
5. Çiçek, M., Erdogmus, I. (2012). The Impact of Social Media Marketing on Brand Loyalty, *Procedia - Social and Behavioral Sciences*, 58, 1353-1360.
6. Fielden, A., Grupac, M., Adamko, P. (2018). How Users Validate the Information They Encounter on Digital Content Platforms, *The Production and Proliferation of Fake Social Media News, the Likelihood of Consumer Exposure, and Online Deceptions. Geopolitics, History, and International Relations*, 10 (2), 51–57.
7. Frey, P. (2011). *Marketingová komunikace nové trendy 3.0*. Praha: Management Press.
8. Chlebikova, D., Misankova, M., Kramarova, K. (2015). Planning of personal development and succession, *Procedia Economics and Finance*, 26, 249-253.
9. Iankova, S., Davies, L., Archer-Brown, C., Marder, B., Yau, A. (2018). A comparison of social media marketing between B2B, B2C and mixed business models, *Industrial Marketing Management*, 81, 169-179.
10. Jemala, L. (2008). *Podnikateľský manažment a marketing*. Bratislava: STU.
11. Karimi, S., Nafhibi, H. (2015). Social media marketing (SSM) strategies for small to medium enterprises (SMEs), *International Journal of Sales & Marketing Management Research and Development*, 7(4), 11-20.
12. Klietkova, J., Janoskova, K. (2017). Branding with understanding: how national profile of consumer influences brand value perception, *Marketing and management of innovations*, 3, 149-157.
13. Klietkova, J., Durana, P., Kovacova, M. (2019). Naked Consumer's Mind Under Branded Dress: Case Study of Slovak Republic, *Central European Business Review*, 8(1), 15-32.
14. Krivohlavý, J. (1995). *Tajemství úspěšného jednání*. Praha: Grada Publishing.
15. Kucerka, P. (2011). Nastroje marketingu so zameraním na sociálne media, *Kniznica*, 12 (9), 35-37.

16. Majerova, J. (2014). Comprehensive Proposal of Activities of Product Brand Policy in Conditions Specific to Slovak Republic. Paper presented at the 2nd International Conference on Economics and Social Science, Shenzhen, People's Republic of China, July 29-30, pp. 3-8.
17. Nakara, W., Benmoussa, F-Z., Jaouen, A. (2012). Entrepreneurship and social media marketing: Evidence from French small business, *International Journal of Entrepreneurship and Small Business*, 16, 386 - 405.
18. Nica, E., Taylor, L. (2017). New media technologies, digital sharing, and the neoliberal economy, *Ekonomicko-manazerske spektrum*, 11(2), 103-110.
19. Ralston, S., Klietnik, T., Rowland, Z., Vrbka, J. (2018). Are Pervasive Systems of Fake News Provision Sowing Confusion? The Role of Digital Media Platforms in the Production and Consumption of Factually Dubious Content, *Geopolitics, History, and International Relations*, 10(2), 30–36.
20. Rypakova, M., Stefanikova, L., Moravcikova, K. (2015). Suggestion of green customer segmentation in Slovakia. Paper presented at the 4th World Conference on Business, Economics and Management (WCBEM), Ephesus, Turkey, April 30 - May 02. *Procedia Economics and Finance*: 26, 359-366.
21. Safko, L., Brake, D.K. (2009). *The Social Media Bible*. New Jersey: John Wiley & Sons, Inc.
22. Sajid, S. (2016). Social Media and Its Role in Marketing. *Business and Economics Journal*, 7, 203.
23. Saravanakumar, M., Sugantha, L. T. (2012). Social Media Marketing. *Life Science Journal*, 9. 4444-4451.
24. Scott, D.M. (2010). *Nove pravidi marketingu a PR*. Bratislava: Eastone Books.
25. Shareef, M.A., Mukerji, B., Dwivedi, Y. K., Rana, N. P., Islam, R. (2019). Social media marketing: Comparative effect of advertisement sources, *Journal of Retailing and Consumer Services*, 46, 58-69.
26. Schivinski, B., Dabrowski, D. (2016). The effect of social media communication on consumer perceptions of brands, *Journal of Marketing Communications*, 22 (2). 189-214.
27. Srpova, J., Veber, J. (2012). *Podnikani male a stredni firmy*. Praha: Grada Publishing.
28. Szabo, L., Jankelova, N. (2006). *Faktory uspesnosti agrarnych podnikov v Slovenskej republike*. Bratislava: Ekonom.
29. Thomkaew, J., Homhual, P., Chairat, S., Khumhaeng, S. (2018). Social media with e-marketing channels of new entrepreneurs. Paper presented at the 3rd International Conference on Applied Science and Technology, Georgetown, Penang, Malaysia, April 10-12, pp.020147-1-4.
30. Tracy L. T. (2008). *Advertising 2.0. – Social Media Marketing in a web 2.0. World*. Westport: Greenwood Publishing Group, Inc.
31. Valaskova, K., Bartosova, V., Kubala, P. (2019). Behavioral aspects of the financial decision-making, *Organizacija*, 52(1), 22-32.
32. Veber, J. (2009). *Management. Základy, moderní manažerské přístupy, výkonnost a prosperita*. Praha: Management Press.
33. Vries, L., Gensler, S., Leeftang, P. (2012). Popularity of Brand Posts on Brand Fan Pages: An Investigation of the Effects of Social Media Marketing, *Journal of Interactive Marketing*, 26, 83–91.
34. Weinberg, T. (2009). *The new community rules: marketing on the social web*. Sebastopol, CA: O'Reilly.

DATING THE GROWTH CYCLE OF MOROCCO AND ITS SYNCHRONIZATION WITH THE CYCLES OF THE MAIN TRADING PARTNERS

Soussi Noufail Outmane

*Professor at the Faculty of Economics of Salé,
University Mohammed V, Rabat, Morocco*

Abdelghani Bensaid

*Doctoral student at the Faculty of Economics Agdal,
University Mohammed V, Rabat, Morocco*

ABSTRACT

This work analyses the characteristics of the Moroccan growth cycle and the degree of synchronization of it with those of France, Spain and the European Union. Two models are used for dating series: a model based on parametric methods, and another of non-parametric type. The results identify that in the short and medium term, three cycles illustrate the impact of cyclical factors on national growth. The study of synchronization with partner countries shows that the deadlines differ from one period to another, it is stronger during the recent periods of the study. In addition, over the period studied, the results also indicate that after 2011 the Moroccan economic cycle registered a greater agreement with the growth cycle of the Spanish economy than with that of the French economy.

Keywords: Dating, Business cycles, Synchronization

1. INTRODUCTION

An economic cycle corresponds to a well-defined period in which we can observe the succession of several phases linked to the economic activity of a country. These phases are at the origin of any explanation concerning the evolution of the state of the conjuncture and the determination of the periodicity of this cycle in time. The various attempts to explain and model this concept are not new. The first checks date back to David Ricardo in the 19th century when he analysed the periodic return of the trade and agricultural crises in European countries. Other factors impacting the growth cycle were born following the industrial, monetary, financial and technological transformation that the world knew during this century. The Moroccan economy like that of other countries seems to be a cyclical economy. This result was prescribed by a study conducted in 2014 by the High Commission for Planning of Morocco, where the authors showed the characteristics of the Moroccan economic cycle during the period 1998-2012 and the dating of it. This exercise exclusively concerned the GDP aggregate (in addition to four other aggregates) to describe the cycle. This intuitive choice seems interesting because the GDP aggregates all of the wealth created, and it reflects the duality of its economy. Because of the different endogenous and exogenous crises that have affected developed and developing economies, this work focuses on the study of economic cycles in four series, that of France, Spain and the European Union and more precisely, the dating of the fluctuations and the movement of these cycles with that of Morocco. In addition to the neighbourhood relationship between Morocco and the European Union. And despite the ongoing diversification of Morocco's trading partners, the European Union remains the Kingdom's first customer and supplier, the main source of FDI and the first source of MRE transfers and tourist receipts.

2. BUSINESS CYCLES: CONCEPT AND THEORY

2.1. Definition of the business cycle

The literature on economic cycles distinguishes two types of cycles, the business cycle, which traces changes in the level of activity in the economy, generally measured through the GDP series, and the growth cycle. The latter reproduces the gap between the GDP series and its underlying long-term trend; turning points (peaks and troughs in the cycle) mark the acceleration and slowing down of growth. The present study is concerned with this second type of economic cycle. The aim is to decompose the GDP series into two components: a structural, non-stationary component (the long-term trend) and another, a stationary cyclical (short- to medium-term growth cycle). This amounts to expressing the series Y_t , corrected for seasonal variations, in the following form:

$$Y_t = T_t + C_t + \varepsilon_t$$

Where T_t is the trend, C_t is the growth cycle and ε_t is a random component.

Technically, the underlying trend can be seen as potential GDP. This is obtained when the national economy experiences full employment. Thus, the economy expands when real GDP exceeds the underlying trend. In this case, the peak of this cycle corresponds to a situation where the GDP is above its trend level (the output gap or the output gap reaches its maximum) while the trough represents a situation where the GDP is at - below (the output gap then reaches its minimum level), and this is the case where the economy is in recession. The turning points in the economy are called peaks and troughs. They indicate the highest point respectively the lowest that the economy can reach in the current economic situation (Fregert and Jonung, 2010). However, there are several methods of trend-cycle decomposition (statistical tools, filters, production functions).

2.2. Theoretical approaches to the business cycle

From a theoretical point of view, the first attempt to describe market fluctuations was developed by Samuelson (1939). His model called *multiplier-accelerator* is based on rigorous mathematical approaches. It shows that changes in purchasing power inevitably lead to cyclical fluctuations. Second, Keynes (1936) emphasized the importance of trying to reach full employment. In this context, he asserts that there is no guarantee that the goods produced will be requested by consumers. Unemployment can therefore be a natural cause in the event of a default in demand, particularly during an economic downturn. Modern business cycle theory is the basis for two basic assumptions. The first assumes that there are predetermined (exogenous) factors in the economic cycle responsible for any change in GDP and slightly impact both the other economic indicators and the (long) assumed duration of the economic cycles. In this case, no radical change between the following quarters can be observed. The second approach assumes that there are also random factors that can cause unexpected events that cause the economic cycle to change course quickly. In this context, Frisch (1933) developed a new model called propagation-impulse. This model predicts that the economy is constantly exposed to random disturbances called pulses¹. The return to balance and the adaptation of the economy to these impulses is generally long. Researchers such as (Fregert and Jonung, 2010) estimate that the duration of cyclical fluctuations is normally between three and eight years. Other researchers like Juglar (1862), Kuznet (1961) consider a longer cyclical period. These cycles vary between seven and eleven years.

¹ They describe the random events in the economic cycle.

3. CONCEPT OF DATE OF BUSINESS CYCLES

3.1. Dating growth cycles

Two broad categories of approaches are used to date the economic growth cycle from a time series, that is, to specify the moments of the peaks and troughs that represent turning points for each cycle.

1. Parametric type methods, based on non-linear time series models. The most famous model is that of Markov Switching Models which adapt to the measurement of the characteristics of economic growth cycles.
2. Non-parametric models which rely on shape recognition algorithms to identify local minima and maxima of the series in question.

The best known of the non-parametric models is that of Bry and Boschan, implemented in 1971 as a continuation of the work of the NBER. This algorithm, extended to quarterly data by Harding and Pagan, makes it possible to detect potential peaks and troughs in a quarterly series over a given interval. Thus, a quarter is identified as a peak (trough) if it is a maximum (minimum) during the two quarters preceding and following the quarter considered, thus the phases last at least two quarters and five quarters for the cycles. Easier to implement than parametric methods, it is the Bry and Boschan model that was adopted by this study.

3.2. Method for dating turning points

The first step concerns the decomposition of the GDP series (chained prices) into two components, trend and cycle, using the Hodrick-Prescott (HP) filter. Subsequently, the BBQ method (developed by Bry and Boschan) is applied to the cyclical component (the difference between the original series and its trend), in order to detect the turning points of the economic growth cycle and identify the recovery and slowdown phases. For Harding and Pagan (2002), the BBQ approach is the most reliable for good dating of turning points, meeting the following two conditions:

- A peak must be followed by a trough and vice versa.
- A phase must last at least two quarters while a complete cycle must last at least five quarters.

For Harding and Pagan, and in quarterly data, a value (Y_t) is considered to be peak if $\{y_t > y_{t-1}, y_t > y_{t+1}, y_t > y_{t-2}, y_t > y_{t+2}\}$ whereas it is considered as hollow if $\{y_t < y_{t-1}, y_t < y_{t+1}, y_t < y_{t-2}, y_t < y_{t+2}\}$.

3.3. Harding And Pagan Concordance Index

Harding and Pagan proposed an index which measures the degree of agreement between two cycles (x and y), by calculating the average of the periods during which the two cycles are simultaneously in the same state of recovery or deceleration.

This index is written as follows:

$$IC_{xy} = \frac{1}{T} \sum_{t=1}^T [S_{x,t} S_{y,t} + (1 - S_{x,t})(1 - S_{y,t})]$$

we notice :

- IC_{xy} : Index of concordance between the economic growth cycles of country x and country y.
- T : The number of observations.
- $S_{x,t}$: State of the cycle of country x at the time "t" / $S_{x,t} = 1$ in the event of recovery, $S_{x,t} = 0$ in the event of a slowdown.

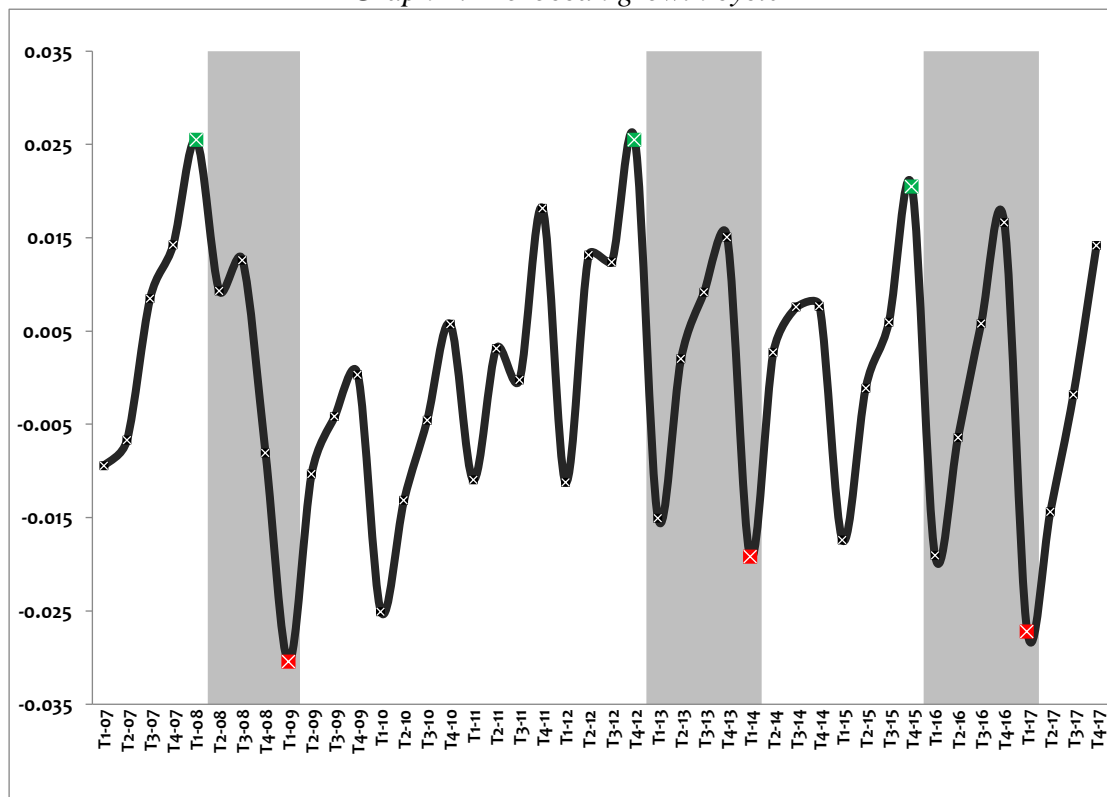
- $S_{y,t}$: State of the cycle of country y at the instant " t " / $S_{y,t} = 1$ in the event of recovery, $S_{y,t} = 0$ in the event of a slowdown.

The value of the index IC_{xy} is between 0 and 1: if this value is close to or equal to 1, the variable x is said to be pro-cyclical with respect to y , if the IC is close to 0, it is considered to be contra-cyclic.

4. DATING OF THE MOROCCAN GROWTH CYCLE

The following graph presents the Moroccan growth cycle on the basis of quarterly GDP at chained prices from Q1-07 to Q4-17 calculated by the Bry-Boschan algorithm, the peaks are represented by green dots while the dips by red dots. The gray areas represent phases of contraction (a trough that follows a peak).

Graph 1: Moroccan growth cycle



This graph highlights four growth cycles, three of which are complete: Q1-2007 / Q1-2009, Q2-2009 / Q1-2014, Q2-2014 / Q1-2017 and the fourth, which started in Q2-17, again unfinished. The description of these three cycles, illustrated by the following table, highlights the following characteristics:

- The average length of growth cycles is 13.3 trimeters (3.3 years), however this duration varies from one cycle to another, ranging from 8 (2 years) to 20 quarters (5 years).
- The recovery phases are spread over longer periods than those of slowdown:
- The recovery phases are spread over an average duration of 8.67 quarters. The longest recovery phase extends over a period of 15 quarters, the period from Q2-2009 to Q4-2012.

Unlike the recovery phases, the duration of which differs from one cycle to the next, the slowdown phases extend, almost, over the same duration (4 to 5 quarters).

Table 1: Dating of growth cycles

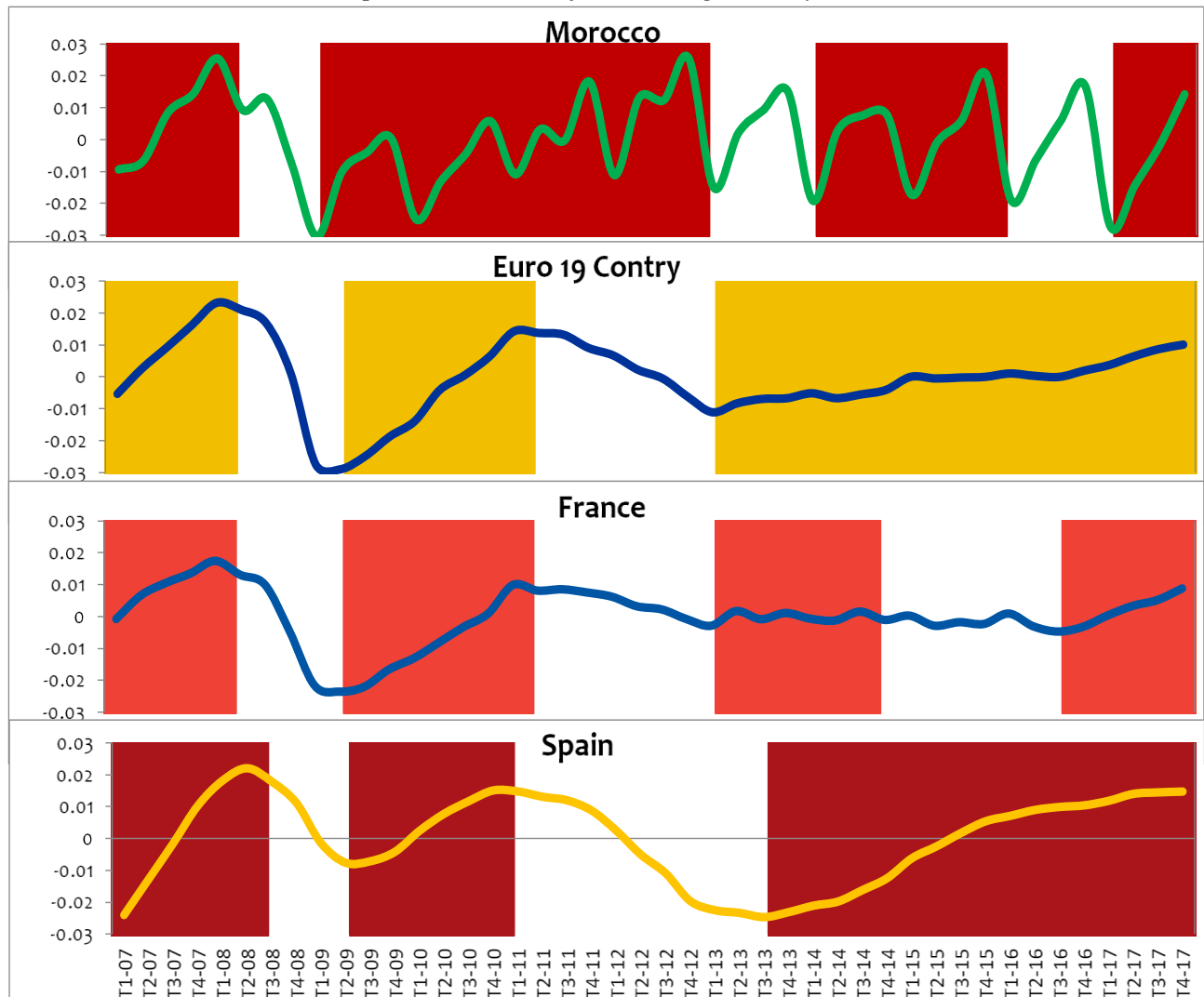
Cycle	Pics	Recovery phase Hollow-pic	Deceleration phase Pic-hollow	Growth cycles Hollow-Hollow
T1-07/T1-09	T1-08	4	4	8
T2-09/T1-14	T4-12	15	5	20
T2-14/T1-17	T4-15	7	5	12
Average		8,7	4,7	13,3

The three cycles show the impact of cyclical factors on national growth in the short and medium term.

5. SYNCHRONIZATION OF MOROCCO'S GROWTH CYCLES WITH ITS PARTNERS

The study of the synchronization of the economic cycles of Morocco and its main European partners will make it possible to assess the degree of correlation of these cycles and to understand the mechanisms of transmission of the cyclical stocks which shake the economies of these partners to the Moroccan economy. The growth cycles are obtained using the Hodrick-Prescott filter.

Graph 2: Evolution of the GDP growth cycle



The economic growth cycle in Morocco shows, compared to its main partners, the following characteristics:

- Greater volatility of the cycle and its phases;
- A correspondence with the phases of the growth cycle of the European partners over two periods (T1-07 / T1-11), (T2-14 / T4-15) and two decoupling periods of (T2-11 / T1-14) and (T1-16 / T1-17).

The findings from the previous graph are corroborated by the concordance index which measures the degree of correspondence between Morocco's growth cycles with its main European partners and between the latter's economic cycles. The following three tables represent the value of this index for the entire period 2007-2017 and for two sub-periods 2007-2010 and 2011-2017.

Table 2: Degree of synchronization of economic cycles (Harding and Pagan index of concordance)

Partners	periods	Morocco	France	Spain
France	2007-2017	0,58	-	-
	2007-2010	0,94	-	-
	2011-2017	0,37	-	-
Spain	2007-2017	0,60	0,79	-
	2007-2010	0,88	0,94	-
	2011-2017	0,44	0,70	-
E.U	2007-2017	0,60	0,88	0,91
	2007-2010	0,94	1,00	0,94
	2011-2017	0,41	0,81	0,89

For the period 2007-2010, we see that there was an average degree of agreement of around 60% between the growth cycle of the Moroccan economy and those of the economic growth of the EU, France and Spain. This synchronization, stronger during the 2007-2010 period (88% to 94%), fell to a remarkably low level (37% to 44%) during the 2011-2017 period. The index also shows that, during the period 2011-2017, the Moroccan economic cycle registers a more important agreement with the growth cycle of the Spanish economy than that of the French economy (44% against 37%), unlike the 2007-2010 period when this agreement was greater with the cycle of the French economy than with the cycle of the Spanish economy (94% against 88%).

6. CONCLUSION

The previous analysis shows that the Moroccan growth cycle has shown, since 2011, a less pronounced synchronization with that of its main European partners: 0.37 to 0.44 during the period 2011-2017, against 0.88 to 0.94 over the 2007-2010 period. This dropout is attributed, essentially, to the resilience of the Moroccan economy in the face of the financial and economic crisis that struck the Kingdom's first economic partner in 2008 and had a heavy impact on its economy. The resilience factors of the Moroccan economy are mainly the following:

- Increased product diversification which has enabled the emergence of new high-growth and technology-intensive professions, such as the automobile, whose share in exports doubled between 2007 and 2017, from 12 to 24% . This productive dynamic was accompanied by a diversification of business partners. The EU remains, of course, the main destination for Moroccan exports; however, its share continues to decline in favor of new markets. For example, exports to Africa doubled between 2007 and 2017 (from 5% to 10%).

- The conduct of a counter-cyclical macroeconomic policy, supporting domestic demand, has helped to mitigate the effects of the financial crisis. Thus, the Moroccan economy registered an upward growth trend which reached 4% during the 2008-2016 period, a growth level exceeding that of the main competitors in the MENA region.

LITERATURE:

1. AIMAR, F. BISMANS et C. DIEBOLT (2010), *Le cycle économique : une synthèse*, Association Française de Cliométrie, Working Paper, no 4.
2. BANQUE MONDIALE (2019), Statistic Division, WDI Database.
3. BAXTER, M. et R.G. KING (1999), *Measuring Business Cycles: Approximate Band-Pass Filter For Economic Time Series*, The Review of Economics and Statistics, 83(4) : 575-593.
4. BENTOGGIO, G., J. FAYOLLE et M. LEMOINE (2002), *La croissance européenne perturbée par un cycle de courte période*, Économie et Statistique, 359-360 ; 83-100.
5. BERNANKE, B.S. (2004), *The Great Moderation*, Remarks at the Meetings of the Eastern Economic Association, Washington, DC, February 20, 2004.
6. BEVERIDGE, S. et C. R. NELSON (1981), *A New Approach to the Decomposition of Economic Time Series into Permanent and Transitory Components*, Journal of Monetary Economics, 7(2) : 151-174.
7. BOURBONNAIS, R. (2009), *Économétrie*, Dunod, 7^e édition.
8. BOUTHEVILLAIN, C. (1996), *Les cycles des grands pays industrialisés. Des croissances plus proches mais des zones déphasées*, Économie et Statistique, 298(août) : 71-91.
9. BRY, G. et C. BOSHAN (1971), *Cyclical Analysis of Times Series: Selected Procedure and Computer Programs*, Cambridge MA: NBER.
10. BURNS, A. F. et W. C. MITCHELL (1946), *Measuring Business Cycle*, New York, NBER.
11. CETTE, G. (1997), *Écart de positionnement dans le cycle économique : quelques évaluations pour l'économie française*, Bulletin de la Banque de France, 38(février) : 91-104.
12. CHRISTIANO, L.J. et T. J. FITZGERALD (2003), *The Pass Band Filter*, International Economic Review, 44(2) : 435-465.
13. DOKO, F. et S. SANOU (2004), *Modèles MS-VAR et analyse du cycle des prix des matières premières : cas du cacao*, Mémoire de groupe de travail, République de Côte d'Ivoire.
14. FATHI, E. (2009), *Décrire le cycle économique en Tunisie*, Économie et Prévision, (3) : 75-92.
15. FERRARA, L. (2009), *Caractérisation et datation des cycles économiques en zone euro*, Revue Économique, 60(3) : 703-712.
16. HODRICK, R. et E.C. PRESCOTT (1997), *Postwar U.S. Business Cycles: An Empirical Investigation*, Journal of Money, Credit, and Banking, 26 : 1-16.
17. NDONGO, O. et Y. FRANCIS (2006), *Datation du cycle du PIB camerounais entre 1960 et 2003*, MPRA.
18. OKUN, A.M. (1962), *Potential GNP: Its Measurement and Significance*, in Proceedings Business and Economic Statistics Section of the American Statistical Association, p. 89-104.

RISK IN SOCIAL PRACTICES: «NORMALIZATION» AND «HABITUALIZATION»

Svetlana Ilynykh

*Novosibirsk state University of Economics and Management, Russia
ili.sa@mail.ru*

Svetlana Rovbel

*Novosibirsk State University of Economics and Management, Russia
rovbel_s@mail.ru*

Elena Naumova

*Novosibirsk State University of Economics and Management, Russia
e_naumova@mail.ru*

Evgeniya Komf

*Novosibirsk State University of Economics and Management, Russia
zk.08@mail.ru*

ABSTRACT

In the article, the author considers scientific approaches to understanding risk. Risk is an uncertainty that is rooted in the very structure of the world's existence. Risk becomes an inevitability. Scientists distinguish three approaches to the nature of risk: objective, subjective, and objective-subjective. According to the concept of objective risk, the uncertainty and instability inherent in this world constantly generate risk and are the natural cause of risk. The concept of subjective risk relates risk exclusively to the decision-maker, their values, and their physiological and psychological capabilities. Risk can only occur where there is a specific action or activity of a person who can predict future situations. In the concept of objective-subjective risk, the latter is considered as a combined phenomenon. The author of the article develops the idea of the objective-subjective nature of risk, according to which the risk is not always manageable and «normalized». «Normalization» of risk has the property of constancy. Because of this, often a person can not quite adequately assess how risky a particular life strategy is. The risk becomes habitualized. The author provides this idea with the results of an empirical study on the example of consumer practices and health-saving practices. The risk of consumer practices is determined by factors such as gender, age, education, status, and income. These factors may affect different consumer behavior patterns in different ways. It turned out that the least risky group is the middle – income group. When implementing consumer behavior, they are guided by their experience, carefully approach both the choice of goods and services, and the assessment of their quality. Affluent buyers trust manufacturers, retailers, and the primary group's opinion. In traditional consumer practices, lower-income individuals demonstrate higher risk strategies. In contrast, high-income individuals are more in risk with alternative consumer practices. The practice of health care in the event of onset of symptoms were both out risk assessment and habitualization.

Keywords: *risk, uncertainty, risky strategies, consumer behavior, health saving practices, income*

1. INTRODUCTION

Risk research has become quite relevant in many scientific sphere at the present time. This is due to the fact that structural and functional changes in Russian society increase the dominance of social risks. As a result, there is a need for complex interdisciplinary researches of this

phenomenon. Increasing scientific interest in the study of risk as a special branch of social knowledge is associated with the processes of social and political modernization. Modern society is rapidly transforming. Social practices can't successfully develop into legitimate institutions. In this regard, there is a need to manage social risks. In this sense, sociology allows us to say that risk management as an activity has its own methodological foundations and its own conceptual pragmatics. It seems to us that the main task is to systematize and develop an integrated approach to determining social risks that affect the life of an individual, the activities of an organization, and the functioning of society. Here is important to pay attention to the problems of variability and to evaluate possible strategies for social action in the process of managing social risks.

2. CHAPTER TWO

Regarding the theoretical justification of the problem, it's worth noting that in General, risk as a subject of research of scientists appeared relatively recently. The Western founders of the risk theory should include A. Giddens (Giddens 2002), N. Luhmann (Luhmann 1991), M. Douglas, A. Wildavsky (Douglas, Wildavsky 1982), D. P. Piscione (Piscione 2014), N. Pidgeon, R. E. Kasperson and P. Slovik (Pidgeon, Kasperson, Slovik 2003), A. Chavoshian and K. Takeuchi (Chavoshian, Takeuchi 2013), R. W. Perry and E. Quarantelli (Perry, Quarantelli 2005) etc. Douglas Hubbard (Hubbard 2009) suggests considering the distinction between risk and uncertainty. According to G. Bohmann, "the concept of risk has recently made a dizzying career in the field of social theory" (Behmann 2010: 27). This is partly due to the fact that the entire world community is experiencing a huge destabilization of social systems, whether it's the economy, the social sphere, health care or education. The fact that interest in risk is increasing in the scientific community may indicate the processes of changing public consciousness. Scientists are interested not only in the nature of the risk, its typology, but also in how the potential for risks can be eliminated. In sociology, the research of risk is of interest, since it's necessary to study not just uncertainty, but uncertainty, which is unavoidable as an attribute element of natural and social reality. This means that risk as a derivative of uncertainty is strengthened in the existence of the world. Risk becomes an inevitability. Risk is present as a synonym for being. The ability to manage this uncertainty and inevitability, as well as the amount of this uncertainty, is dependent on the decisions of the person, on the moral norms adopted when achieving the goals. In this case, we can agree with Y. A. Zubok that "risk is a category that reflects, first, the characteristics of the living conditions of social actors in a state of transition from a situation of uncertainty to a situation of certainty (or Vice versa); secondly, the very activity in these conditions, when there is a reasonable choice when assessing the probability of achieving the expected result, failure or deviation from the goal, taking into account the existing moral and ethical standards». U. Beck (Beck 2007, 2010, 2015) and K. J. Arrow (Arrow 1987, 2011) defined risk through a situation of uncertainty resulting from either a lack or an overabundance of information. According to U. Beck (Beck 2007, 2010, 2015), society, on the one hand, is highly developed in scientific and technical and economic aspects. But on the other hand, individuals are almost completely left to themselves in the matter of overcoming fears and insecurities generated by a variety of risk factors. The researched problems in the aspect of sociology require a brief analysis of the nature of risk. V. I. Zubkov identifies three main approaches to determining the nature of risk: objective, subjective, and objective-subjective (Zubkov 2003:68-69). According to the concept of objective risk, the uncertainty and instability inherent in this world constantly generate risk and are the natural (genetic) cause of risk. The concept of subjective risk relates risk exclusively to the decision-maker, their values, and their physiological and psychological capabilities. Risk can only occur where there is a specific action or activity of a person who can predict future situations. In the concept of objective-subjective risk, the latter is considered as a combined phenomenon.

According to N. Luhmann (Luhmann 1991), risk is subjective, since it's always associated with the choice of certain alternatives and the calculation of the probability of their result. At the same time, the amount of risk is objective, since it is a form of qualitative and quantitative expression of real uncertainty as an essential characteristic of the world around us and its elements. Thus, speaking about the nature of risk, we can assume that it has an objective-subjective nature. This means that, on the one hand, risks can be "transparent for observation". But, on the other hand, they can't be completely controlled and controlled, since the subjective factor is included. As a result, we can agree with the opinion of K. Lau that "behind the risk there are always previously unknown and unrecoverable completely complex structures of reality" (Ustyantsev 2006: 35). So, from the point of view of sociology, risk, due to its objective-subjective nature, isn't always manageable. When studying the problem of risk, it's necessary to pay attention to such a factor as "normalization" of risk. This is about changing the perception of risk. It becomes, though still a complex phenomenon, but at the same time commonplace. The line between crisis and everyday, normal life dissolves. There is a "normalization" of risk. From this point of view, "normalization" of risk is essentially equivalent to "normalization". One of the remarkable statements of P. Sztompka (Sztompka 2000) is that when we are talking about an economic, political, environmental, social crisis, we are increasingly referring to a durable, long-term, permanent, chronic situation. Increasingly, the crisis is seen as something normal, typical, and we would even be surprised if such a crisis suddenly disappeared. Zygmunt Bauman (Bauman 2001) associates "normalization" of risk with the fate of a person. In his opinion, unreliability is a widespread feature of modern conditions. It's a cumulative experience of uncertainty about a person's position, rights, and availability of means of livelihood, uncertainty about continuity and future stability, and insecurity for a person's physical body, personality, and their continuities – property, social environment, and community. The scientist develops the idea that nowadays riskiness is not a matter of choice, because it is the very fate. Risk acquires a state of "normalization" due to the fact that it has become permanent in modern society. Immanuel Wallerstein (Wallerstein 2001) convincingly points out that we live in a universe of uncertainty, the only greatest advantage of which is the constancy of this uncertainty. This constancy arises from the fact that risk turns out to be the reverse side, the shadow of any action, that is, an element of human existence itself. The concept of "habitus" introduced by P. Bourdieu (Bourdieu 1998), defined as a set of social relations, a system of individual attitudes, and orientations, is essential for understanding the "normalization" of risk. Habitus allows explaining the riskological behavior of an individual. The process of social construction of reality according to P. Berger and T. Lukman (Berger Luckmann 1995) is also important, including in relation to risk-taking behavior. It's worth noting that in order to reduce the "normalization" of risk, it's important to form a strategy of goal-oriented behavior (Weber 1990), according to which the meaningfulness of social action is at the forefront. This is a kind of activist model of social action that excludes simple replication of social norms. Weber's theory of social action encourages us to think about what we prefer in a particular situation, in relationships with people, in life, including in a situation of risk. Let's sum up the interim results. In sociology, risk is understood as uncertainty that has an objective-subjective nature. We have little control over risk, so it's difficult to manage it. But at the same time, it should be noted that in society there is a "normalization" of risk, which has the property of constancy. Because of this, often a person can't quite adequately assess how risky a particular life strategy is. We will illustrate this postulate with empirical examples.

3. CHAPTER THREE

In sociology, the risks of consumer behavior are actively investigated. Here is an example of a consumer study presented by O. V. Tkachenko (Tkachenko 2017). The authors presents the results of a sociological study "Consumer behavior of the population of Volgograd in the

situation of choosing and purchasing pharmaceutical products and services". The sample is multi-stage: zoned, random mechanical, quota, statistical error doesn't exceed 4.1% (N=614). The authors believe that 89.1% of consumers constantly face current and potential risks. At the same time, there are three types of consumer positions in relation to danger and risk. The first position is the lack of understanding of the potential danger and negative consequences of their actions, which lead to the loss of human potential components. It's detected by 8.2% of respondents. The second position is expressed in the recognition of certain risks by consumers and in an active position only if a large amount of money is lost. 47.9% of respondents were identified here. The third position is typical for 43.8% of consumers who understand the potential danger, are concerned about their well-being, have a negative experience of risk situations, don't want to risk their physical condition and financial well-being, and are guided by an active consumer position. As you can see, about 90% assess their life in the context of emerging risks. This confirms the idea of persistent risk. 8.2% and 47.9% of respondents can be attributed to those for whom risks have become a "normal" state. Either they are not at all concerned about the risks, or they experience inconvenience only financially. Although 43.8% of respondents are more proactive, they still understand the potential danger of risks. Implicit "normalization" of risks, one way or another, takes place. Many factors influence the risky model of consumer behavior: gender, age, education, status, income. Without considering all the factors, we dwell only on a few. As for age, O.V. Tkachenko associates risks in consumer behavior with long distribution conditions, lack of commodity consumption, which affected the desire of Russians to satisfy only basic needs. The lack of skills of judicious assessment and decision making in consumer choice is manifested in the inability of a number of categories of the population to navigate in the relative abundance of goods. The connection between risky consumer behavior and the respondent's income is also interesting. It turned out that the least risky group is the middle – income group. When implementing consumer behavior, they are guided by their experience, carefully approach both the choice of goods and services, and the assessment of their quality. Wealthy buyers trust manufacturers, distribution networks, and primary group opinion. Low-income buyers display the "high acceptable risk" strategy, since, when they evaluate the quality of modern goods and services low, they focus only on price when choosing them. In other words, the lower the income, the more risky the consumer strategy the respondent uses. However, the authors found another interesting feature that links consumer strategies, income levels, and risks. To verify the hypothesis that for a group of consumers in alternative consumer practices, the latter are endowed with signs of status, prestige, and risk, the author conducted an empirical study in July 2017 in Novosibirsk on the topic "Alternative practices of food consumption". The method of in-depth interview based on a sample of available cases was used. We note that such studies are practically absent in sociology. The task of empirical study of alternative practices of food consumption is seen as possible at various levels: quantitative (representative research) and qualitative (focus group, in-depth interview, and others). The first of them is a classic representative survey, which aims to detect mass forms of consumer behavior and respondents' opinions about the whole complex of the consumer sphere. The second level of research of alternative consumer practices is in an in-depth interview, which makes it possible to track individual consumption processes based on the analysis of narratively recorded interactions. The description of social interactions in the context of consumer practices, of course, will not represent the representativeness of this type of behavior, but will allow you to determine the features of alternative consumer practices. Alternative consumption practices are associated with a preference for a healthy diet in the form of a raw food diet. A healthy diet, a healthy lifestyle is, of course, one of the values. However, values can have a contradictory nature and turn into their opposite. Hence the risk. We point out that the risk of consumption is due to the fact that supporters of a food system that completely excludes the use of any food that has been subjected to temperature treatment, use

products that contain pathogenic bacteria, etc. Many vegetables, fruits, and berries may well contain traces of fertilizers that are destroyed only by heat treatment. Alternative consumption practices as risky (in the above aspect) are directly correlated with income levels. The fact is that this group of consumers uses expensive food products, if necessary, orders them in foreign countries. According to one of the respondents, "it's much cheaper to eat regular food than "live food". The respondents surveyed by the authors had a high level of income and owned one or more businesses. It's worth noting that according to the typology of social behavior (M. Weber), this type of consumer behavior is value-rational. In our view, in this context, it contributes to the "normalization" of risk. By correlating with the O.V. study Tkachenko, we can say: in traditional consumer practices, lower-income individuals demonstrate higher risk strategies; in contrast, high-income individuals are more at risk with alternative consumer practices. As for environmental behavior in relation to one's health, the theory of habitualization is clearly visible here. We can also cite the results of an empirical study that illustrates health-saving practices and habitualized risk in behavior with regard to one's health. We conducted a study of the opinion of residents of Novosibirsk. The study was conducted under the author's guidance in June 2019 (N=771, of which 399 are women and 372 are men). A questionnaire was used. The sample is formed by a three-stage selection of territories. Health-saving practices were tested using a series of questions, one of which was the following: "What will You do when symptoms appear?". Different answers were offered to this question, which involved contacting specialists, self-treatment, and passive refusal of treatment. While self-medication was treated not only from the perspective of self-selection of medicines, but also appeal to virtual means of obtaining information in case of illness (the Internet). If there is no significant risk, more than 40% of respondents in both groups choose one of the methods of self-treatment – the independent choice of drugs in the pharmacy. It's significant that 9.8% of women and 13.7% of men will turn to the Internet for information. In this case, the virtualization of modern society is one of the major health risks. Less than a third of respondents (28.4% and 24.5%, respectively) will go to a medical institution, and about one in ten respondents will call a doctor. The passive method "I will do nothing" is chosen by 6% of women and 12.6% of men. The presented health-saving practices in the event of symptoms of the disease are both risk-based and habitualized. At the same time, you can also see respondents with purposeful behavior that deliberately reduces the risks of the disease.

4. CONCLUSION

Sum up. Risk as an object of sociology has a significant interest, since it's directly related to the preservation of the life of the entire social system. Risk can be considered as a measure of possible losses in the social system. It's important to keep in mind that risks are difficult to manage, constant, and "normalized". In order to avoid risk, it is important to form a goal-oriented type (according to M. Weber) of consumer behavior. Empirical research of risks on the example of consumer behavior shows that they are predetermined by a set of factors such as gender, age, status, education, income level, etc. At the same time, these factors may have different effects on different models of consumer behavior. This thesis allows us to suggest that by taking risks under control and managing them, we can thereby improve the quality of life as a whole.

LITERATURE:

1. Arrow, K.J. (1987) The Demand for Information and the Distribution of Income // *Probability in the Engineering and Information Sciences*. 1:3-13.
2. Arrow, K.J. (2011) Credit Instruments and Information in General Equilibrium // P. Bridel (ed.) *General Equilibrium Analysis: A Century after Walras*. Abington, U.K. and New York: Routledge. Ch. 10:102-108.

3. Bauman, Z. (2001) *The individualized society*. Polity.
4. Beck, U. (2010) *World at Risk*. Cambridge: Polity Press
5. Beck, U. (2007) *Power in the Global Age*. Cambridge: Polity Press
6. Beck, U. (2015) Emancipatory Catastrophism: What does it mean to Climate Change and Risk Society? // *Current Sociology*.. 63 (1): 75–88.
7. Berger, P., Lukman, T. (1995) *Social design of reality. Treatment on sociology of knowledge*. M.
8. Bourdieu, P. (1998) Structure, habitus, practice. *Journal of Sociology and Social Anthropology*. 1(2): 44-59.
9. Behmann, G. (2010) *Modern society: risk society, information society, knowledge society*. Moscow: Logos.
10. Chavoshian, A., Takeuchi, K. (2013) *Floods: From Risk to Opportunity*. (IAHS Red Book Series). International Association of Hydrological Science.
11. Douglas M., Wildavsky A. (1982) *Risk and culture: An essay on selection of technological and environmental dangers*. Berkeley, CA: University of California Press
12. Frolova, S.M., Golub, Yu.G. (2011) Risk as an integral component of the everyday life of modern society. *Personality in the modern world: life strategies, values, risks: materials of a scientific-practical conference*. Saratov: Publishing house «KUBiK»: 69-73.
13. Giddens, A. (2002) *Runaway World: How Globalisation Is Reshaping Our Lives*. Profile Books.
14. Hubbard, W.D. (2009) *The Failure of Risk Management: Why it's Broken and How to Fix It*. John Wiley & Sons, Inc., Hoboken, New Jersey.
15. Ilynykh, S.A. (2017) Consumer behavior: status, riskiness, habitualization. *Society: sociology, psychology, pedagogy*. 9: 9-12
16. Kashcheev, S.I. (2011) *Risk, freedom, passionarity. Personality in the modern world: life strategies, values, risks: materials of a scientific-practical conference*. Saratov: Publishing house «KUBiK»: 38-42.
17. Luhmann, N. (1991) Der Begriff Risiko. In: N.Luhmann. *Soziologie des Risikos*. Berlin; New York: Walter de Gruyter. S.9–40.
18. Perry, R. W., Quarantelli, E. (2005) *What is a Disaster? New answers to old questions* Xlibris, Corp.
19. Pidgeon, N., Kasperson, R. E., Slovik, P. (2003) *The Social Amplification of Risk* Cambridge. Cambridge University Press
20. Piscione, D. P. (2014) *The Risk Factor: Why Every Organization Needs Big Bets, Bold Characters, and the Occasional Spectacular Failure*. St. Martin's Publishing Group, Dec 23, Business & Economics
21. Strizoe, A.L. (2014) Subjective risks of civilization and culture in an era of global change. *Risks of civilizations and cultures in the global world: Sat. Proceedings of the All-Russian Scientific Conference*. Saratov: Information Center Science: 10-16.
22. Sztompka, P. (red.) (2000) *Imponderabilia wielkiej zmiany*. Warszawa: PWN.
23. Sztompka, P. (2000) *Trauma wielkiej zmiany*. Warszawa: ISP PAN.
24. Tkachenko, O.V. (2017) *Social risks in the consumer behavior of the population of modern Russia: regional aspect: author. dis ... Dr. sociol.* Volgograd
25. Ustyantsev, V.B. (red.). (2006) *Risk society and man: ontological and value aspects*. Saratov: Publishing Center «Science».
26. Ustyantsev V.B., Gobofov I.A., Pigrov K.S. (2012) *Society: space, risks, values*. Saratov: Saratov University Press
27. Vasilenko, I.V., Tkachenko, O.V. (2014) Social risk: to the definition of a concept. *Bulletin of the Volgograd State University. Series 7. Philosophy. Sociology and social technology*. 3: 32-45

28. Wallerstein, I. (2001) *The end of the world as we know it Social Science for the Twenty-First Century*. Univ Of Minnesota Press; First edition edition
29. Weber, M. (1990) *Selected works*. M. Progress
30. Yanitsky, O.N. (2003) *Sociology of risk*. M.: Publishing house LVS.
31. Zubok Yu.A. (2007) *The phenomenon of risk in sociology: the experience of youth research*. M.: Thought
32. Zubkov, V.I. (2003) *Sociological risk theory*. M.: Publishing House of RUDN.

DIVERGENCES AND THEIR EVIDENTIAL VALUE IN THE PROCESS OF MAXIMIZING EARNINGS FROM TRADING OF FINANCIAL MARKETS

Jan Chutka

*University of Zilina, The Faculty of Operation and Economics of Transport and Communications, Department of Economics
Univerzitná 1, 010 26 Zilina, Slovakia
jan.chutka@fpedas.uniza.sk*

Ladislav Vagner

*University of Zilina, The Faculty of Operation and Economics of Transport and Communications, Department of Economics
Univerzitná 1, 010 26 Zilina, Slovakia
ladislav.vagner@fpedas.uniza.sk*

ABSTRACT

If we start to consider the analysis of financial markets in order to achieve exchange rate gains, we usually come across a range of tools and methods that offer different approaches to the issue. One of the most widespread and most widely used is technical analysis, which focuses on examining historical market data, such as prices and volume, on the basis of which it forms its predictions of future price development. A separate group of analytical tools of technical analysis are mathematical indicators that process historical market data based on an exact mathematical procedure. However, in certain situations there is a conflict between the market price of the financial asset and the resulting value of the mathematical indicator. These situations are known as divergences. In our article we focused on the issue of divergences in order to verify the information ability of divergences in the process of maximizing profits from trading on financial markets. The first chapter of our paper is focused on processing the theoretical foundations needed for further research in this field. In the second chapter we defined the framework of the research itself as selected financial instrument, time frame, kind of mathematical indicator and other necessary variables. In the third and last chapters we presented and interpreted the obtained values. We believe this article will be a valuable contribution in this research area.

Keywords: *divergence, technical indicator, earnings maximizing*

1. INTRODUCTION

If we become interested in the issue of predicting price movements of financial instruments in the financial markets, we will come across a wide range of different methods and procedures that promise guaranteed functionality. A special group of forecasting tools are the so-called technical indicators. The aim of our contribution will be to verify the functionality of the use of the RSI and the predicative ability of divergences between the price of the financial instrument and this indicator. In the first chapter, we will create a theoretical basis for using the RSI and the divergences themselves. In the second chapter we define the necessary variables for testing. The third chapter will be devoted to the publication of research results and their interpretation. We believe that our contribution will be valuable for further research in the field of technical analysis and financial market trading [4,6,7].

2. THEORETICAL FRAMEWORK

2.1. RSI technical indicator

RSI or relative power index are classified as oscillators. It is one of the most popular indicators of technical analysis. The name relative strength index is a bit misleading because it does not compare the relative strength of the two underlying assets, but the intrinsic strength of one asset [1,2,3].

Calculation algorithm:

1. Calculation of the opening and closing price difference for each one rising candle (U) and for the falling candle (D).

$$U = CLOSE_i - CLOSE_{i-1} \dots \text{for each growing candle} \quad (1)$$

$$D = CLOSE_i - CLOSE_{i-1} \dots \text{for each falling candle} \quad (2)$$

2. Calculation of exponential moving averages from U and D values for a selected time period.

3. RS calculation.

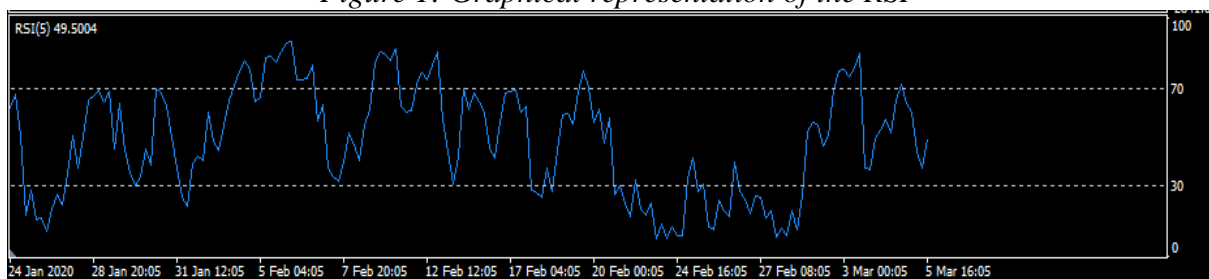
$$RS = EMA(U) / EMA(D) \quad (3)$$

4. Quantification of RSI

$$RSI = 100 - 100 \times (1 / 1 + RS) \quad (4)$$

RSI is characterized as so-called. the following indicator, which means that the price of the financial asset follows. Its value ranges from 0 to 100. A big advantage of this indicator as well as most oscillators is that it has the ability to predict potential trend changes. If the value of the indicator gets close to its margins, there is a very high probability that the market will be correcting the primary trend (moving against the current trend) and the RSI indicator will again be closer to the centre of its probability distribution. Most often we can see a graphical form of visualization of the RSI, which consists of a line that oscillates between 0 and 100. Significant values of RSI are 70 and 30. These values are interpreted as boundaries that indicate a possible overbuy or oversold market. The RSI oscillator tries to indicate potential inflection points of changes in the price development of the financial instrument. It is also important to note that exceeding the reference level towards the RSI mean is always considered as a strong signal of potential trend change [1,8,11].

Figure 1: Graphical representation of the RSI



Source: Own processing

2.2. Divergences

Divergence belongs to the technical types of market inputs derived from the indicator. It arises when there is a discrepancy between the development of the price of the financial instrument and the value of the indicator [5,9,10]. For the purposes of divergence trading we will use the RSI (Relative Strength Index) indicator. We know two kinds of divergences, hidden and classic. Classical divergence (indicated by a red line in the graph) is a reverse input that indicates a possible trend change. The hidden divergence is a trend and tells us the possible continuation of the trend (indicated by a blue line in the graph). It is very important to realize that divergence as such is only an aid to entry and is based on market structure (S / R levels).

For efficient trading of divergences, we will follow the following rules and characteristics:

- The divergence is only valid after the candle has been closed.
- The divergence that appears below the zero line on the indicator is always traded as a long position.
- We enter a long position to break through the high candle, where the divergence has been confirmed.
- The divergence that is created above the zero line on the indicator is always traded as a short position.
- We enter the short position to break through the low candle, where the divergence was confirmed.
- If we denote the vertices of the divergence in the graph and the indicator, their lines must always have a visible slope.

3. THE FRAMEWORK OF THE RESEARCH

Our research will be carried out as follows. We will use RSI with a set time period of 5. The reason for setting this time period into the indicator calculation is that the indicator with this setting can respond more quickly and sharply to the price changes of the financial instrument. Divergences between the price of the financial asset and the RSI of period 5 will be searched on the US.500 financial asset price chart, which is a CFD derivative of the SP500 futures index offered by XTB a.s.. For data collection we chose the time interval of price development of this financial instrument from 1.1.2019 to 31.12.2019. The measurement will be carried out on a candle price chart of this instrument with a period of one candle formation of 4 hours. We chose this interval because we consider it to be adequate for the research and because during the calendar year research will also take into account factors such as seasonality, earnings season and various other macroeconomic factors. Another reason is that we assume a sufficient frequency of individual measurements and thus a certain predicative ability of our results. Our aim will be to identify the frequency of divergence outbreaks in the course of the year and to check whether they can be considered as an indicator of the inflection point of the price trend of the financial instrument.

4. RESULTS

During the research we obtained the following measured values:

Table following on the next page

Table 1.: Results of measurement

Number	Date	Time	Price	Type	UP/DOWN	Movement (points)	Number of H4 candles
1	7.1.2019	20:05	2553,2	Classic	Down	4,5	1
2	11.1.2019	0:00	2591,4	Classic	Down	6,3	1
3	23.1.2019	16:05	2634,2	Classic	UP	765,2	1772
4	6.2.2019	8:05	2728,1	Classic	Down	50	14
5	8.2.2019	16:05	2693,7	Classic	UP	705,7	1699
6	14.2.2019	8:05	2757,4	Classic	Down	29	6
7	25.2.2019	16:05	2803,9	Classic	Down	28,9	13
8	4.3.2019	0:05	2816,1	Classic	Down	94,5	32
9	12.3.2019	16:05	2794,8	Classic	Down	11,4	4
10	13.3.2019	0:00	2819,2	Classic	Down	12,1	6
11	14.3.2019	8:05	2818,4	Classic	Down	11,4	4
12	15.3.2019	20:00	2829,2	Classic	Down	6	1
13	21.3.2019	12:00	2815,4	Classic	UP	49,5	5
14	25.3.2018	8:00	2797,8	Classic	UP	18,5	5
15	3.4.2019	12:05	2876,1	Classic	Down	3,4	1
16	9.4.2019	0:00	2897,7	Classic	Down	20,6	5
17	1.5.2019	4:05	2956,6	Classic	Down	228,2	148
18	2.5.2019	16:05	2916,8	Classic	UP	32,5	7
19	14.5.2019	4:05	2821,3	Classic	UP	72,4	19
20	29.5.2019	20:05	2780,1	Classic	UP	18,2	6
21	3.6.2019	20:05	2753,7	Classic	UP	642,8	1108
22	11.6.2019	12:05	2905	Classic	Down	37,9	12
23	21.6.2019	20:05	2954,4	Classic	Down	40,1	18
24	27.6.2019	0:05	2925,1	Classic	UP	104,7	129
25	5.7.2019	0:05	3000	Classic	Down	37,4	14
26	22.7.2019	0:05	2976,6	Classic	UP	54,8	29
27	26.7.2019	20:05	3027,6	Classic	Down	251,2	37
28	22.8.2019	0:05	2926,8	Classic	Down	9,6	4
29	23.8.2019	8:05	2932,7	Classic	Down	120,2	5
30	30.8.2019	8:05	2938,7	Classic	UP	49,8	8
31	9.9.2019	12:05	2982,6	Classic	Down	25,6	7
32	13.9.2019	12:05	3012,7	Classic	Down	32	3
33	25.9.2019	12:05	2963,5	Classic	UP	30,5	5
34	3.10.2019	16:05	2904,7	Classic	UP	501,5	579
35	7.10.2019	20:05	2934	Classic	Down	52,9	13
36	15.10.2019	20:05	2994,7	Classic	Down	20,8	17
37	23.10.2019	4:05	2990,5	Hidden	UP	406,3	500
38	29.10.2019	16:00	3034,4	Classic	Down	12	5
39	9.12.2019	16:05	3140,5	Classic	Down	24,8	5
40	13.12.2019	0:00	3180,6	Classic	Down	25,3	1
41	27.12.2019	0:00	3240,4	Classic	Down	28,2	12

Source: Own processing

In the period we have chosen, we have identified 40 divergences on the price chart and on the basis of the preset RSI. Of which 39 were classic and one hidden divergence. It can be stated that, on the basis of established rules, the market reacted to each identified divergence, although in some cases only by a few points change. 35% of the identified divergences predicted the inflection point and the change of the current short-term downtrend to the uptrend and the remaining 65% predicted the change to the downtrend. Based on the analysis of the measured values, we found that the divergences that predicted the uptrend identified an inflection point followed by an average of 313.91 points change in the predicted direction. On the other hand, the divergences that predicted the downtrend identified an inflection point, followed by an average of only a 30.9 points price response. We can explain such significantly different results by the fact that during the year 2019 there was a strongly established uptrend and inflection points on the stock markets, which we identified based on divergences tended to display price peaks and bottoms of shorter market corrections. If the divergence predicted an uptrend, it was more likely to succeed because the market tended to continue the established trend that corresponded to the forecast. Based on the measured data, we can say that the divergence of the price development of the financial instrument with the preset RSI can be considered as a solid signal of the change in the market trend. However, it is questionable how effective the tool for predicting changes in the trend of divergence may be. Although the market has always reacted to the identified divergences, but in some cases only minimally, and the price change only a few points. On the other hand, in this way we were able to identify 5 inflection points where both the primary and secondary trends were unified and the market continued in the long-term trend. We cannot answer the question to what extent this method is effective because it depends on the specific business rules, money management and risk management of the particular trader.

5. CONCLUSION

Our paper dealt with the issue of predicting the future development of financial instruments, namely the use of divergences as the main prediction tool. The aim of our contribution was verify the functionality of the use of the RSI and the predicative ability of divergences between the price of the financial instrument and this indicator. In the first chapter, we created a theoretical basis for using the RSI and the divergences themselves. In the second chapter we defined the necessary variables for testing. The third chapter was devoted to the publication of results and their interpretation. We believe that our contribution will be valuable for further research in the field of technical analysis and financial market trading.

ACKNOWLEDGEMENT: *The paper is an output of the science project VEGA 1/0210/19 Research of innovative attributes of quantitative and qualitative fundamentals of the opportunistic earnings modelling.*

LITERATURE:

1. Bernstein, J., (1995). The complete day trader, the first edition. New York: McGraw-Hill, Inc., ISBN 0-07-009251-6.
2. Gavurova, B., Belas, J., Kocisova, K., Kliestik, T., (2017). Comparison of selected methods for performance evaluation of Czech and Slovak commercial banks. *Journal of Business Economics and Management*, Vol. 18, no. 5, pp. 852-876.
3. Chovancova, B., Hudcovsky, J., & Kotaskova, A., (2019). The Impact of Stocks and Bonds on Pension Fund Performance. *Journal of Competitiveness*, vol. 11, no. 2, pp. 22-35.
4. Kliestik, T., Misankova, M., Valaskova, K., Svabova, L., (2018). Bankruptcy prevention: new effort to reflect on legal and social changes. *Science and Engineering Ethics*, vol. 24, No 2, pp. 791-803.

5. Kovacova, M., Kliestik, T., Valaskova, K., Durana, P., Juhaszova, Z., (2019). Systematic review of variables applied in bankruptcy prediction models of Visegrad group countries. *Oeconomia Copernicana*, vol. 10, no. 4, pp. 743-772.
6. Kowo, S.A., Akinbola, O.A., (2019). Strategic leadership and sustainability performance of small and medium enterprises. *Ekonomicko-manazerske spektrum*, vol. 13, no. 1, pp 38-50.
7. Siekelova, A., Kollar, B., Weissova, I., (2015). Impact of credit risk management. *Procedia Economics and Finance*, vol. 26, pp. 325-331.
8. Sosnowski, T., (2018). Earnings management in the private equity divestment process on Warsaw Stock Exchange. *Equilibrium – Quarterly Journal of Economics and Economic Policy*, vol. 13, no. 4, pp 689-705.
9. Tuffnell, C., Kral, P., Durana, P., Krulicky, T., (2019). “Industry 4.0-based Manufacturing Systems: Smart Production, Sustainable Supply Chain Networks, and Real-Time Process Monitoring,”. *Journal of Self-Governance and Management Economics*, vol. 7, no. 2, pp 7–12.
10. Valaskova, K., Kramarova, K., Kollar, B., (2015). Theoretical Aspects of a model of credit risk determination- Credit risk. *Advances in Education Research*, vol. 81, pp. 401-406.
11. Valaskova, K., Zvarikova, K. Prediction of credit risk by selected theoretical rating models. *Advances in Social and Behavioral Sciences*, vol. 5, pp. 160-166.

THE WORLD ECONOMY ON THE EVE OF A NEW CRISIS

Mushfig Feyzullaev

*Candidate of Economic Sciences,
Associate Professor at Surgut State University
628400, Tyumen Region, Surgut, 1 Lenin Str., Russia
feyzullaev@bk.ru*

Ramiz Javadov

*Associate professor at Azerbaijan State University of Economics,
Azerbaijan State Economic University
Baku, street Istiqlaliyat-6, post office AZ1001, Azerbaijan
ramizjavad@gmail.com*

Nazim Hajiyeu

*Associate professor at Department of Economics and Business management,
Azerbaijan State University of Economics, Baku, Azerbaijan,
Visiting Scholar, Davis Center for Russian and Eurasian Studies,
Harvard University, Boston, USA
n.hajiyeu@unec.edu.az; nazimhajiyeuaz@gmail.com*

ABSTRACT

The article is devoted to the analysis of the processes, trends, and directions of global changes occurring in the world economy. The retrospective of the development of the theory of crises is revealed. Various approaches and theories of crises have been studied. A comparison has been carried out on the views of various economic schools in analyzing the causes of economic crises in the world. The authors collected statistical materials to identify the factors shaping the crisis situation in world markets. The application of the next global crisis in the forthcoming years is analyzed. A study was conducted to identify crisis phenomena, to establish the factors, causes and consequences of global trade wars. The main directions of the development of crisis phenomena in the world are revealed. The global devaluation processes are analyzed. Possible variants of negative scenarios of the American-Chinese contradiction in trade issues are predicted. The impact of the expected next global crisis on the Russian economy is estimated.

Keywords: *crisis phenomena, capital flight, trade wars, economic sanctions, devaluation, stock market*

1. INTRODUCTION

Recently, the possibility of starting another global crisis has often been discussed. At the same time, it is impossible to determine from which region of the world it will begin. The gradual devaluation of the currencies of developing countries in 2018 resembles 1998. However, the looming crisis will have a deeper bottom, and its effects are expected to be stronger than those of previous crises. Thus, three main directions of development of crisis phenomena are formed:

1. As a result of the economic sanctions launched by the United States, world trade felt an imbalance in many spheres. The consequences of this imbalance will affect the balance of trade operations, increased protectionism, centrifugal tools, and destabilization of the currency and stock markets. This is evidenced by the facts of the development of devaluation processes this year.
2. The confrontation between the USA and China in matters of mutual trade can negatively affect the economic performance of both countries. The global economy will suffer particularly if this confrontation leads to a decrease in the growth rate of the Chinese

economy, which currently ranks first in the world at parity purchasing power ahead of the United States (see Table 1). A reduction in consumption from China will entail a decline in world trade, especially in the energy supply industries. That can not but be reflected in the indicators of Russian-Chinese trade.

3. Over the past 10 years, the US economy has shown its strength in a quick recovery from the 2008 crisis. During this time, US stock indexes have increased significantly. However, the main reason for such growth was cheap financial resources in the debt market. This year, the US Federal Reserve began a gradual increase in lending rates, which led to a rise in the cost of borrowing in the US market. The continuation of this scenario will lead to an outflow of money from the stock market and will force the markets to begin a deep correction to growth. In this case, along with the US market sales around the world will begin. The emerging markets will be the hardest hit.

Table 1: Rating of countries by GDP (PPP) [1]

№	Country	GDP (USA \$)
1	China	23 300 782 880 353
2	USA	19 390 604 000 000
3	India	9 448 658 813 549
4	Japan	5 562 821 811 765
5	Germany	4 193 922 741 398
6	Russia	3 749 283 676 766
7	Indonesia	3 242 768 575 868
8	Brazil	3 240 523 597 736
9	Great Britain	2 896 832 821 061
10	France	2 871 263 869 539

2. THEORY

Over the centuries of world economic development, many theories have been developed that study crisis phenomena. We will analyze the main economic theories explaining the causes of world economic crises. One of the pioneers of the theory of crises was Jean Charles Sismondi. According to Sismondi, the cause of the crises was the disproportions in the process of income distribution. The main trouble according to the author is the poverty of the majority of the population who do not have the opportunity for adequate consumption [2]. The author of Capital, Karl Marx, believed that the lack of planning in the development of commodity production was to blame. Marx criticized the capitalist system, where, in his opinion, there was a contradiction between public and private interests. The cause of the onset of crisis, he called the accumulative nature of capital [3]. One of the famous economists of the twentieth century, John Maynard Keynes linked the emergence of a crisis in the economy with a reduction in aggregate demand in the country. According to Keynes, this phenomenon causes an increase in unemployment and leads to a drop in household income. For the first time, Keynes introduced the concept of investor expectations, as a psychological component in the theory of crises.

The main cause of the crisis, according to the author, is changes in supply and demand and the expected decrease in profits [4]. At the same time, such theorists as J. Robinson, J. Hobson could not associate crisis phenomena with the capitalist mode of development. They attributed the causes of the crisis to overproduction and under consumption. Joan Robinson proposed to stimulate consumption in order to avoid the onset of an economic crisis [5]. F. Hayek and L. Mises have seen the cause of the crisis in poor management, in disproportions in the development of economic sectors, entrepreneurial risks, etc. [6]. Some theorists also linked the recurrence of crises with the processes of innovation, the development of scientific and technological progress. (J. Schumpeter, E. Hansen). The emergence of new technologies is a stimulating factor for economic growth [7]. Along with foreign authors, a lot of works were also developed and devoted to the theory of crises by Russian economists. One of the pioneers of the Russian scientific school in the field of crises was M.I. Tugan-Baranovsky. The author's main postulates have been developed through studies of industrial crises. His theory was based on the analysis of the English economy of the XIX century. He also saw the cause of crises in overproduction, in the growth of unemployment and the price policy of capitalism [8]. The particular value among the studies of world crises are the "Kondratieff cycles", which were put forward by economist N. D. Kondratyev. He substantiated and proved the existence of long cycles of crises [9]. According to this theory, a transition to a more developed level occurs every fifty years in the global economy. Kondratyev formulated features of the cycles, while also pointing out the existence of upward and downward phases of the wave. Thus, he argued the dependence of the economy on periods of return on investment, appreciation or depreciation of the cost of capital. The realities of the world economy became proof of Kondratyev's theory, and this theory was recognized by the world community [10]. Also among the authors of the theory of crises can be noted such scholars as P. Samuelson [11], J. Schumpeter, H. Hansen [12], A. S. Pigou [13], J. Hobson; F. Hayek, L. Mises and others. Jevons [14]. The modern economists analyzing crisis phenomena, devoting their works to the study of the causes and factors of the imbalance of economic systems. We can mention J. Sorros [15], B.Sh. Bernanke [16,17], D. Lipton, O. Blanchard [18,19] L. Leuven, F. Valencia, N. Rubini, B. Rietz and others.

3. THE ANALYSIS OF THE PROBLEM, METHODS AND METHODOLOGY

Let us consider possible scenarios with regard to statistical data in details. In 2018, currencies of countries such as Venezuela, Turkey, Argentina, Indonesia, South Africa, Russia, Brazil, India, etc. were subject to strong devaluation movement (see table 2). As can be seen from the figure, the currency of Venezuela has undergone the greatest devaluation. The main reasons for which were the decline in the country's Gross Domestic Product, continuing for several years, high inflation, high unemployment, a double exchange rate. Also an important role was played by the political situation and unfriendly relations with neighbors, capital outflow and mass migration of people to neighboring countries [20]. The reasons for the devaluations in other countries also have an economic basis. For example, the Turkish economy at the same time with a good growth rate, also had high inflation rates, which in 2018 reached 16% per annum. Tensions with the United States reinforced the crisis and led to an outflow of capital.

Table following on the next page

Table 2: TOP-10 of the weak currencies in the last 12 months [21]

Currency	currency depreciation against the US dollar, %
Venezuelan Bolivar	99,996
Sudanese pound	63,05
Argentine Peso	53,44
Turkish lira	46,8
Angolan Kwanza	41,35
Liberian Dollar	24,14
Brazilian real	23,89
Iranian real	20,84
Russian ruble	17,99
South African rand	15,22

The US introduction of measures to increase customs' duties on some Turkish goods and the backlash of the Turkish authorities scared off foreign investors, most of whom were investors from the United States. After the sale of Turkish assets by foreign investors, Turkish lira was subjected to strong pressure, and, as a result, the central bank had to sharply raise the key rate (see Table 3).

Table 3: Key rates of central banks

Country	Bank	Rate	Effective date
Australia	Reserve Bank of Australia	1.50	02.08.2016
Brazil	Central Bank of Brazil	6.50	22.03.2018
Great Britain	Bank of England	0.75	02.08.2018
Denmark	National Bank of Denmark	0.05	19.01.2015
Eurozone	European Central Bank	0.00	16.03.2016
India	Reserve Bank of India	6.50	01.08.2018
Canada	Bank of Canada	1.75	24.10.2018
China	People's Bank of China	4.35	24.10.2015
Mexico	Bank of Mexico	7.75	21.06.2018
New Zealand	Reserve Bank of New Zealand	2.00	11.08.2016
Russia	Central Bank of the Russian Federation	7.50	17.09.2018
USA	Federal Reserve System	<2.25	26.09.2018
Turkey	Central Bank of Turkey	24.00	13.09.2018
Switzerland	National Bank of Switzerland	-0.75	15.01.2015
Sweden	Bank of Sweden	-0.50	11.02.2016
South Africa	South African Reserve Bank	6.50	28.03.2018
Japan	Bank of Japan	-0.10	03.08.2016

The Brazilian real depreciated due to capital flight from developing countries after the devaluation of the Turkish lira. The Russian ruble, which is devalued by periodic jumps, suffers because of anti-Russian sanctions. Despite the budget surplus, the ruble's positive trade balance this year has depreciated by 18%. Given the increase in anti-Russian sentiment in the world, the new US sanctions measures, as well as global crisis factors, do not hope to strengthen the Russian currency. In the next few years, the ruble will be under the onslaught of such factors as capital flight from developing countries, changes in energy prices, the return of foreign debts by Russian banks and enterprises. These factors may lead to an additional devaluation of the Russian currency by 10-15%. The confrontation between the United States and China began with the arrival of a new president Donald Trump in US power. The President of the United States with the aim of fulfilling election promises began a dangerous protectionist policy. The main defendant became China. The analysis of the history of relations between these countries over the past decade shows that the gap in the trade balance has steadily grown in favor of China. The American economy is notable for its use. The US trade deficit is deficient in 2002. (see Fig.1). According to data for 2017, the gap between US imports and exports reached \$ 800 billion. The main part of which falls to China (see Table 4). Analyzing the dynamics of the US trade deficit with the People's Republic of China, it is necessary to take into account the important fact that the main part of this deficit is made up of imports of American products produced in China. In the early 2000s, many US companies relocated most of their own production to China to reduce costs. The increase in the US deficit in the trade balance with China is connected with the quite conscious desire to reduce the cost of production of consumer goods as competition intensifies. Placement of production in China was due to cheap labor, low environmental requirements, convenient logistic location, availability of raw materials. Due to these factors, China has become a place of international expansion of American corporations [22]. China itself was no less interested in developing these relations. The gradual transfer of production in the territory of the Middle Kingdom allowed him to gain access to modern technologies. At the same time, the centrally managed Chinese economy took on the experience of managing companies with market methods. Over the years of non-stop GDP growth and the well-being of the population, the Chinese have gained access to new technologies both officially - by creating joint ventures, and unofficially - by creating their own industries using foreign licensed programs. Over time, high-quality Chinese brands, not inferior to the originals, began to crowd out American products around the world, including in the United States. This is evidenced by the structure of US imports (see Figure 2). The United States will find it very difficult to reduce the trade deficit with threats and blackmail. It is necessary to ascertain the fact that the existing deficit in trade relations has much deeper roots and persists for 17 years. Thus, the main reason for this deficit is structural imbalances in the trade balance of the American economy. The American economy has a high share of the service sector in the country's GDP.

Figure following on the next page

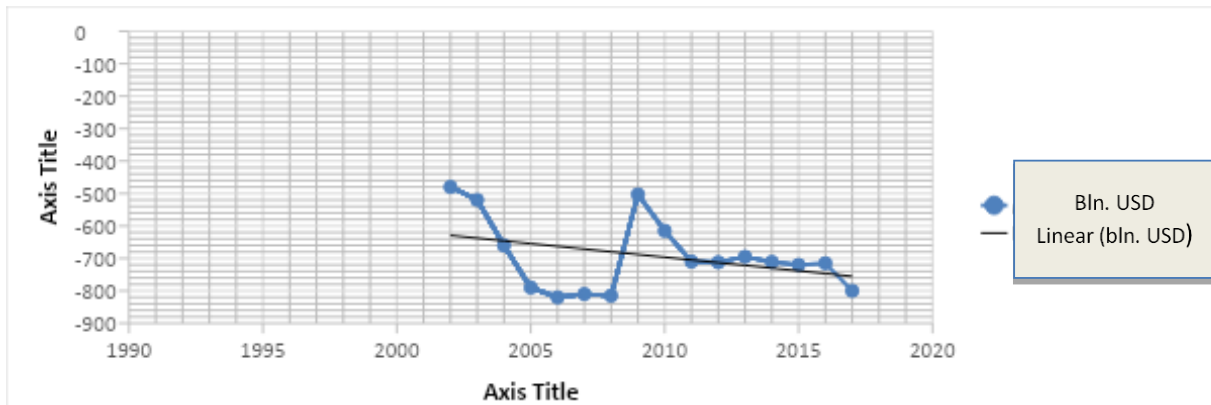


Figure 1: USA trade deficit

Today, US unemployment is at an all-time low. The desire of the US President to return the production of American goods back into the country will not work as quickly as he wishes. First, it will require skilled workers, and in conditions of almost full employment, this will lead to an increase in wages, as a result of an increase in inflation, and a higher cost of final products. As a result, in the medium term, incomes of the population will start to decline, the aggregate consumption and sources of investment resources will decrease, which will lead to a decrease in economic growth rates. On the other hand, faster growth of public debt will require more and more financial means to service the debt.

Table 4: Volume of China's exports to the United States by year

Years	Exports, billion dollars
2002	104
2003	120
2004	160
2005	205
2006	240
2007	270
2008	280
2009	215
2010	280
2011	298
2012	310
2013	312
2014	345
2015	360
2016	350
2017	380

Secondly, in the financial markets all this will affect the strengthening of the dollar and, over time, will lead to a decrease in the export of American products in the world.

Figure following on the next page

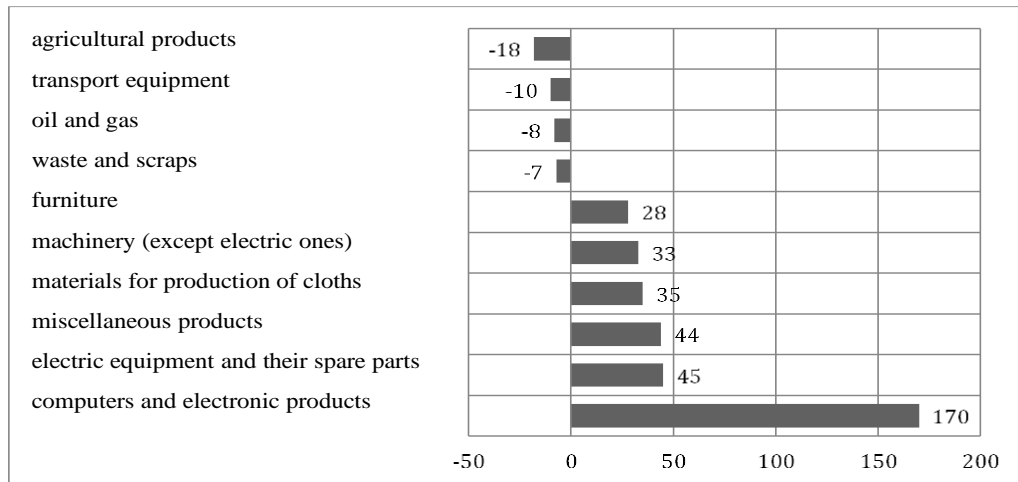


Figure 2: Trade balance of China and the United States

Therefore, the result of the US-launched trade war will be the deterioration of global indicators. The third direction, more precisely the reason for the possible beginning of the crisis, also emerges from the two previous ones as a cumulative effect. Equity markets are also subject to cyclical development. Recent studies show that economic cycles tend to shrink [23]. Now global markets have a trend cycle consisting of a 10-12 year period. Thus, if the world economy develops according to the above scenario, then in the next two years the possibility of a severe drawdown of developing countries is guaranteed [24]. Another proof of the approaching of a possible recession is the flattening of the yield curve in the US, writes Guggenheim Partners (see Fig. 3) [25]. Data reflecting the market's views on future economic activity reinforce the assumption that the flattening of the bond curve signals the possibility of a recession in the United States by early 2020, according to calculations by an asset management company worth \$ 265 billion. For example, the difference between current indicators of consumer confidence and expectations for the future shows that, according to respondents, they will no longer be better than current conditions, say strategies [26]. The same opinion is shared by Randy Watts, chief investment strategist with investment advisory firm William O'Neil & Company, who notes: "I think that there is something that worries the markets, and I think that these are concerns about income estimates" [27].

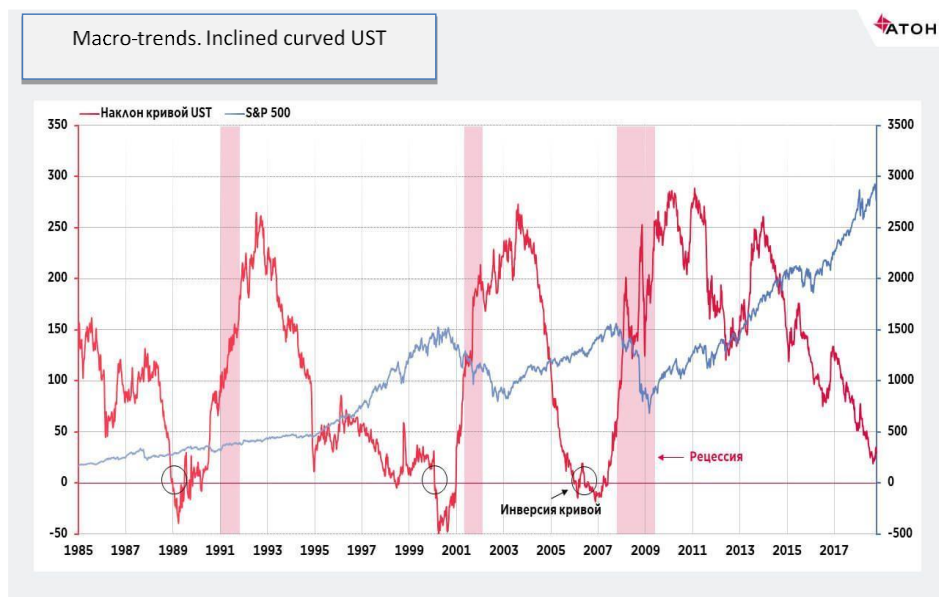


Figure 3: The dynamics of index S & P 500 [28]

4. CONCLUSIONS AND RECOMMENDATIONS

Taking into considerations all the above mentioned issues, we can make the following conclusions. The commenced trade war by the United States, with the participation of the European Union and China, will undoubtedly influence the development of the world economy negatively. If this scenario continues, the recession in the United States will begin within a year and a half or two years. This in turn will lead to a decrease in the growth rates of the economies of the leading countries of the world. Undoubtedly, this process will also affect the Russian economy. Firstly, the already low economic growth of Russian GDP will decline further due to the slowdown in the growth of the global economy; secondly, it will cause cheaper commodities (energy, ferrous and non-ferrous metals) and low-grade products that Russia exports. In order to get out of the situation, as well as in order to reduce the influence of external factors, Russia needs to restore consumer demand. But in the face of a chronic drop in household incomes over the past five years, it is virtually impossible to increase consumption. Also, hidden unemployment, lack of sources of investment resources, and a decline in investment activity in the economy have negative effects. As a result of the author's own analysis of the article shows, the number of small and medium-sized businesses continues to decline. In 2018 alone, the number of organizations that ceased their activities in the country exceeded the newly opened ones by two times. And the number of activated subjects in the economy fell by 7%. The same trend was observed in 2017 [29]. Thus, the decline in entrepreneurial activity states the existence of serious structural problems in the Russian economy. The continuation of this scenario will lead to the beginning of a recession at the end of 2019 - at the beginning of 2020. The current structure of the economy is the main limiting factor for growth. Therefore, without revising the constituent elements and the structure of the country's economic system, it is impossible to change the existing trend of the Russian market.

LITERATURE:

1. Rating of countries of GDP (PPP). [Electronic resource]. URL: <http://nonews.co/directory/lists/countries/gdp-ppp>. (Date of circulation: 02/20/2019)
2. Blaug M. Sismondi, Jean Charles Leonard // 100 Great Economists Before Keynes = Great Economists. - SPb.: Ekonomikus, 2008. - p. 274-276. - 352 s.
3. Marx K. Capital. - M.: Publishing house of political literature, 1988. V. 2, p. 159.
4. Keynes J. The General Theory of Employment, Interest and Money - Moscow: Helios ARB Publishing House, 2012, p. 256.
5. Robinson J. The Euler theorem and the problem of distribution // Milestones in economic thought. Volume 3. Factor markets / Ed. V. M. Galperin - St. Petersburg: School of Economics, 2000 - P.59-81 - 489 p.
6. Kapelyushnikov R. Philosophy of the Friedrich von Hayek Market // MEiMO. - 1989. - № 12.
7. Hayek, F. A. Chapter 5. Joseph Schumpeter (1883-1950). Methodological individualism // The fate of liberalism in the XX century. - M.: IRISSEN, 2009. - 337 p.
8. M.I. Tugan - Baranovsky. Periodic industrial crises. Science, 1997.
9. Kondratyev ND. Large conjuncture cycles and the theory of foresight - M.: Publisher: Economics, 2002, p. 418.
10. ND Kondratyev: crises and forecasts in the light of the theory of long waves. A look from the present / ed. L. E. Grinina, A. V. Korotaeva, V. M. Bondarenko. M.: Moscow. ed. publishing house "Teacher", 2017. - 384 p.
11. Samuelson, P. E., Nordhaus, V. D. Macroeconomics. 18th ed. M.: Williams. 2009 - 585s.
12. Schumpeter, J. Theory of Economic Development. M.: Directmedia Publishing, 2008 - 401c.
13. Pigou, A. C. Industrial Fluctuations. N. Y.: A. M. Kelley, 1967-39 p.

14. Samuelson P., Nordhaus V. Economics - M.: Publisher: Williams, 2012, 849 c.
15. G. Soros. Soros on Soros. Ahead of changes: translated from English. M.: INFRA-M., 1996. –336 p.
16. Stewart, James B., “Eight Days: The American Financial System,” The New Yorker magazine, September 21, 2009. - P 58–81. Summarizing Sept 15–23, 2008 with interviews by James Stewart of Paulson, Bernanke, Geitner. [Electronic resource]. URL: http://www.newyorker.com/reporting/2009/09/21/090921fa_fact_stewart. (Date of circulation: 10.10.2018)
17. Remarks for the Federal Reserve [Electronic resource] URL: http://www.whitehouse.gov/the_press_office/Remarks-By-The-President-and-Ben-Bernanke-at-the-Nomination-of-Ben-Bernanke-For-Chairman-Of-the-Federal-Reserve. (The date of circulation is 12.11.2018)
18. O. Blanshar. Fighting global crisis will last for 10 years. [Electronic resource]. URL: http://news.dt.ua/ECONOMICS/u_mvfvvazhayut_scho_borotba_zi_svitovoyu_krizoyu_trivativatime_10_rokiv-109781.html. (Date of appeal: 12/15/2018)
19. O. Blanshar. Looking back at 2011: four harsh truths [Electronic resource]. URL: <http://www.imf.org/external/russian/np/blog/2011/122111r.pdf>. (Date of appeal: 10/07/2018)
20. Venezuela devalued the bolivar by 96%. Makarov O., Tkachev I. [Electronic resource]. URL: <http://www.rbc.ru/economics/20/08/2018/5b7a9b8a9a7947da66b67704>. (Appeal Date: 02/20/2019)
21. Top 10 devaluations in the world. Ibrayeva A. [Electronic resource] URL: <http://kursiv.kz/news/finansy/2018-09/top-10-devalvaciy-v-mire>. (Date of circulation: 02/20/2019)
22. GDP of the leading countries of the world in 2018. [Electronic resource]. URL: <http://global-finances.ru/vvp-stran-mira-2018>. (Date of circulation: 02/20/2019)
23. The third trade: the opposition of China and the United States is beneficial to Russia. Atasuntsev A., Makarov O. [Electronic resource] URL: <http://www.rbc.ru/politics/21/06/2018/5b28c7969a79475346d74b2b>. (Date of appeal: 03/30/2019)
24. Technical Analysis of the S & P-500 Index for the period 2009-2018 [Electronic resource]. URL: <http://corner.kz/post/tehnikeskij-analiz-indeksa-sandp-500-za-period-2009-2018-gg-prognozy-rekomendacii>. (Date of appeal: 04/07/2019)
25. The UST curve does not lie about the risk of recession, says Guggenheim. [Electronic resource]. URL: <http://www.finanz.ru/novosti/aktsii/krivaya-UST-ne-lzhet-o-riskee-recessii-govorit-Guggenheim-grafik-1027669971>. (Date of appeal: 03/09/2019)
26. Where to Do Business in 2019. And Where to Avoid. URL: <https://www.bloomberg.com/news/articles/2018-10-31/where-to-do-business-in-2019-and-where-to-avoid>. (Date of circulation: 02/20/2019)
27. Tech Drove Stocks Skyward. It's a different story on the way down. URL: <http://www.nytimes.com/2018/10/31/business/stock-market-tech.html> (Date of reference: 02/15/2019)
28. American market: what to expect further? Kaminsky A. [Electronic resource]. URL: http://www.aton.ru/ideas/amerikanskiy_rynok_chego_zhdat_dalshe. (Date of circulation: February 14, 2019)
29. The number of companies established in the Russian Federation in 2018 decreased by 19%. [Electronic resource]. URL: <http://www.interfax.ru/business/647533>. (Date of circulation: February 14, 2019)

MUNICIPAL SOCIAL RESPONSIBILITY

Kristina Afric Rakitovac

*Associate Professor at Juraj Dobrila University of Pula, Croatia
Faculty of Economics and Tourism "Dr. Mijo Mirković", Croatia*

Mojca Tavcar Bencic

Agilna agencija, Pula, Croatia

ABSTRACT

The implementation of the concept of social responsibility in urban governance, usually called as municipal social responsibility (MSR,) is becoming nowadays a challenge and necessity. Local governments, as key bearers of smart, sustainable and inclusive development, should be role models and leaders of responsible business. MSR is the key tool for supporting sustainable competitiveness. Since MSR is a complex and multidimensional concept, the process of its implementation differs among cities. Besides, while the impact of implementation of corporate social responsibility in the business sector have been elaborated in many scientific research studies, the implementation of MSR has been elaborated rarely. The purpose of the paper is to point out the importance of implementation of MSR into the internal dimensions of urban governance and towards different external stakeholders. The aim of the paper is to analyse the contribution of MSR to internal processes and relations with external stakeholders. The paper presents the results of the empirical multidimensional analysis of the process of implementation of MSR in the city of Pula, Croatia. The research results contribute to better understanding of the importance and long-term benefits of implementation of MSR for various stakeholders.

Keywords: *municipal social responsibility, urban governance, sustainable cities, sustainable competitiveness, stakeholders*

1. INTRODUCTION

Numerous, complex and long-term effects of the dominant neo-liberal expansionist paradigm request the creation and implementation of a more responsible development model which will, while streaming towards economic progress, consider the long-term impact on the quality of life of different stakeholders, the society at large and the natural surroundings. Cities, with their variety of stakeholders, are important agents in addressing those challenges. According to OECD (2020), urbanisation continues to grow all over the world, with 70% of global population expected to live in cities by 2050. Data from the OECD Metropolitan Database also shows that the 327 OECD metropolitan areas above 500,000 inhabitants concentrate 63% of GDP. The implementation of the concept of social responsibility in urban governance, usually called as municipal social responsibility (MSR), is becoming nowadays a challenge and necessity. Local governments, as key bearers of smart, sustainable and inclusive development, should be role models and leaders of responsible business. Local governments are responsible for the creation of a sound business environment adjusted to sustainability issues. Since MSR is a complex and multidimensional concept, the process of implementation differs among cities. While the impact of implementation of corporate social responsibility (CSR) have been elaborated in many scientific research studies, the impact of MSR have been elaborated rarely. The purpose of the paper is to point out the importance of implementation of MSR into the internal dimensions of urban governance and towards different external stakeholders. The aim of the paper is to analyse the contribution of CSR to internal processes and on relations with external stakeholders. The paper presents the results of the empirical multidimensional analysis of the process of implementation of CSR in the city of Pula, Croatia.

The research results contribute to better understanding of the importance and long-term benefits of implementation of MSR for various stakeholders (city's employees, business partners, citizens, etc.).

2. MUNICIPAL SOCIAL RESPONSIBILITY

Cities, as very dynamic economic and social structures, are important stakeholders in the process of transition towards a more conscious and responsible way of satisfying needs, i.e. a transition from a linear to a circular economy. Those urban challenges were already recognised in the document “Our common future” which has invited city governments to promote sustainable local production and consumption, direct local participation, etc. (WCED, 1987) ICLEI – Local Governments for Sustainability, as a global network committed to sustainable urban development, was founded in 1990. Now it is active in more than one hundred countries and supports more than 1,750 local and regional governments towards urban sustainability, i.e. climate-change adaptation, nature-based, equitable, resilient and circular development (ICLEI, 2019). The role of local governments in implementing sustainable development (SD) was confirmed in the subsequent document Agenda 21, adopted, as a non-binding action plan, at the UN Conference on Environment and Development held in Rio de Janeiro, Brazil in 1992 (UNCED, 1992), as well as in all following documents (RIO+10, RIO+20, etc.). The latest document, Agenda 2030 for Sustainable Development, sets out a 15-year plan to achieve 17 Sustainable Development Goals (SDGs). SDG 11 “Make cities and human settlements inclusive, safe, resilient and sustainable” is directly related to local governments. Local authorities are invited on local actions by implementing the needed transitions in the policies, budgets, institutions and regulatory frameworks. (UN, 2015) OECD estimates that, beyond SDG 11, an estimated 65% of the 169 targets behind the 17 SDGs will not be reached without engagement of local and regional governments (OECD, 2020). From the European perspective, it is important to mention, inter alia, the European Sustainable Cities and Towns Campaign, which was initiated by the Aalborg Charter in 1994 aimed to support cities all over Europe to become more sustainable. It was followed by the Basque Declaration from 2016, which invites local leaders to find innovative ways to collaborate with the civil society in order to meet sustainability challenges and increase the well-being of its citizens. Until February 2020, it was endorsed by 514 cities and regions, 171 organisations and 207 individuals. (sustainablecities.eu, 2020) Local governments in EU were invited to implement, in collaboration with relevant stakeholders, the Strategy Europe 2020: A strategy for smart, sustainable and inclusive growth (EC, 2010). In the context of the Strategy, smart cities are initiators of sustainable technological economic growth; sustainable cities are committed to environmental protection through sustainable production, sustainable consumption, energy efficiency and renewable sources; and inclusive cities are committed to social integration, justice, fair relations, poverty elimination, respect of human rights and dignity. The implementation of sustainable development into the business practice is usually called as corporate social responsibility (CSR). The concept is usually related to responsible relations of companies towards their internal and external stakeholders. CSR, as a systematic concept has been developed in the second part of the XX century. It has been defined by Howard R. Bowen already in 1953 (Carroll, A.B., 2016). Many authors (Carroll, A.B. 1979, 1991; Kotler, P. and Lee, N. 2004, et al.) as well as many international organizations (World Business Council for Sustainable Development, 1998; the European Commission, 2006 and 2011, et al.) have recognised companies' responsibility toward the society. Therefore, after almost seventy years, there is no one universal definition on CSR. The best known is Carroll's, as follows: “Corporate social responsibility encompasses the economic, legal, ethical and discretionary (philanthropic) expectations that society has of organisations at a given point in time”. It was originally defined in 1979, while in 1991 Carroll presented it in the form of the CSR pyramid (Carroll, A.B., 2016).

Dahlsrud, A. (2008) has analysed 37 definitions of CSR, proposed by various institutions and individual authors. He has concluded that observed definitions were consistently referred to five dimension, i.e. environmental, social, economic, stakeholder and voluntariness. He notes that CSR definitions are describing a phenomenon, but fail to propose any guidance on how to manage the challenges related to its implementation. Social responsibility should not be limited only to the corporate sector, but it should be implemented in the public governance as well. The paper is focused on the concept of municipal social responsibility (MSR). Local authorities, as key carriers of smart, sustainable and inclusive development, should be role models and leaders of responsible business. Besides, local governments are responsible for the creation of a sound business environment adjusted to sustainability issues. MSR is the key tool for supporting sustainable competitiveness, i.e. “the ability of cities to keep growing and developing over time while fostering social cohesion and environmental quality” (Carvalho, L. et al., 2014, p. 4, in: Van den Berg, L. et al., eds. 2014). Due to MSR is a complex and multidimensional concept, the process of implementation differs among cities. Besides, while the impact of CSR in the business sector have been elaborated in many scientific research studies, the implementation of MSR in urban governance was elaborated rarely. Tetreova, L. and Jelinkova, M. (2019) explain that MSR is related to implementation of activities which municipalities perform within the framework of their independent sphere of competence above the legal requirement in five socially responsible fields: economic, environmental, ethical, social and philanthropic. Their research, applied in 25 statutory cities in the Czech Republic, has shown a high intensity of MSR activities in the field of economic (97%), social (96%) and environmental responsibility (93%), followed by philanthropic responsibility (71%), while lowest intensity was related to ethical responsibility (31%). One important element of MSR is transparent reporting on sustainability issues to all interested stakeholders. García-Sánchez et al. (2013) have detect three main factors which encourage or limit sustainability reporting: municipal context, internal features of public entities and political factors. They recognised the need for national policies, laws or recommendations which will generate similar levels of transparency among local governments in order to avoid social dilemma, and the accountability process should be focused on increasing information about the social and environmental actions and impact of a municipality. Croatia has 128 cities, populated by 54% of all inhabitants. The key documents related to sustainable urban development are the Strategy of Regional Development of the Republic of Croatia 2020 and the forthcoming National Development Strategy of the Republic of Croatia 2030. The impact of MSR in Croatia have not been elaborated yet. The paper presents the results of the empirical analysis of the impact of MSR in the city of Pula, Croatia. The city was chosen as a good practice example considering that MSR has been in the process of implementation since 2008, as one of the first cities in the country.

3. EMPIRICAL RESEARCH

3.1. Research methodology

The city of Pula, Croatia, is the biggest city of one of the most developed regions in Croatia, the Istria County. According to the latest Census (2011), it has 57.460 inhabitants and it is ranked eighth in Croatia. In 2019 it was proclaimed as the most successful city in Croatia due to the highest average income per capita and a very low share of people at risk of poverty. MSR is based on three pillars: electronic business (e-documentation system, e-kindergartners, e-invoices, e-consultations, etc.), quality management system and social responsibility. The quality management system ISO 9001:2008 was introduced in 2009. In 2014 Pula was the first town in Croatia committed to the Ten principles of the UN Global Compact (until August 2019). In the same year it has received, as the first city in the world, the certificate IQNet SR 10. A documented information security management system ISO 27001:2005 was introduced also in 2014. All three standards have been connected in the integrated management system.

The first Sustainability report (GRI G4) was published in 2014, the second in 2016. From the environmental responsibility perspective, the city of Pula was one of the first in Croatia which has implemented a bike-sharing system, already in 2015. From the social responsibility perspective, the city supports many NGOs, many of them placed in the Community center Rojc. The aim of the research was to analyse the impact of MSR to internal processes and relations with external stakeholders. The main research hypothesis was that the implementation of MSR improves the internal and external business relations. The research has embraced three groups of respondents: employees, entrepreneurs and citizens. The research instruments were three separate questionnaires for each group. The empirical research was realised in October 2019.

3.2. Research results

The research results are presented in three parts. The first part is related to opinions of employees of the city of Pula regarding the impact of MSR. The second part is related to opinions of entrepreneurs operating in the city of Pula concerning the implementation of MSR in the urban governance. The third part is related to opinions of citizens living in the city of Pula regarding the implementation of MSR. The paper presents selected questions and answers. The first section presents the employees' opinions regarding the implementation of MSR in the city of Pula. The research instrument was an on-line questionnaire consisting of 27 questions. It was sent to all 178 employees of the municipal administration. 35 questionnaires, i.e. 19.7% were correctly fulfilled and elaborated. The first group of questions was related to employees' opinions on sustainable development and MSR and the impact of their implementation in urban governance. The first question was related to respondents' knowledge about the concepts of SD and CSR. The majority of them, i.e. 91.4% confirmed their acquaintance with both concepts. When asked about the implementation of MSR, more than a half of them (57.1%) were acquainted with it and able to give at least one example of implementation, while 40.0% of respondents were acquainted, but they were not able to mention neither one example. The proposed examples were related to norms linked on MSR (e.g. IQNet SR-10, ISO norms), the Code of Ethics, collaboration with NGOs, volunteering as one of the criteria for the city scholarship; electronic office, etc. The majority of employees (i.e. 80.0% of them) are acquainted about a person or department responsible for MSR. Then, respondents were asked to estimate if the decision making process in the city of Pula considers, in a systematic and documented way, the impact on the economy, the environment and the society. The majority of respondents, i.e. 57.1% confirmed that, while 40.0 % consider the impact is being evaluated in an insufficient way. The second group of questions was related to the employees' opinions regarding the implementation of MSR in the city of Pula. The statements were based on Ten principles of UN Global Compact. The arithmetic mean of all answer was 4.24, which indicates that employees consider the implementation of MSR in the city of Pula as very successful. The results are presented in the Table 1.

Table following on the next page

Table 1: Implementation of MSR in the City of Pula - Employees' Opinion

STATEMENT	N	1	2	3	4	5	Ar. mean	St. dev.	Var.
Respect of human rights is regulated in official documents.	35	0	0	4	10	21	4.49	0.70	0.49
The city government supports the respect of internationally proclaimed human rights and systematically and consistently operates against human rights abuse.	35	0	1	3	10	21	4.46	0.78	0.61
The city government operates in transparent way and enables independent control of its activities as well as the related activities of its key business partners.	35	0	1	2	15	17	4.37	0.73	0.53
The city government takes care about health and safety issues, committed to creation of high-quality working environment.	35	0	0	3	16	16	4.37	0.65	0.42
The city government is continually committed to creation of an inclusive and supporting environment for each individual and on elimination of any form of discrimination of its employees and other stakeholders.	35	0	2	3	16	14	4.20	0.83	0.69
The city systematically implements permanent education and cares for continuous personnel development.	35	1	3	4	16	11	3.94	1.03	1.06
The city has a formal system of evaluation of working productivity which is directly connected to a reward system in order to ensure better financial and other rights of its employees above the minimum legal requirements.	35	2	7	6	13	7	3.46	1.20	1.43
The city implements fair and responsible employment policy, respects their diversity and gives equal possibilities for all.	35	1	2	3	16	13	4.09	0.98	0.96
The city supports a precautionary approach to environmental challenges.	35	0	0	3	15	17	4.40	0.65	0.42
The city continuously undertakes initiatives to promote greater environmental responsibility.	35	0	1	2	16	16	4.34	0.73	0.53
The city consciously and proactively promotes energy efficiency and renewable energy sources.	35	0	0	2	14	19	4.49	0.61	0.34
The city of Pula supports its employees and all citizens in waste reduction, recycling and proper disposal.	35	0	1	3	14	17	4.34	0.76	0.58
The city of Pula supports preservation of natural resource and biodiversity protection.	35	0	1	3	15	16	4.31	0.76	0.7
All employees are acquainted with the Ethical code.	35	0	0	3	19	13	4.29	0.62	0.39
Corruption and nepotism in public procurement, new employment, asset management, sponsorships, donations and incur entertainment are not allowed.	35	1	1	4	16	13	4.11	0.63	0.87
The city operates against corruption and public procurement and all similar affairs are based on fair competition.	35	1	0	4	17	13	4.17	0.86	0.73

Source: Authors' research

The respondents were mostly satisfied with the respect of human rights (4.49; 4.46) and the commitment to environmental protection, i.e. precautionary approach to environmental challenges (4.40); continuous initiatives related to promotion of environmental responsibility (4.34); conscious and proactive promotion of energy efficiency and renewable energy sources (4.49) and supporting employees and all citizens in waste reduction, recycling and proper disposal minimization of waste and recycling (4.34). The lowest level of satisfaction was related to the formal system of evaluation of working productivity (3.46), the systematic implementation of permanent education (3.94) and implementation of fair and responsible employment policy, which respects diversity and gives equal possibilities for all (4.09). The results are presented in the Table 1. The second section presents the opinions of entrepreneurs operating in the city of Pula regarding the implementation of MSR. The research instrument was a questionnaire consisting of 20 questions. According to the Croatian Chamber of Economy, in 2018 there were 2.760 active entrepreneurs in the city of Pula. The sample was defined on 338 enterprises. It was structured by the core business activity of each company, regarding the National Classification of Activities (NCA, 2007). The questionnaires were sent by e-mail. 33 questionnaires, i.e. 9.76% were correctly fulfilled and elaborated.

The first group of questions was related to entrepreneurs' opinions on sustainable development and MSR. When asked about their acquaintance with concepts of SD and CSR, 60.6% of respondents were acquainted with both concepts, 18.2% have just heard about them, while 12.1% were acquainted only with the term SD and 6.1% only with the term CSR. Only 3% of respondents have never heard for the proposed concepts. In the next, multiple-choice question, respondents were asked to illustrate their understanding of CSR. The most frequent answer was related to environmental protection (66.0%), followed by social responsibility (57.6%), economic development (45.5%), economic growth (39.4%), etc. In the next questions the respondents were invited to estimate the level of implementation of CSR in their business practice and in the city administration. As it is shown in Table 2, entrepreneurs considered themselves more committed to CSR, compared to their perception of its implementation in the city of Pula.

Table 2: Entrepreneurs' opinions related to implementation of CSR into their business practice and in the urban governance of Pula (in %)

Answers	Self-evaluation	Implementation in the city of Pula
The business practice is entirely adjusted to CSR principles	21.2	12.1
The business practice is partially adjusted to CSR principles	72.7	81.8
The business practice is not adjusted to CSR principles	6.1	6.1
Total	100.0	100.0

Source: Authors' research

The last question in this group was related to the respondents' opinion on the importance of implementation of MSR. For almost one third of them (30.3%), it is considered as very important, for 60.6% of them it is considered as important while only for 9.1% it considered as not important. The second group of questions was related to the entrepreneurs' opinions regarding the implementation of MSR in the city of Pula. The respondents were invited to evaluate eleven statements based on five pillars of CSR, i.e. economic, environmental, ethical, social and philanthropic responsibility, as proposed by Tetreva, L. and Jelinkova, M. (2019). The results are presented in the Table 3.

Table following on the next page

Table 3: Entrepreneurs' opinion regarding the implementation of MSR in the city of Pula

STATEMENT	N	1	2	3	4	5	Ar. mean	St. dev.	Var.
The city operates transparently and enables independent survey of its operations, as well as of its key business partners.	33	3	12	4	11	3	2.97	1.21	1.47
The city systematically cares about the quality of public services and creates a supporting environment for entrepreneurs.	33	4	13	3	10	3	2.85	1.25	1.57
The city consciously and proactively operates on promoting energy efficiency and renewable energy sources.	33	2	4	3	18	6	3.67	1.11	1.23
The city operates in order to prevent and decrease negative impact on the environment, stimulating entrepreneurs to follow its example.	33	3	5	2	18	5	3.52	1.20	1.44
The city, its public companies and institutions educate and support their employees for ethical behaviour which results with professional relationship towards entrepreneurs and citizens.	33	2	11	4	13	3	3.12	1.67	1.36
The city respects the principles of public procurement and its business policy is focused against corruption in all its forms, including extortion and bribery.	33	8	10	4	8	3	2.64	1.34	1.80
The city continuously works on creation of inclusive and supporting environment for each individual, company and organisation and operates on prevention of any form of discrimination.	33	2	4	4	20	3	3.55	1.03	1.07
Due to transparent employment process, care about its employees during the employment and redundancy process the city gives a positive example to entrepreneurs.	33	6	8	5	11	3	2.91	1.31	1.71
The city, by offering appropriate social services (kindergartens, retiring homes, etc.) creates supporting business environment for launching new entrepreneurial ventures.	33	6	12	1	12	2	2.76	1.30	1.69
The city has a good collaboration with NGOs and actively participate in projects aimed to wellbeing of its citizens.	33	0	1	5	22	5	3.94	0.66	0.43
The city, by allocation of funds to donations, sponsorships and other financial incentives, supports the realisation of civil society's and educational institutions' projects as the base for a prosperous society.	33	1	2	5	20	5	3.79	0.89	0.80

Source: Authors' research

The arithmetic mean of all answers was 3.25. The research has shown that entrepreneurs considered that the city administration is most successful in implementation of the philanthropic responsibility (3.94; 3.79), followed by environmental responsibility (3.67; 3.52), social responsibility (3.12; 2.91), while they expect more activities related to economic (2.76; 2.85) and ethical responsibility (3.55; 3.12; 2.97; 2.64). The entrepreneurs expected more transparent business operations and employment, more responsible public procurement, better public and social services and a more supporting business environment. The third section presents the opinions of citizens living in the city of Pula regarding the implementation of MSR. The research instrument was a questionnaire consisting of 23 questions. Data were collected by an on-line survey. The questionnaire was fulfilled by 85 adults. The first group of questions was related to citizens' opinions on sustainable development and MSR. When asked about their acquaintance with the concepts of SD and CSR, 98.8% of respondents have heard about at least one of them. Precisely, 47.1% confirmed their acquaintance with both terms, while 34.1% have just heard about them. Citizens are more acquainted with the term SD (14.1%), compared to CSR (3.5%). In the next question, respondents were asked to explain the term „sustainable development“, as a multiple choice question. More than half respondents (57.6%) associate it with environmental protection, followed by the mostly cited definition of sustainable

development, i.e.: „Sustainable development seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future.” (WCED, 1987, p.16) (49.4%), and, on the third place, with the economic development (42.1%). When asked to explain the term CSR, tri-quarters of them (77.6%) identify that with the respect for human rights, followed by elimination of any form of discrimination (60%) and environmentally responsibility (57.6%). Although this was a very small sample, it can be concluded that citizens associate sustainable development primarily to environmental responsibility, while CSR to social responsibility. The last question in this group was related to the citizens' opinions regarding the importance on implementation of MSR in the city of Pula. Similarly, as previously mentioned entrepreneurs' opinions, a quarter of citizens (25.9%) consider that very important, 64.7% consider important, while only 9.4% consider MSR as not important. The second group of questions was related to the citizens' opinions regarding the implementation of MSR in the city of Pula. The respondents were invited to evaluate fifteen statements which were partially based on five pillars of CSR, proposed by Tetreanova, L. and Jelinkova, M. (2019). The arithmetic mean of all answer was 3.24. The citizens were mostly satisfied with the environmental responsibility (av. mean 3.52, 3.45, 3.35, 3.34, 3.32) and social responsibility (3.40, 3.36, 3.11), while, as it was concluded for entrepreneurs, the citizens expect more activities related to economic responsibility (3.25, 3.06, 3.01, 2.92) and ethical responsibility (3.36, 3.21, 2.74). The citizens expect more responsible public procurement, higher financial responsibility, more transparent business operations and employment, more responsible public procurement, better public and social services and better communication with citizens. The results are proposed in the Table 4.

Table following on the next page

Table 4: Citizens' opinions related to implementation of MSR in the city of Pula

STATEMENT	N	1	2	3	4	5	Ar. mean	St. dev.	Var.
The city operates cautiously and responsibly with available financial resources.	85	8	22	26	27	2	2.92	1.03	1.05
The city's investment policy is oriented towards its development and improvement of the living conditions of all its citizens.	85	8	23	13	38	3	3.06	1.17	1.25
The city, in comparison to other towns in Croatia and considering the overall economic situation in Croatia, develops in a proper way.	85	13	15	9	34	14	3.25	1.34	1.81
The city operates transparently and respects the rights of its citizens to get acquainted with expenditures from the public budget.	85	8	21	21	32	3	3.01	1.07	1.15
The city respects the principles of public procurement and its business policy is focused against corruption in all its forms, including extortion and bribery.	85	16	20	22	24	3	2.74	1.67	1.36
The city works in order to prevent and correct negative impact on the environment.	85	10	12	13	38	12	3.35	1.23	1.52
The city continuously promotes and implements responsible approaches towards the environment.	85	11	9	9	37	19	3.52	1.31	1.71
The city consciously and proactively works on promoting and implementing energy efficiency and renewable energy sources.	85	8	12	12	37	16	3.48	1.22	1.49
The city, its companies and institutions support their employees and all citizens towards recycling, waste minimization and proper waste disposal.	85	14	11	9	36	15	3.32	1.36	1.84
The city supports protection of natural resources and biodiversity.	85	12	13	11	32	17	3.34	1.34	1.80
The city meets the social needs of its employees as well as citizens and visitors.	85	5	18	8	46	8	3.40	1.10	1.22
The city, its public companies and institutions educate and support their employees for ethical behaviour which results with professional relationship towards entrepreneurs and citizens.	85	6	20	16	36	7	3.21	1.13	1.24
The city has a good collaboration with NGOs and actively participates in projects aimed to wellbeing of its citizens.	85	5	12	15	40	13	3.52	1.10	1.21
The city continuously works on creation of inclusive and supporting environment for each individual, company and organisation and operates on prevention of any form of discrimination.	85	5	18	13	39	10	3,36	1,21	1,26
The City respects opinions and attitudes of its citizens, relevant information are reported in a transparent and comprehensive way, which results with an image of the city as a reliable and desirable place to live.	85	8	24	11	35	7	3,11	1,86	1,41

Source: Authors' research

4. DISCUSSION AND CONCLUSIONS

MSR is a permanent commitment of local governments to offer public services which will increase the quality of life of their citizens and foster sustainable competitiveness through the co-creation of a supportive business environment. Since MSR is a complex and multidimensional concept, the process of its implementation differs among cities. The aim of the empirical research was to analyse the impact of MSR to internal processes and relations with external stakeholders in the city of Pula, Croatia. It has embraced three groups of respondents: employees, entrepreneurs and citizens. The research has shown that all observed stakeholders consider important the local government's committed to MSR. The research has shown a gap in perception on MSR between the observed groups, i.e. employees are much more satisfied with the implementation of MSR (A.M. 4.24) then the external stakeholders (A.M. 3.25 entrepreneurs' answers and A.M. 3.24 for citizens' answers).

Employees are probably more acquainted to the city's policies, measures and impacts related to MSR implementation. Local government should improve the visibility of their activities through continuous communication with external stakeholders and through annual sustainability reports. The detected less successful areas should be considered as challenges to be addressed in a systematic way in the next period. From the employees' perspective, the reward system and the activities related to lifelong learning should be improved. From the entrepreneurs' perspective, the research has shown that they expect more stringent respect of principles of public procurement, more efficient anti-corruption measures, better social services and a more supporting business environment. From the citizens' perspective, the research has shown that they expect more stringent respect of principles of public procurement, more efficient anti-corruption measures and more cautious and more responsible public expenditures.

ACKNOWLEDGEMENT: "This paper is a result of scientific project "The Determinants and Challenges of Competitiveness" supported by the Faculty of Economics and Tourism "Dr. Mijo Mirković", Juraj Dobrila University of Pula. Any opinions, findings, and conclusions or recommendations expressed in this paper are those of the authors and do not necessarily reflect the views of the Faculty of Economics and Tourism "Dr. Mijo Mirković" Pula."

LITERATURE:

1. Carroll, A. B. (2016). *Carroll's pyramid of CSR: taking another look*. International Journal of Corporate Social Responsibility. Retrieved 10.08.2019 from <https://jcsr.springeropen.com/articles/10.1186/s40991-016-0004-6>
2. Dahlsrud, A. (2006). *How Corporate Social Responsibility is Defined: an Analysis of 37 Definitions*. Corporate Social Responsibility and Environmental Management. 15, 1–13. Wiley InterScience. DOI: 10.1002/csr.132. Retrieved 12.05.2019 from <https://onlinelibrary.wiley.com/doi/epdf/10.1002/csr.132>
3. EC (2010). *EUROPE 2020: A strategy for smart, sustainable and inclusive growth*. European Commission. Retrieved 01.06.2019 from <https://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%200007%20-%20Europe%202020%20-%20EN%20version.pdf>
4. García-Sánchez, I.M.; Frías-Aceituno, J.V.; Rodríguez-Domínguez, L. (2013). Determinants of corporate social disclosure in Spanish local governments. *Journal of Cleaner Production* 39. pp. 60–72. Retrieved 01.06.2019 from https://www.researchgate.net/publication/264541314_Determinants_of_corporate_social_disclosure_in_Spanish_local_governments
5. ICLEI (2019). *Resilient cities, thriving cities: the evolution of urban resilience*. Local Governments for Sustainability; Bonn, Germany. Retrieved 01.06.2019 from http://e-lib.iclei.org/publications/Resilient-Cities-Thriving-Cities_The-Evolution-of-Urban-Resilience.pdf
6. Kotler, P., Lee, N. (2004). *Corporate Social Responsibility: Doing the Most Good for Your Company and Your Cause*. Wiley, USA
7. OECD (2020). *Achieving the SDGs in cities and regions*. Retrieved 20.05.2019 from <http://www.oecd.org/about/impact/achievingthesdgsincitiesandregions.htm>
8. Sustainable Cities Platform. Retrieved 10.05.2019 from <https://sustainablecities.eu>
9. Tetreova L., Jelinkova M. (2019): *Municipal Social Responsibility of Statutory Cities in the Czech Republic*. Sustainability 11(8), 2308; <https://doi.org/10.3390/su11082308>. Retrieved 10.06.2019 from <https://www.mdpi.com/2071-1050/11/8/2308>
10. UN (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. Retrieved 10.05.2019 from https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E

11. UN (2000). UN Global Compact. Retrieved 15.06.2019 from <https://www.unglobalcompact.org/>
12. UNCED (1992). *Agenda 21*. United Nations Conference on Environment & Development. Rio de Janeiro, Brazil. Retrieved 02.05.2019 from <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>
13. Van den Berg, L. et al. (Eds.) (2014). *Cities as Engines of Sustainable Competitiveness European Urban Policy in Practice*, Ashgate, Surrey, UK
14. WCED (1987). *Report of the World Commission on Environment and Development: Our Common Future*. UN World Commission on Environment and Development. Retrieved 10.05.2019 from <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>

CONCEPT OF BUSINESS ACCOUNTING AND INTEGRATED REPORTING

Victor Plotnikov

*Novosibirsk State University of Economics and Management «NINH»,
Russian Federation
vcplotnikov@yandex.ru*

Olesya Plotnikova

*Novosibirsk State University of Economics and Management «NINH»,
Russian Federation
vcplotnikov@yandex.ru*

ABSTRACT

The concept of accounting for the facts of economic life that currently dominates in accounting cannot be considered hopelessly outdated. At least, the model of accounting and accounting (financial) reporting built on this concept provides information to most stakeholders about external verifiable indicators that characterize the financial position of an organization. However, it should be recognized that the concept of accounting for the facts of economic life no longer meets the needs of the modern market economy, since it does not allow to assess the quality and stability of financial indicators. There is no element of foresight in this concept, that is, information about what facts of economic life are expected in the future. The market approach shifts the focus of accounting from the information needs of owners to a wider circle of stakeholders, which requires the presentation of such information about value creation processes, on the basis of which it would be possible to optimally distribute capital among all participants in market relations and reflect the effects of a combination of external and internal factors, providing or negatively affecting the sustainable development of the organization. The formation and development of a new concept - the International Concept of Integrated Reporting (IIRC) in the development of accounting as an economic science, can be described as information support for a business model on the processes of creating value in the short, medium and long term. IIRC is based on a new, truly, promising and progressive approach - taking into account the transformation of various types of capital in the process of creating value over time. Therefore, today, with the involvement of a wide range of specialists, the accounting community faces a fundamental task - using integrated thinking (knowledge and skills of intellectual capital), to develop a model of accounting (business accounting and integrated reporting) in order to provide information to financial capital providers and other stakeholders reflecting threshold values of indicators characterizing the sustainable development of the business model of creating value over time, taking into account the risks associated with efficient use of various types of capital, within which the business model creates value.

Keywords: *business model, business accounting, integrated reporting*

1. INTRODUCTION

The scholastic question of whether accounting is an economic science is raised only in Russia. We owe the emergence of such a question to the legacy of the command-administrative economic system of the Soviet period, when not only accounting, but also economic science, in general, was almost completely destroyed. Nevertheless, over the past 20 years, economic science in Russia, which has considerable freedom of thinking in propositions, conclusions, and proposals, has more than managed to overcome the barriers of instructions and commands coming from above.

At the same time, accounting as the most conservative science remains at some intermediate stage of Russia's economic development. Thus, a certain gap was formed between economic theory and accounting as a mechanism that forms an empirical basis for theoretical research. In order to bridge this gap, it is necessary to more decisively use institutional theory approaches in accounting. In countries with developed market economies, institutional theory has been largely accepted in accounting studies as the basis of its methodological structure. More specifically, drawing on various Institutional theory strands such as New Institutional theory and Old Institutional Economics, complementary with change management theories, a complete theoretical framework is formulated. This approach intends to grasp - through a deep understanding of institutions, routines and change, both planned and unplanned and to what extent accounting change is related to the adoption of Integrated Reporting (Katsikas E., Rossi F.M., Orelli R.L., 2017, p.24). Accounting, operating in the economic categories of institutional theory, should give significance to facts, study these facts and provide an impetus for wider and more productive research. Accounting science should make clear their understanding and interpretation to create a conceptual framework for formulating principles and developing rules or other guidelines for their application in a business accounting system that generates information for integrated reporting. The International Integrated Reporting Concept (IIRC) develops new conceptual approaches in accounting as in economic science, more precisely, draws attention to its individual theoretical aspects, confirming that «accounting is not a mechanical adherence to a set of rules that a computer can successfully execute, but at the highest social science» (Hendricksen, p.78). At the same time, both in IIRC and many scientists emphasize «is that IR makes sense only if it is the result of «integrated thinking» developed inside the organization—without integrated thinking the process of IR may be little more than a marketing activity (Katsikas E., Rossi F.M., Orelli R.L., 2017, p.7). The fundamental IR concepts identified in IIRC are currently at the stage of their adoption and approval, when more and more companies around the world recognize the IR hypothesis as a necessary truth, which allows to more reliably assess the degree of sustainability and development prospects of the organization. Unfortunately, at the moment, South Africa is the only country in which IR is mandatory by law (Black Sun - IIRC, 2014, 2015). However, surly, numerous European countries have legislation on sustainability reporting. This fact can be described as a serious step towards the recognition of integrated reporting. However, to date, the most difficult task facing the developers of integrated reporting, in our opinion, is the use of a wide range of non-financial indicators recommended by IIRC, and their inclusion in the balanced IR system as a reserve of the value of certain types of capital (human, client, social etc.). To solve this problem, measurement and quantification of non-financial indicators and their integration with financial indicators, for example, in an integrated balance sheet, will be required. It is such an integrated balance that will be more understandable for most investors.

2. CHAPTER CONCEPT OF BUSINESS ACCOUNTING AND INTEGRATED REPORTING

In the 21st century, global changes in the economy, including those associated with the formation of the digital economy, are taking place under the conditions of the traditional system of accounting and financial reporting. Moreover, some accounting researchers argue that the modern accounting model does not require fundamental changes and is sufficient for practical use by professional accountants. The current model of current financial statements does not allow its users to reliably assess the quality and sustainability of the financial results of the organization's activities in the future and, as A. Thomas noted, «it is becoming increasingly obvious that the price of this inability to assess the sustainability of corporate effectiveness is much higher than the financial consequences of ruining an individual corporations. This question concerns us all» (Black E., 2009, p. 127).

Currently, the world professional community is making serious efforts to modernize accounting and its theory. The most successful attempt, in our opinion, is the development of IIRC, aimed at creating effective characteristics that describe the economic resources of the organization when reflecting accounting objects. This concept can be attributed to the most promising direction in the development of accounting theory and is characterized as of great general economic importance. Integrated reporting becomes a strategic communication tool for integrating various points of view on value creation, offering a new understanding of approaches to sustainable development, corporate governance, as well as all types of capital (Plotnikov V.S., Plotnikova O.V., 2019). The main content of IIRC can be described as follows. Existing approaches to business valuation based on actual reporting indicators are inevitably outdated. In the traditional financial statements there is no reflection of such types of capital as intellectual capital, client capital, social capital, etc., which significantly reduces the value of the business in its assessment. The costs of customer-forming activities, for research (innovative) research, social activities are traditionally included in management expenses and are recognized as expenses of the period and are charged to the cost of production (works, services). Therefore, the primary objective of business accounting should be recognized as the capitalization of the listed costs with their subsequent reflection in the structure of the balance sheet assets as client capital, intellectual capital, social capital, etc. Capitalization of costs and their exclusion from the cost of production only through accounting procedures can ensure the profit growth of commercial organizations, which will affect not only the accounting system, but also the country's economy. Our proposed concept will require restructuring of both the theory and the accounting methodology, at least maintaining the priority of double entry and balance. This will increase the prestige of accounting and make it a true economic science. The goal of developing a business accounting model and integrated reporting is to provide financial capital providers and other stakeholders with information reflecting threshold values of indicators characterizing the sustainable development of the business model and the stages of its value-creation life cycle over time, taking into account risks associated with the efficient use of various types capital within which the business model creates its value. Focusing on financial capital providers making decisions on its distribution and use, the integrated report should reflect the organization's business model strategy, which «represents a system of transforming resources through its commercial activities into products and results aimed at achieving the organization's strategic goals and creating value over the short, medium and long term» (ISIR, 2013, p. 4.11). Thus, it is possible to determine the main systemic tasks of business accounting in a business model, each of which requires solving related tasks:

1. information support of the entry system, i.e. systems for assessing the available stock of capital for its adequacy for the sustainable development of a business model for creating value over time;
2. information support of actions in the life cycle of converting resources (capital) into a new value over time. In essence, this task can be successfully solved in the traditional system of financial accounting and reporting;
3. information support for the outputs of the business model, i.e. information about what changes in the cost of various types of capital have occurred or are expected as a result of actions to create value in the short, medium and long term.

The solution of these problems requires a shift in emphasis from the professional thinking of accountants to the formation of integrated thinking, which not only determines the ability to understand the relationship between the various operational and functional units of the organization and its capital, it is much wider. Integrated thinking is the ability to combine related economic research that explains the processes of value creation over time and their importance in ensuring the sustainable development of the organization.

At the same time, business accounting should become a mechanism of information support, including business analysis, which acts as a motivational element for confirming or making decisions of financial capital providers in the allocation of resources necessary to create value in the short, medium and long term. Therefore, business accounting is an information system of a business model about the processes of creating value and value growth, reflecting the measurement of the results of organizations. This system should be based on information on the forecast and actual capital stocks needed to finance the value creation processes, expressed quantitatively in the form of liabilities that provide financial support for value creation objects - economic resources. The result of the functioning of such an information system for reflecting actions to transform economic resources and liabilities into facts of economic life (the value of earned income) is the creation of an integrated report reflecting the change in all types of capital and future prospects. It should be noted that in ISIR, in contrast to the traditional balance sheet theory, capital is treated as resources, that is, assets of the organization, and not its liabilities. Therefore, the overall goal of classifying capital stocks for accounting is to create an orderly capital structure of the organization. Without such a structure, the efficient management of capital accounts and their alignment with economic benefits are impossible (Plotnikov V.S., Plotnikova O.V., 2019). The results of assessing the possibilities of using various types of capital should be interlinked with the objects of creating value in time. In other words, a balance should be formed of economic resources (value objects) and obligations (financing of value creation processes), ensuring the functioning of the business model of value creation in the future. The identification of value objects and the specification of their assessment imply the existence of certain criteria, and the criteria themselves depend on the purpose of the assessment. The objectives of the assessment are interlinked with the identification of objects accounted for as elements of financial capital. In ISIR, financial capital is interpreted as follows: «Financial capital is a reserve of funds that: o are available to the organization for use in the production of goods or the provision of services; o come through financing (debt, equity financing and grants) or are created as a result of operations or investments» (ISIR, 2013, clause 2.15). This is not an exhaustive list of stock items of financial capital value. However, to speak of the category of financial capital as a reserve of funds and, first of all, as a reserve of cash is not entirely correct, since their largest amount is used in the process of creating value in the short term. The situation is different with cash inflows, which should be used to form a stock of the value of other types of capital of the organization in the medium and long term. However, the formation of a reserve of funds for these purposes is also impractical. This will mean the diversion of funds from circulation. In this case, the reserve of financial capital should be included in the integrated reporting as an economic resource, that is, «a right that has the potential to create economic benefits» (CFPFS, p.4.14) and reflect this right as part of the elements of financial capital in the integrated balance sheet asset. With this approach in mind, the main task of business accounting of financial capital can be formulated as follows: assessment of the possibility of forming an economic resource of financial capital to form a stock of the cost of other types of capital, taking into account the value of these capital for the organization and the environment. Regarding production capital, the integrated report should explain what types of assets should be included in the business model in order to increase operating profit and increase the efficiency of the value creation process over time. The need and the possibility of attracting additional production capital should be assessed, linking this to the financing scheme, i.e. using financial capital. In addition, an analysis of the diversion of production capital from the existing business model is required without prejudice to its sustainable development and viability, or during their liquidation. The importance of human capital should be confirmed by an analysis of the key skills and experience of employees using their abilities to effectively create value. Particular attention should be paid to the ability of human capital to form intellectual capital, which is a vital component of the business model of

value creation over time. Of course, intellectual capital is very difficult to form completely, proceeding only from the possibilities of its own human capital. It is necessary to attract third-party intellectual capital in the form of patents and patented knowledge, etc. Therefore, the use of both human and intellectual capital should be linked to the general financing scheme, i.e. use of financial capital. In the same sequence, one can consider other types of capital (natural, environmental, social, etc.). The main thing is that the business accounting model reflects the economic resources of the organization for the formation of the stock of value of all types of capital. At the same time, business accounting should provide information to financial capital providers about the sequence of transformation of the right to use cash and other assets into stocks of the value of certain types of capital. That is why ISIR, when determining users of integrated reporting, emphasizes that «financial capital providers are interested in the value that the organization creates for itself. They are also interested in the value that the organization creates for others when it affects the organization's ability to create value for itself or relates to the stated purpose of the organization (for example, an explicit social goal) that affects their estimates» (ISIR, 2013, p. 2.5). Integrated reporting is the result of integrated thinking that can reflect and explain information about the processes of value creation in the short, medium and long term. Integrated thinking, in our opinion, not only determines the ability to understand the interconnectedness and interdependence between its various operational and functional units and capitals, it is much broader. Integrated thinking is the ability to combine related economic research, which is able to explain the processes of value creation over time and their significance both for the organization and for society as a whole. In this case, we should consider the process of institutionalization of integrated thinking, which can bridge the gap between economic theory and accounting theory. We would call this process economic art, which John N. Keynes defines as «art ... is a system of rules to achieve a given goal» (Keynes, 1899 [1891], p.27-28, 36; *The philosophy of economics. An Anthology*, 2012, p. 177). Perhaps that is why the content of the integrated report is determined by leading principles designed to achieve a balance between financial and non-financial indicators in an integrated balanced scorecard, rather than standards.

3. CONSLUSION

The design of the business accounting model can be represented in the form of several logically interconnected stages:

1. Forecasting the use of various types of capital (individually and collectively) to ensure the sustainable development of the organization's business model with reflection in the integrated balance sheet as economic resources (production, human, intellectual, etc.) and liabilities (facility financing scheme value creation).
2. Assessment of the possibility of using available resources and the need to attract outside capital, which is reflected in the conversion of economic resources and liabilities into facts of economic life (assets and liabilities).
3. Reflection of actions on the use of resources within the framework of individual business models of creating value over time and actions that ensure the increase in the value of capital.
4. Determination of changes in measuring the value of certain types of capital at the output of a separate business model.
5. Consolidation and synthesis over time of information on the creation of value and changes in capital in the whole organization with its reflection in the integrated reporting of the organization.

The main thing that you need to pay special attention to the developers of the business accounting model is to provide financial capital providers with information about the

distribution of resources among the objects of the value creation life cycle in time. Therefore, at each stage of the life cycle of creating value, key indicators of activity parameters should be highlighted, expressed as economic resources and obligations involved in the process of creating value in the short, medium and long term. In fact, we are talking about fixing in time information about the creation of values throughout the life cycle that forms the value of a business model.

LITERATURE:

1. Black, E. (2009). Cost issues. *Master the latest management, investing and regulation techniques based on company value*. Moscow, Russia: Olymp-Business CJSC.
2. Bhasin, M.L. (2016). *Voluntary Reporting of Corporate Governance Information in Annual Reports: An Empirical Study of an Asian Country*. International Journal of Management Sciences and Business Research, 5(7), 71-95.
3. Black Sun - IIRC, 2014, 2015.
4. CFPFS (Conceptual Framework for the Presentation of Financial Statements). (2018). Retrieved 15.09.2019 from https://www.minfin.ru/ru/document/?id_4=125979.
5. De Villiers, C., Rinaldi, L. and Unerman, J. (2014). Integrated Reporting: Insights, Gaps and an Agenda for Future Research, Accounting, Auditing & Accountability Journal, 27 (7), 1042–67.
6. Hendricksen, E.S. (1997). *Theory of accounting*. Moscow, Russia: Finance and Statistics.
7. Humphrey, C., O'Dwyer, B. and Unerman, J. (2015). *The Rise of Integrated Reporting: Understanding Attempts to Institutionalize a New Corporate Reporting Framework*. The British Accounting and Finance Association Conference, Manchester, April.
8. ISIR (International Standard for Integrated Reporting). (2013). Retrieved 05.01.2020 from http://ir.org.ru/attachments/article/94/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK.docx_en-US_ru-RU.pdf.
9. Katsikas, E., Rossi, F.M., Orelli, R.L. (2017). *Towards Integrated Reporting Accounting Change in the Public Sector*. SpringerBriefs in Accounting. Springer International Publishing, Switzerland.
10. Kenys, J.N. (1899 [1891]). *The subject and method of political economy*. Moscow, Russia: I.A. Baladin.
11. Plotnikov, V.S., Plotnikova, O.V. (2019). *Capitalization stock capitalization model in integrated reporting*. *Economic and Social Development*. Book of Proceedings 47th International Scientific Conference on Economic and Social Development, November Prague: Varazdin Development and Entrepreneurship Agency, 375-382.
12. Plotnikov, V.S., Plotnikova, O.V. (2018). *Business Combinations and Consolidated Financial Statements: A Monograph*. Moscow, Russia: INFRA-M.
13. *The philosophy of economics. An Anthology* (2012). Moscow, Russia: Publishing house of the Gaidar Institute.

INTERCULTURAL LEARNING THROUGH THE ERAMUS STUDENT MOBILITY PROGRAMME

Violeta Vidacek-Hains

*University of Zagreb, Faculty of Organization and Informatics Varaždin, Croatia
vvidacek@foi.hr*

Amaliya Parlaj

*University of Zagreb, Faculty of Organization and Informatics Varaždin, Croatia
amajurjev@foi.hr*

ABSTRACT

The Erasmus Mobility Programme is a European project that provides an opportunity for higher education students and staff to network and gather professional and social intercultural competences. Incoming and outgoing students have an opportunity to attend courses at different universities all over the world. The main goals of this research is to explore the challenges and benefits for students who have studied in a foreign country. Student feedback is compared to feedback provided by officers from international relations units in different countries. The Respondents are 32 incoming Erasmus University students from France, Belgium and Albania who spent a semester in Croatia, and Croatian outgoing students who participated in Erasmus Programme in different European countries (Portugal, Spain, Check Republic, Slovakia). For the purposes of this research a questionnaire (IROQ) linked to student experiences was created. International relations officers participated in interviews and shared their opinions about the advantages and challenges of the Erasmus Programme. Student feedback was analyzed in terms motivation and the goals that students tried to accomplish. Student evaluation of the quality of the Erasmus Programme was explored. Results showed that students from different countries positively evaluated the Erasmus Programme. Programme was very useful for students and that their perception of its quality was high, but there were also some additional issues that could be improved (such as overlapping classes, financing, ECTS transfer, courses in English improvement etc.). These results could be used for planning and creating Erasmus preparatory workshops about student challenges and opportunities. Students' international experiences could be valuable information that could be used to create Erasmus mobility.

Keywords: Erasmus Mobility, Students, Communication

1. INTRODUCTION

Globalization in education includes many changes in comparison to previous educational practice. One of those changes is international student and staff mobility. International student mobility is a period of learning abroad with formal and non-formal models of education. The main aim of international student mobility programmes is to include young people and adults in programmes which will enhance their personal and professional development (European Parliament Council, 2006, p.p.8 according to Wells, 2014). According to research (İlter, 2016), student participation in the Erasmus Programme has many benefits, such as the development of linguistic and cultural competences, broader perception, a higher level to tolerance and a better understanding of cultural values. Students who participated in the Erasmus Programme reported a higher level of problem-solving competences and development of their communication competences. Bryła (2015 a) reported that more than 2/3 of students are generally satisfied with international student mobility. Students emphasized that they improved their foreign language skills, made international friendships, developed their intercultural awareness and become more self-confident. It is interesting that 90% of students with international experience would recommend international mobility to their friends and peers.

Student satisfaction and academic achievement depends on the elements of and effective learning environment within a university. An effective learning environment is an open system of variable factors that influence the effectiveness of student learning from the perspective of learners, faculty, administrators and professional staff (Appatova and Prats, 2008). Student motivation, academic achievement and further career development can be increased by creating a learning environment in curricula and extracurricular activities (Vermeulen and Schmidt, 2008). Communication and interaction are important parts of student exchange programmes and not only formal but also informal elements of curriculum can increase student satisfaction and achievement. Informal communication and student networking are important parts of the internalizations of HE institutions (Leask, 2009). A specific type of student internalization in higher education is double degree study. Students with double degree international experience considered their international experience as an opportunity to build relationships. This research confirmed the importance of having professional relations with partner universities in double degree joint programs (Nedelcu and Ulrich, 2014). There are various factors linked to student satisfaction with international mobility experience. Individual differences in coping styles is one of them. Hill and Iyer (2010) find differences between students with high and low coping styles in terms of their satisfaction with their international study abroad experience. Students who have a more active coping style feel more satisfied with their international experiences in comparison with students with lower coping skills. The Erasmus student experience is important not only for study achievement but also for future career development. Students with Erasmus mobility experience reported that their international mobility had a positive impact on their academic success, personal development, employment and career (Engel, 2010). International experience is well recognized by employees and provides a competitive advantage to students with international mobility experience compared with students with similar qualification without international experience. Students recognize the benefits of international experience, such as personal development, growing-up experience, character building and self-esteem. They emphasize networking as an important part of their private and professional life (Ferencz *et al*, eds., 2013). Bryła (2015 b) reported that alumni students who participated in the Erasmus Programme during studding, considered language skills and tertiary education as most important factors in their professional career and current job position. The research was conducted 4-5 year after their Erasmus mobility experience. Majority of them (nearly 70 %) had additional working abroad experience. Approximately 30% think that Erasmus experience is highly related to their successful job career. Students choose different counties for their international experience for different reasons. There are some economic and education criteria that affected students' decision about their preferred country. International students from developed countries consider educational factors as the most important for choosing a country for their international mobility, while students from non-developed countries evaluated economic and educational factors similarly important in the process of choosing a country for their international mobility. The volume of merchandise traded between countries also determined their choice, which means that better collaboration between countries facilitated student mobility (Wei, 2013). Some Erasmus students with international experience did not evaluate the international studying experience as an experience that increased their income and social status (Teichler and Janson, 2007), while others reported that the intercultural environment of Spain, Portugal, Lithuania, Turkey and Iran increased their professional development and concurrency in the competitive labour market (Kumpikaitė *et al*, 2012). According to Teichler (2012), European policies need to ensure more quality and intra-institutional diversity. The number of students that included in international mobility programmes is growing each year. In the middle of last century, the approximate number of students that studied abroad was 200,000, while in 2012 this number was more than 2 million (Wells, 2014).

According to Migration Data Portal (2017), the number of students with no residential visa status and international experience in Europe increased up to 5.3 million in 2017. A literature review and previous research results encouraged an institutional research team to explore the benefits and obstacles facing incoming and outgoing international exchange students in the Erasmus Programme at one faculty in Croatia. According to the institutional experience and literature review, following main goals of this research were defined as follows: the general objective was to explore the opinion of studying abroad for incoming foreign students and outgoing students, and specific objectives were to explore motivation, expectations and reflections of incoming and outgoing Erasmus students who spent one semester in a foreign country.

2. METHODOLOGY

2.1. Respondents

The respondents were incoming undergraduate and graduate Erasmus students that spent the 2018/19 autumn or spring semester at the Faculty of Organization and Informatics in Varaždin (FOI) (N=18, F=4, M=14) and outgoing FOI students that spend one semester at Erasmus partner universities in Europe (N=14, F=3, M= 11). The majority of students were 21-23 years old (N=15 incoming students and N=12 outgoing students), 2 incoming students were 18-21 years old, and 1 incoming and 2 outgoing were older than 23 years. Croatian students (N=14 outgoing students) attended lectures during one Erasmus semester at Universities in Slovakia (N=9), the Czech Republic (N=3), Portugal (N=1) and Spain (N=1). Incoming Erasmus students (N=18 incoming students) arrived at FOI from the foreign following countries: France (N=16), Belgium (N=1) and Albania (N=1). Half of Erasmus students (N=16) attended one semester during the undergraduate level of study (N=9 incoming and N=7 outgoing) and half of them joined the Erasmus Programme during their graduate level of study (N=9 incoming and N=7 outgoing).

2.2. Measurement Instruments

To identify student motives, expectations, and experiences during the Erasmus Programme, the questionnaire International Research Office Questioner *IROQ* was created. This questionnaire contains 25 items, some of which included demographic data (5 items), open ended questions (8), multiple choice items (5) and Likert scale items (7). Student participation is on a voluntary basis, and research was conducted anonymously with a Google Forms Survey. All respondents are contacted by international relations officer.

3. RESEARCH RESULTS

3.1. Students Motivation for Participating in the Erasmus Programme

Students were asked why they chose certain countries for their Erasmus semester experience. The majority of incoming and outgoing students made their choice of country for financial reasons. 13 of the 18 incoming students were from West Europe (Belgium and France), the life costs in Croatia were acceptable and this was the main reason for choosing Croatia. The majority of outgoing Croatian students (N=11) consider the Czech Republic or Slovakia as countries that are not too expensive. Other motives of incoming and outgoing students for choosing certain countries were culture, faculty curriculum, recommendation from other colleagues and other reasons. Students can choose different universities and faculties according to the Erasmus agreement of their institution. The reasons why foreign incoming students chose the Faculty of Organization and informatics in Varaždin is because this was the only option (N=10), curriculum similarities (N=3), other reasons (N=3) and friends (N=2). Reasons why Croatian students chose partner faculties in the Czech Republic, Portugal, Spain and Slovakia because of similarities of curriculum (N=8), other reasons (N=4) and suggestions from other

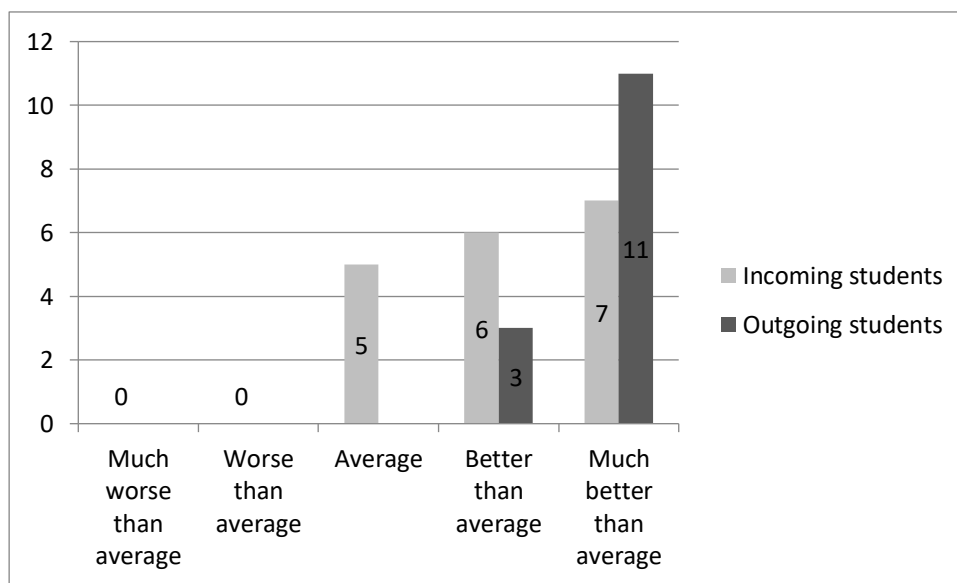
students (N=2). The general motivation for student participation at the Erasmus Programme is very similar in groups of incoming foreign students and outgoing Croatian students. The majority of incoming and outgoing Erasmus students participated in the Erasmus Programme because of intercultural learning experience, networking, challenges and skills development. There are no statistical differences between incoming and outgoing students regarding their motives for participating in an Erasmus Programme. ($X^2=3.75$, $p>0.05$, $df = 6$)

3.2. Students Expectations before Participating at the Erasmus Programme

Being part of Erasmus one semester student exchange programme includes individual students' differing expectations regarding a new learning environment. Students that come to Croatia as incoming Erasmus students expect that they will be faced with new cultural experiences (N=7), improve their language (N=5), meet new people (N=4), have fun (N=5) and other (N=7). Outgoing Croatian students expect that the best benefit will be to meet new people (N=5) and to be faced with new cultural experiences (N=3). An interesting fact is that some of them have no expectations before becoming Erasmus student (N=4) and some have other nonspecific expectations (N=6).

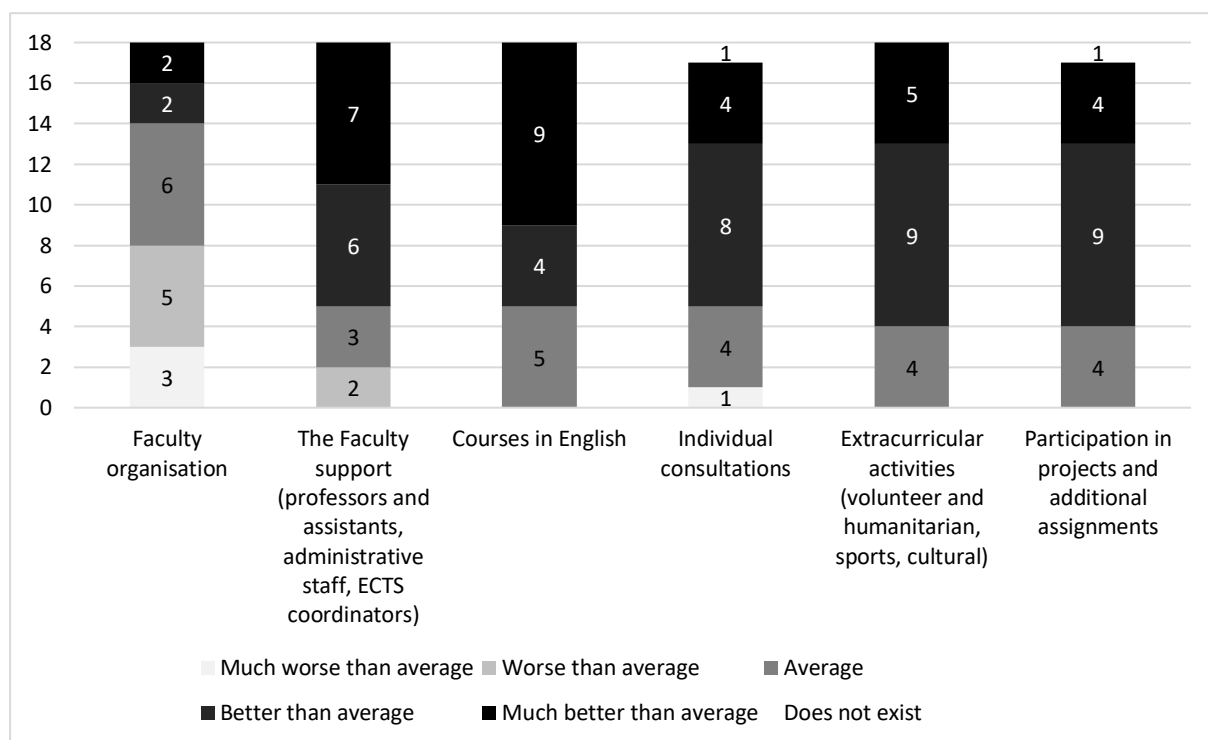
3.3. Students Feedback after Erasmus Programme Experience

Students' reflections and impressions after completing an Erasmus semester in a foreign country illustrated that incoming students had excellent new experience in Croatia (N=9), it was a good opportunity for them personally (N=3), for their development (N=2) and for other reasons (N=4). For Croatian students Erasmus is an excellent experience (N=7), they think this was their best decision (N=2), they would like to recommend Erasmus Programme to other students (N=2) and have some other feedback (N=3). The majority of students in both groups reported that the application procedure is not too complicated that they could apply without problems (N=14 incoming students and N=11 outgoing students). Students reported that they had no problem with adjusting to a new environment (Graph 1). They estimated that their adjustment to a new environment was much better (N=7 for incoming and N=11 for outgoing students) or better (N=6 for incoming and N=3 for outgoing students) than the average adjustment. No one single student reported that their adjustment was below the average.



Graph 1: Adjustment of Incoming (N=18) and Outgoing (N=14) Students to the New Cultural Environment

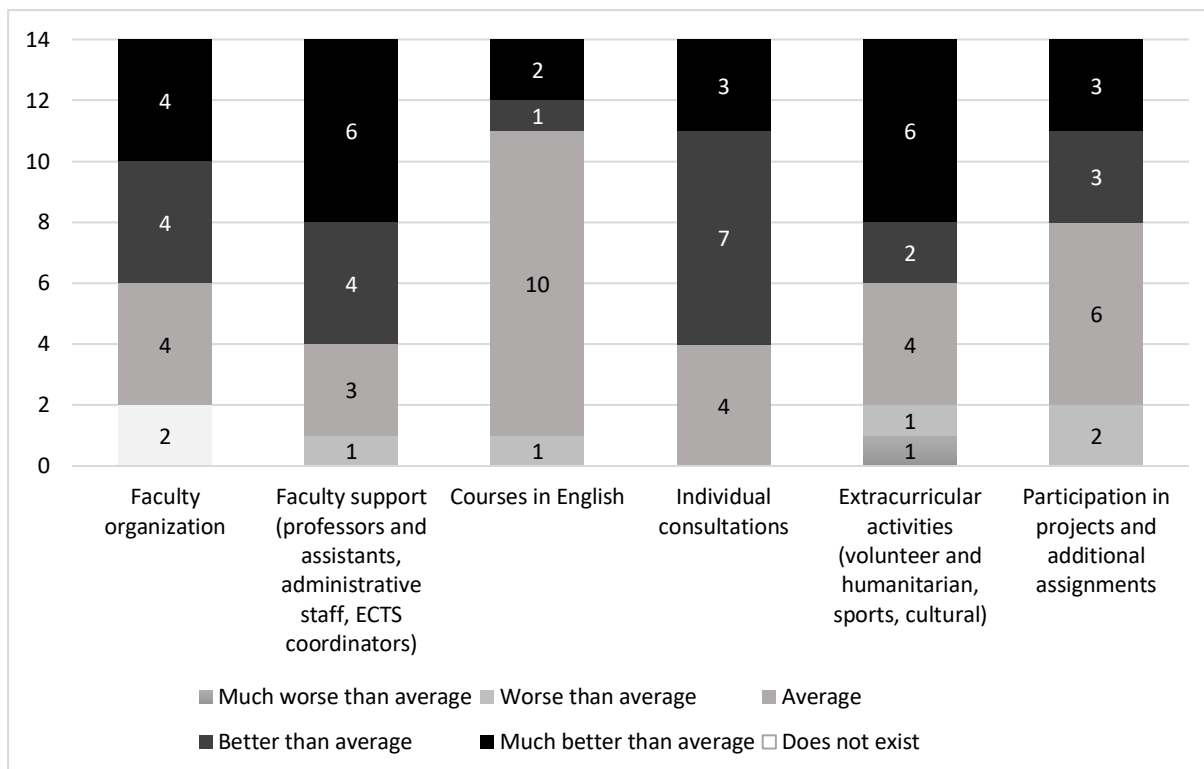
Students were asked to estimate how satisfied they were with elements of effective learning environment at the host institution at the scale from 1 to 5, while 1 means much worse than average and 5 means much better than average (Appatova and Prats, 2008). Incoming students (Graph 2) reported that they were very satisfied with faculty support, courses in English, individual consultations with professors and staff, extracurricular activities and project participation. But, they were not satisfied with the organizational part of their Erasmus Programme schedule. The reason are overlapping classes, which does not allow them to attend all lectures and seminars.



Graph 2: Incoming Student Satisfaction with the Host Institution's Learning Environment

Outgoing students (Graph 3) estimated the element of learning environment on a 1-5 scale (from 1 - much worse until 5 - much better than average). They reported that organization, student support, extracurricular activities and project activities at host institutions were much better or better than average. Student feedback about the quality of courses delivered in English were estimated at mark 3 (average). Results showed that host faculties provide a high quality of study for Erasmus students, but there is room for improvement in courses delivered in English.

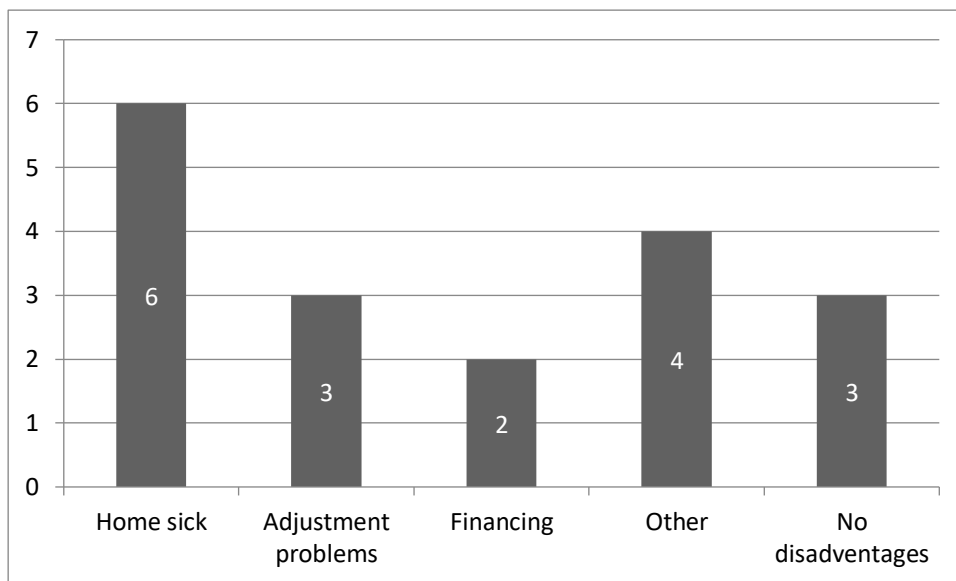
Graph following on the next page



Graph 3: Outgoing Student Satisfaction with the Host Institution's Learning Environment (N=14)

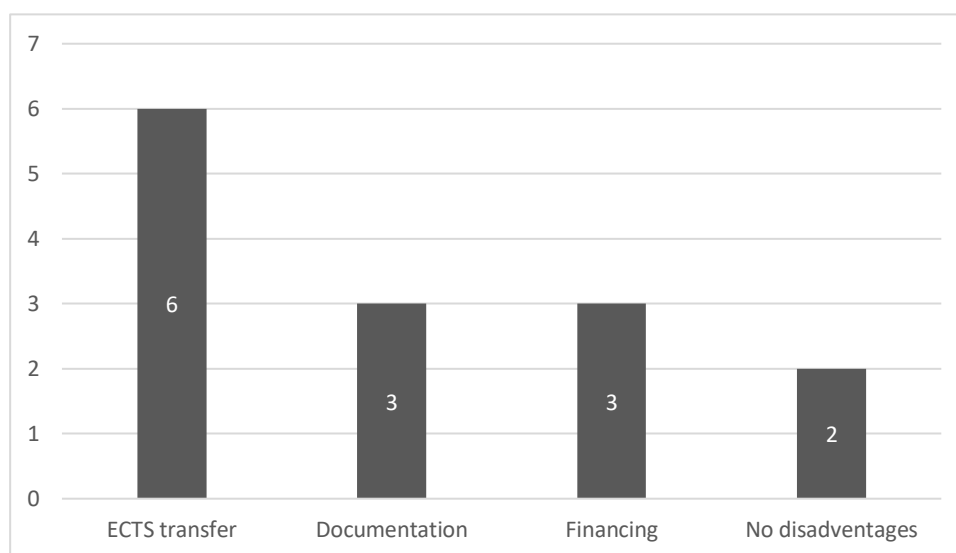
There is no statistically significant difference between incoming foreign students and outgoing Croatian students in terms of their opinion about the advantages of the Erasmus Programme ($X^2=0.545$, $p>0.05$, $df = 4$). Students from both groups agree that the Erasmus Programme is a good opportunity for networking, intercultural learning, new experiences, going out of their own comfort zone etc.... Students reported the following disadvantages of Erasmus Programme for incoming exchange student: incoming foreign students felt home sick in Croatia (N=6), had problems in adjustments (N= 3), financial problems (N=2) and some other problems (N=4), while N=3 incoming students thought that there were no disadvantages to the Erasmus Student Exchange Programme (Graph 4). Outgoing Croatian Erasmus students reported that the ECTS credits were not transferable (N=6), they had problems with documentation (N=3) or financing (N=3), while (N=2) Croatian students thought that there were no disadvantages to the Erasmus Student Exchange Programme (Graph 5).

Graph following on the next page



Graph 4: Disadvantages of the Erasmus Student Exchange Programme for Foreign Incoming Erasmus Students (N=18)

Legend: X= Disadvantages of the Erasmus Programme; Y= Number of Students



Graph 5 Disadvantages of the Erasmus Student Exchange Programme for Croatian Outgoing Erasmus Students (N=14)

Legend: X= Disadvantages of Erasmus Programme; Y= Number of Students

All foreign incoming students (N=18) and all Croatian outgoing students (N=14) would recommend this experience to other students, which means that 100% of students think that an Erasmus semester is a valuable experience for them and other students. The results could be interpreted as a positive experience of students in the Erasmus Programme but this could also be due to research limitations in terms of the smaller number of students and the fact that data were collected during only one academic year.

4. CONCLUSION AND FURTHER RESEARCH

Incoming foreign students from France, Belgium and Albania, as well as outgoing Croatian students going to the Czech Republic, Slovakia, Spain and Portugal, who participated in a single semester in the Erasmus Programmes had a high level of motivation for spending one semester

abroad. General motivation for participating in the Erasmus Programme in both groups of student (incoming and outgoing) were intercultural learning, networking, challenges and skill development. Students chose particular countries because of financial reasons (results according to previous research done by Wei, 2013), gathering intercultural experience, curriculum similarities and recommendations from their peers. This particular University was chosen because of similarities in the curriculum of their home institution. Additionally, for some incoming foreign students this was the only option. This result can be interpreted in terms of a potential need for more Erasmus agreements between different partner institutions across Europe. This is valuable information which can be used for to further improve exchange programmes and particular events, such as a welcome week, team building etc. According to students' experience, the Erasmus Programme has advantages and benefits, such as networking, intercultural learning, new experiences, and going out of their respective comfort zone. Croatian students reported disadvantages such as ECTS transfer, documentation and financing. Incoming foreign students reported that they felt home sick, they had adjustment problems and financial obstacles. The research could be continued during longer period of time, which might ensure a clearer picture of advantages and potential problems with Erasmus Programme. Students' suggestions could be used to improve some elements, such as ECTS credit transfer, financing and overlapping course schedule. Erasmus students are satisfying with elements of an effective learning environment, such as faculty organisation, curriculum, project and extracurricular activities in general, but course schedules need to be improved for incoming foreign Erasmus students and along with the quality of courses for outgoing Croatian students. Elements of effective learning environment are an important factor of student satisfaction and are linked to organisational and communicational elements of studying at higher institutions (Appatova and Prats, 2008). All incoming and outgoing Erasmus students (100%) will recommend this experience to their colleagues (100%), what is according to results of previous research (Bryła, 2015). Generally, the Erasmus Programme is valuable experience for all participants and students, enabling networking, intercultural experience and foreign language competences.

LITERATURE:

1. Appatova V., Prats, H.: (2008). Effective academic environment for under-prepared college/university learners: listen to student voices. Paper presented at the 16th EAN Annual Conference *Access to Success: The student experience from pre-entry to employment*, Galway, Ireland, 2007.
2. Bryła, P. (2015 a). The Impact of international student mobility on subsequent employment and professional career: A Large-scale survey among polish former Erasmus students. *Procedia - Social and behavioral sciences*, 176, 633-641
3. Bryła, P. (2015 b). Self-reported Effects of and satisfaction with *international student mobility*: A large-scale survey among Polish former Erasmus students. *Procedia - Social and behavioral sciences*,, 191, 2074-2082
4. Engel, C. (2010). The impact of Erasmus mobility on the professional career: Empirical results of international studies on temporary student and teaching staff mobility. *Belgian Journal of Geography*, 4, 351-363
5. Ferencz, I., Hauschildt, K Garam, I. (eds.) (2013). Mobility windows from concept to practice. *Lemmens Medien GmbH*, Bonn, D.
6. Hill, D., Iyer, R. (2010). The moderating effect of coping on student satisfaction with a short study abroad program. *Journal for advancement of marketing education*, 17 97-103
7. İlter, B.G. (2016). How do *Mobility Programs Increase Foreign University Students*, Intercultural Awareness? *Procedia - Social and behavioral sciences*, 232, 569-574

8. Kumpikaitė, V., Ramírez, A.M., Ribeiro, H. N.R. (2012). Students' Skills Evaluation: An Intercultural Study. *Procedia - social and behavioral sciences*, 6224, 208-212
9. Leask, B. (2009). Using formal and informal curricula to improve interactions between home and international students. *Journal of studies in international education*, 13, 2, 205-221
10. Migration data Portal <https://migrationdataportal.org/themes/international-students> (access Jan 10th 2020)
11. Nedelcu, A., Ulrich, C. (2014). Are we ready for international students? Our university as window and mirror. *Procedia - Social and behavioral sciences*. 142, 90-96
12. Teichler, U., Janson, K, (2007). The professional value of temporary study in another European country: Employment and work of former Erasmus students. *Journal of studies in international education*, 11, 3-4, 486-495
13. Teichler (2012). Diversification? Trends and explanations of the shape and size of higher education. *Higher Education* 56, 3, 349-379.
14. Vermeulen, L., Schmidt, H. (2008). Learning environment, learning process, academic outcomes and career success of university graduates. *Studies in higher education*, 33, 4, 431-451
15. Wei, H. (2013). An empirical study on the determinants of international student mobility: a global perspective. *Higher education*, 66, 1, 105-122
16. Wells, A. (2014). *International Student Mobility: Approaches, Challenges and Suggestions for Further Research*. *Procedia - Social and behavioral sciences*, 143, 19-24

PRICE FENCES AS A MECHANISM OF COMPANY'S DIFFERENT PRICING TO CUSTOMERS WITH DIFFERENT WILLINGNESS TO PAY

Zdenka Vidrova

University of Zilina

Univerzita 8215/1, 010 26 Zilina, Slovakia

zdenka.vidrova@fpedas.uniza.sk

Margareta Nadanyiova

University of Zilina

Univerzita 8215/1, 010 26 Zilina, Slovakia

margareta.nadanyiova@fpedas.uniza.sk

Jana Kliestikova

University of Zilina

Univerzita 8215/1, 010 26 Zilina, Slovakia

jana.kliestikova@fpedas.uniza.sk

ABSTRACT

Price is one of the most important elements of the marketing mix and an important factor influencing customer buying decisions. Price is an important element for customers to evaluate the product and its value, but it is not the only element entering the customer's purchasing decision. Nowadays, producers or sellers use market segmentation for different charging to customers in various segments. This process is used in the mechanism of price fences. Price fences are just designed to preserve market segmentation and limit spillover between market segments. However, it is very important to choose the right pricing strategy such a way, that the customers do not consider set prices as unfair and pricing discrimination. This situation can be the reason for complaining, leaving the relationship or switching to a direct competitor. In addition, prices perceived as unfair negatively impact demand in the marketplace. In this article, we deal with definitions of basic terms, such as price, price fairness, market segmentation, which are related to price fences. Then, we focus on the essence of price fences and describe their basic types - buyer identification fences, purchase location fences, time of purchase fences and purchase quantity fences. The last part of the paper will be focused on real examples from practice. We will even point out on extreme example of pricing fence from past that could be consider as bad and inappropriate and it can be called as price discrimination. Practical examples can help businesses to avoid such pricing behavior that results in price discrimination.

Keywords: *Differential pricing, Pricing strategy, Price, Price discrimination, Price fences*

1. INTRODUCTION

According to Peattie (1995), the price can be the primary criterion for market segmentation. It is also a key marketing variable, through which a wide range of (not only) marketing goals can be achieved. For this reason, an enterprise should set the price level for the customer and individual segments very wisely. It must not be the case that the customer will regard the price as discriminatory, so it could cause many problems. These statements confirm the importance of pricing strategy (Chijioke et al., 2018). Cornerstones of a good revenue management strategy are customer segmentation and the implementation of targeted price strategies for each segment. Market segments should be kept separate to prevent demand spillover from high priced segments to low priced segments and the associated revenue loss.

Tools to restrict customer migration across segments are referred to as fences (Zhang & Bell, 2012). Occasionally, pricing goods and services at different levels across segments is easy because customers have obvious characteristics that sellers can use to identify them (Nagle & Müller, 2018). Price fences are the least complicated way to charge different prices to reflect different levels of value. Unfortunately, while simple to administer, the obvious price fences sometimes create resentment and are often too easy for customers to get over whenever there is an economic incentive to do so. Thus, finding a fence that will work in a market, where the company operates, usually requires some creativity (Krizanova, et al., 2014a; Krizanov et al., 2014b). For example, many companies segment customers depending on the channel of purchase: online store versus retail store. These sellers set one price in the retail store, at the same provide discounts to online purchasers. Customers have two options: the first one is that they can purchase the product online at lower price with less information and longer processing times. The second one, they have to pay the higher price, but can interact with a salesperson to gain more information or expedite service (Zhang & Bell, 2012). Many questions surrounding fences remain unanswered. These following questions and others are mentioned by Zhang and Bell (2012), for example, how to choose segmentation variables to divide the single market into multiple submarkets profitably? What is the difference between fences in the traditional marketing sense and fences used for revenue management, or how do marketing managers deal with customers switching segments? The paper consists of six chapters: Introduction, Basic definitions, Description of price fences, Basic types of price fences, Price fences in the practice and Conclusion. In the second chapter Basic definitions we deal with definitions associated with price fences – such as price and market segmentation. The third chapter Description of price fences focuses on introduction of the mechanism of price fences. In the forth chapter Price fences in the practice we provide some examples of real price fences, also that one which can be consider as price discrimination.

2. BASIC DEFINITIONS

Firstly, we have to define the price, one of the most important elements of marketing mix. The price is also associated with mechanism of price fences. Price is an important element for customers to evaluate the product and its value, but it is not the only element entering the customer's purchasing decision. In a narrow sense, the price represents the amount of money charged for a particular product (Pajtinkova Bartakova & Gubiniova, 2012). When we talk about price from customer's point of view, it is related with perceptions of price fairness. They represent consumer assessments and associated emotions regarding whether the seller's price, compared to a comparable other, is reasonable, acceptable, or justifiable. Customers or consumers can consider the price is unfair, so they have negative attitude toward to provider, what can be a reason of complaining, leaving the relationship or switching to a direct competitor (Xia et al., 2004). In addition, prices perceived as unfair negatively impact demand in the marketplace (Anderson & Simester, 2008). Other important term, which is closely related to price fences, is market segmentation. It is one of the most important tasks in marketing. Market segmentation is essential to implement differential pricing, thus to apply price fences mechanism. Identifying and describing market subgroups in a way, that guides marketing and sales decision-making, makes the marketing and pricing process much more efficient and effective (Valaskova et al., 2018). For example, customers who are relatively price insensitive, costly to serve, and poorly served by competitors, can be charged more than customers who are price sensitive, less costly to serve, and are served well by competitors. At many companies, however, segmentation strategy focuses on customer attributes that are not useful for pricing decisions or creating customer groupings that do not adequately describe differences in purchase motivations among customers (Popp et al., 2018). There exist various types of segmentation modelling schemes.

Unfortunately, in many cases, segmentations seldom assist pricing decisions, especially for setting different prices that maximize profit from different segments. When segmentation is set right, only then can a marketer ensure that each different customer subgroup is paying the most profitable price that the marketer can charge (Sroka & Szanto, 2018). Once a market segmentation structure has been put in place, firms use various conditions and restrictions to maintain separation of the price categories. Devices, such as less information, prolonged purchase processes, and early purchase and refund penalties, will “fence” customers into different market segments and make it difficult or time consuming for them to migrate from one market segment to another (Value-based market segmentation, 2016).

3. DESCRIPTION OF PRICE FENCES

A fence is a device that is designed to preserve market segmentation and limit spillover between market segments (Zhang & Bell, 2012); however, most fences are not perfect and allow some degree of demand “leakage” from the high-priced market segments to the low-priced segments. Imposing appropriate fences is also crucial for the success of revenue management (Zhang et al., 2010). Price fences are fixed criteria that customers must meet to qualify for a lower price. At theaters, museums, and similar venues, price fences are usually based on age (with discounts for children under 12 years of age and for seniors) but are sometimes also based on educational status (full-time students get discounts), or possession of a coupon from a local paper (benefiting locals who know more alternatives). All three types of customers have the same needs and cost to serve them, but perceive a different value from the purchase (Nagle & Müller, 2018). Rags Srinivasan, management professional with extensive experience in product strategy, strategic marketing and pricing, claims on his blog following statement about price fences: Price fences are as bad as say a fence between two countries. But they do serve the same purpose – to keep the two sides apart (Srinivasan, 2013). Price fences are key components of segmentation and revenue management. They are designed such that those who can afford and willing to pay higher prices are not tempted by the lower priced versions (Srinivasan, 2013). Often a buyer’s relative price sensitivity does not depend on anything immediately observable or on factors a customer freely reveals. It depends instead on how well informed about alternatives a customer is and on the personal values the customer places on the differentiating attributes of the seller’s offer (Zhuravleva et al., 2019). In such cases, the classification of buyers by segment usually requires an expert salesperson trained in soliciting and evaluating the information necessary for segmented pricing (Udell et al., 2019). We suggest that management can look at their particular business situation and decide whether or not fencing is applicable. If fencing is essential, the manager must consider each of the elements listed in the taxonomy and then decide which descriptor best fits the situation. The next step is to choose the optimal fencing decisions (that is, price, inventory and cost devoted to fences) and apply them to the situation in order to improve the firm's financial results (Ionescu, 2019; Belas et al., 2018).

4. BASIC TYPES OF PRICE FENCES

There exist various types of price fences. In next paragraphs, we describe following types: buyer identification fences; purchase location fences; time of purchase fences and purchase quantity fences. Occasionally, pricing goods and services at different levels across segments is easy because customers have obvious characteristics that sellers can use to identify them. In this case we talk about buyer identification fences. Barbers charge different prices for short and long hair because long hair takes more time to cut. But there exist some exceptions, for example when barbers during non-peak hours cut children’s hair at a substantial discount, despite the fact that work with children can be more challenging and time-consuming (Nagle & Müller, 2018). To customers perceiving different values buy at different locations can be used purchase location

fences. This type of price fences is common practice for a wide range of products and is often used by dentists, opticians, and other professionals. They have multiple offices in different parts of a city, each with a different price schedule reflecting differences in the target clients' price sensitivity. Also, many grocery chains categorize their stores by the intensity of competition and charge lower markups in most intense competition areas (Nagle & Müller, 2018; Kramarova et al., 2014). Time of purchase fences are used in those situations when customers in different market segments purchase at different times. It is possible to segment them for pricing by time of purchase. This type of price fences is usually used by theaters segment. They segment their markets by offering midday matinees at substantially reduced prices, attracting price-sensitive viewers who are not employed during the day at times when the theater has ample excess capacity. On the other hand, less price-sensitive evening visitors cannot so easily arrange dates or work schedules to take advantage of the cheaper midday ticket prices (Kral et al., 2019). The last type is called purchase quantity fences. They are useful in the situation when customers in different segments buy different quantities, so they can be segmented for pricing with quantity discounts. There are four types of quantity discount tactics: volume discounts, order discounts, step discounts, and two-part prices. All are common when dealing with differences in price sensitivity, costs, and competition. Customers who buy in large volume are usually more price sensitive. They have a larger financial incentive to learn about all alternatives and to negotiate the best possible deal (Nagle & Müller, 2018).

5. PRICE FENCES IN THE PRACTICE

Using the mechanism of price fences we can see in the nineteenth century yet. We talk about third-class train travel. Railroad company offered three classes of service – small number of super premium first class service; moderately priced second class service and really low priced third class service. Operators removed roofs from the third class cars to prevent those who can afford second class service from being tempted by the low price of the third class service (Trebilcock et al., 2003). This extreme example of pricing fence we can consider as bad and inappropriate and it can be called as price discrimination. Price discrimination is designed to capture market surplus, which exists when some consumers are willing to pay more than others for the same product. The main motivation for firms to implement price discrimination policies is the opportunity to reap large financial gains, but such implementation does not come without risks (Agrawal & Ferguson, 2007). Despite the risks, various firms implement revenue management policies that incorporate third degree price discrimination, whereby firms selectively price higher or lower to different groups of consumers (Wirtz & Kimes, 2007; Ferguson, 2014). There exist three types of price discrimination, third degree price discrimination is situation when a firm charges different prices to different customer segments (Kuo et al., 2016). Even schools and colleges offer their students the same education for different prices based on their price sensitivities, despite the fact that the official school catalogs list just one tuition. Most of the students receive substantial discount called "tuition remission scholarships" obtained by revealing personal information on financial-aid applications. By evaluating family income and assets, colleges can set tuition for each student that makes attendance attractive while still maximizing the school's income (Nagle & Müller, 2018; Valaskova et al., 2019). Deal proneness is another form of self-induced buyer identification- especially through the use of coupons and sales promotions, a frequent tool of consumer marketers. Coupons provided by the seller give deal-prone shoppers a way to identify themselves. Supermarkets and drug stores put coupons in advertising circulars because people who read those ads are part of the segment that compares prices before deciding where to shop. Packaged-goods and small appliance manufacturers print coupons and rebate instructions directly on the packages, expecting that only price-sensitive shoppers will make the effort to clip them out and use them for future purchases (Nagle & Müller, 2018).

Colorado ski resorts use purchase location to segment sales of lift tickets. Tickets purchased slope side are priced the highest and are bought by the most affluent skiers who stay in the slope-side hotels and condos. Tickets are cheaper (approximately 10 percent less) at hotels in the nearby town of Dillon, where less affluent skiers stay in cheaper, off-slope accommodations. In Denver, tickets can be bought at grocery stores and self-serve gas stations for larger discounts (approximately 20 percent less). These discounts attract locals, who know the market well and who are generally more price sensitive because the ticket price represents a much higher share of the local cost for them to ski (Nagle & Müller, 2018; Poliak et al., 2013). Mechanism of one of price fences types is also using by HotelQuest.com, what is documented on their blog. They have an opinion, that the company should design and offer such products that combine the hotel room with fences. These products must meet the needs of each segment and must be priced appropriately. They use following tactic - consider about two different segments: business travelers and holiday segment, which are differently sensitive to price. Business travelers are not so sensitive to price, value flexibility of cancellation and like to have breakfast included in the price, a hotel could offer a free-cancellation breakfast included plan to attract them. Holiday segment is very price sensitive, so the hotel may offer a non-refundable no-meals included plan at a lower rate. In this case, these are two products targeting different segments where the price difference is defensible and justifiable (The role of rate fences in hotel revenue management, 2017). The whole truth is, that the success of the price differentiation strategy within each segment lies in the explanation and justification of each price difference. Potential guests need to feel that they are buying different products when they pay different prices. Rate fences in hotel revenue management are the elements that create this product differentiation. The essence lies in the segmentation of customers into appropriate rate categories based on their needs, behavior, or willingness to pay. Especially rate fences are commonly used in the airline and hotel industries to force customers into higher-paying or lower-paying groups. Author of the article also claims that applying fences on the right way can make business more successful and give the companies a competitive edge (The role of rate fences in hotel revenue management, 2017).

6. CONCLUSION

Market segmentation is one of the most important tasks in marketing. After identifying particular market segments, they should be separate to prevent demand spillover from high priced segments to low priced segments, through this way to prevent revenue loss. Tools, which serve to restrict customer migration across segments, are called as fences. Customers who are relatively price insensitive, costly to serve, and poorly served by competitors, can be charged more than customers who are price sensitive, less costly to serve, and are served well by competitors. At many companies, however, segmentation strategy focuses on customer attributes that are not useful for pricing decisions or creating customer groupings that do not adequately describe differences in purchase motivations among customers. On the other hand, when segmentation is set right, only then can a marketer ensure that each different customer subgroup is paying the most profitable price that the marketer can charge. We suggest that management can look at their particular business situation and decide whether or not fencing is applicable. If fencing is essential, the manager must consider each of the elements listed in the taxonomy and then decide which descriptor best fits the situation. The next step is to choose the optimal fencing decisions (that is, price, inventory and cost devoted to fences) and apply them to the situation in order to improve the firm's financial results. Market segmentation is essential to implement differential pricing, thus to apply price fences mechanism. Company should be careful in charging different prices to different segments. Customers can consider price as unfair and company get into the problem of price discrimination. Answer on this situation can be complaint, leave the relationship with company or switch to a direct competitor.

Despite the all of risks, applying fences on the right way can make business more successful and give the companies a competitive edge.

ACKNOWLEDGEMENT: *This paper is an output of scientific project VEGA no. 1/0718/18: The impact of psychographic aspects of pricing on the marketing strategy of companies across products and markets.*

LITERATURE:

1. Agrawal, V., Ferguson, M. (2007). Optimal customized pricing in competitive settings. *Journal of Revenue and Pricing Management*, vol. 6, pp. 212-228.
2. Anderson, E. T., Simester, D. I. (2008). Does demand fall when customers perceive that prices are unfair? The case of premium pricing for large sizes. *Marketing Science*, vol. 27, pp. 492-500.
3. Belas, J., Gavurova, B., Toth, P. (2018). Impact of selected characteristics of SMES on the capital structure. *Journal of Business Economics and Management*, vol. 19, no. 4, pp. 592-608.
4. Chijioke, N., Vu, H. M., Olatunji, F. (2018). Influence of strategy formulation drivers on strategic performance. *Ekonomicko-manazerske spektrum*, vol. 12, no. 2, pp. 15-25.
5. Ferguson, J. L. (2014). Implementing price increases in turbulent economies: Pricing approaches for reducing perceptions of price unfairness. *Journal of Business Research*, vol. 67, no. 1, pp. 2732-2737.
6. Ionescu, L. (2019). Climate Policies, Carbon Pricing, and Pollution Tax: Do Carbon Taxes Really Lead to a Reduction in Emissions? *Geopolitics, History, and International Relations*, vol. 11, no. 1, pp. 92-97.
7. Kral, P., Valjaskova, V., Janoskova, K. (2019). Quantitative approach to project portfolio management: proposal for Slovak companies. *Oeconomia Copernicana*, vol. 10, no. 4, pp. 797-814.
8. Kramarova, K., Gregova, E., Cisco, S. (2014). CHANGES IN THE CORPORATE TAX IN SLOVAKIA - TAX LICENSE. In J. Stankeviciene, R. Ginevicius, AV. Rutkauskas (ed.), *Proceedings of 8th International Scientific Conference on Business and Management*, pp. 263-271, Location: Vilnius, LITHUANIA.
9. Krizanova, A., Masarova, G., Buc, D., Kolencik, J. (2014). Marketing Research as a Tool of Customers' Contentment Determination. In G. Lee (ed.), *Proceedings of 2nd International Conference on Economics and Social Science (ICESS)*, vol. 61, pp. 92-97, Location: Shenzhen, PEOPLES R CHINA.
10. Krizanova, A., Stefanikova, L., Masarova, G., Rypakova, M. (2014). KEY SUCCESS FACTORS OF COMPANY'S INTELLIGENCE PROGRAM. In J. Stankeviciene, R. Ginevicius, AV. Rutkauskas (ed.), *Proceedings of 8th International Scientific Conference on Business and Management*, pp. 85-92, Location: Vilnius, LITHUANIA.
11. Kuo, A., Rice, A. H., Fennell, P. (2016). How fitting! The influence of fence-context fit on price discrimination fairness. *Journal of Business Research*, vol. 69, no. 8, pp. 2634-2640.
12. Nagle, T. T., Müller, G. (2018). *The Strategy and Tactics of Pricing (A Guide to Growing More Profitably)*. New York: Taylor & Francis.
13. Pajtinkova Bartakova, G., Gubiniova, K. (2012). *Udrzatelny marketingovy manazment*. Bratislava: IAM press.
14. Peattie, K. (1995). *Environmental Marketing Management: Meeting the Green Challenge*, Pitman Publishing. London: Pitman.

15. Poliak, M., Krizanova, A., Semanova, S., Stefanikova, L. (2013). THE IMPACT OF PROCUREMENT METHOD OF THE TRANSPORT SERVICES TO THE FINANCIAL REQUIREMENT OF PERFORMANCE CONTRACTING ENTITY. *TRANSPORT PROBLEMS*, vol. 8, no. 4, pp. 67-76.
16. Popp, J., Olah, J., Fekete, M. F., Lakner, Z., Mate, D. (2018). The Relationship Between Prices of Various Metals, Oil and Scarcity. *Energies*, vol. 11, no. 9, pp. 2392.
17. Srinivasan, R. (2013). *The most beautiful price fence*. Retrieved 29.02.2020 from <https://iterativepath.wordpress.com/2013/10/27/the-most-beautiful-price-fence/>.
18. Sroka, W., Szanto, R. (2018). Corporate Social Responsibility and Business Ethics in Controversial Sectors: Analysis of Research Results. *Journal of Entrepreneurship, Management and Innovation*, vol. 14, no. 3, pp. 111-126.
19. *The role of rate fences in hotel revenue management*. (2017). Retrieved 29.02.2020 from <http://www.hotelquest.com/rate-fences-revenue-management/>.
20. Trebilcock, M., Winter, R. A., Collins, P., Iacobucci, E. M. (2003). *The Law and Economics of Canadian Competition Policy*. Toronto: University of Toronto Press.
21. Udell, M., Stehel V., Kliestik, T., Kliestikova, J., Durana, P. (2019). Towards a Smart Automated Society: Cognitive Technologies, Knowledge Production, and Economic Growth. *Economics, Management, and Financial Markets*, vol. 14, no. 1, pp. 44-49.
22. Valaskova, K., Bartosova, V., Kubala, P. (2019). Behavioural Aspects of the Financial Decision-Making. *Organizacija*, vol. 52, no. 1, pp. 22-32.
23. Valaskova, K., Kliestikova, J., Krizanova, A. (2018). Consumer Perception of Private Label Products: An Empirical Research. *Journal of Competitiveness*, vol. 10, no. 3, pp. 149-163.
24. *Value-based market segmentation*. (2016). Retrieved 29.02.2020 from <http://theorybiz.com/the-strategy-and-tactics-of-pricing/value-creation-2/1660-value-based-market-segmentation.html>.
25. Wirtz, J., Kimes, S. E. (2007). The Moderating Role of Familiarity in Fairness Perceptions of Revenue Management Pricing. *Journal of Service Research*, vol. 9, no. 3, pp. 229-240.
26. Xia, L., Monroe, K.B., Cox, J. L. (2004). The price is unfair! A conceptual framework of price fairness perceptions. *Journal of Marketing*, vol. 68, pp. 1-15.
27. Zhang, M., Bell, P. (2012). Price Fencing in the Practice of Revenue Management: An Overview and Taxonomy. *Journal of Revenue and Pricing Management*, vol. 11, pp. 146-159.
28. Zhang, M., Bell, P. C., Cai, G., Chen, X. (2010). Optimal fences and joint price and inventory decisions in distinct markets with demand leakage. *European Journal of Operational Research*, vol. 204, no. 3, pp. 589-596.
29. Zhuravleva, N. A., Cadge, K., Poliak, M., Podhorska, I. (2019). Data Privacy and Security Vulnerabilities of Smart and Sustainable Urban Space Monitoring Systems. *Contemporary Readings in Law and Social Justice*, vol. 11, no. 2, pp. 56-62.

THE IMPORTANCE OF WELL-TARGETED MARKETING ON SELECTED BRANDS

David Vrtana

*University of Zilina, Faculty of Operation and Economics of Transport and Communication
Department of Economics
Univerzitna 8215/1, 010 26 Zilina, Slovak Republic
david.vrtana@fpedas.uniza.sk*

Anna Krizanova

*University of Zilina, Faculty of Operation and Economics of Transport and Communication
Department of Economics
Univerzitna 8215/1, 010 26 Zilina, Slovak Republic
anna.krizanova@fpedas.uniza.sk*

Juraj Kolencik

*University of Zilina, Faculty of Operation and Economics of Transport and Communication
Department of Economics
Univerzitna 8215/1, 010 26 Zilina, Slovak Republic
juraj.kolencik@fpedas.uniza.sk*

ABSTRACT

The importance of marketing in the market environment is constantly growing. Nowadays, we can see a number of brands trying to enforce their communication policy in a competitive environment in order to best meet the needs of customers. However, there are brands that do not need to develop an aggressive communication policy and yet can satisfy every customer's requirement. We also refer to this type of marketing as well-targeted. The article deals with the issue of Modelleisenbahn Holding, which owns two successful brands, Roco and Fleischmann. The peculiarity of these brands is that they do not develop almost any communication policy to attract new customers. Their main business is the sale of model railways. Therefore, they target their policy to a specific customer segment whose passion is to create their own model railways. Based on the above, the article elaborates a model of Freebie marketing, which is meant to sell one product at a lower price in order to induce the sale of another product usually higher price. This model is actively covered by Modelleisenbahn Holding GmbH, which attempts to trigger the sale of another (higher-quality) product in the starting network (usually at a lower price). He expects the customer to be interested in expanding the purchased set and thus building his own railway world. The article shows how freebie marketing can boost shopping behavior and is suitable for targeting a particular segment. The importance of a well-targeted marketing is also supported by the hardened marketing strategy described in the article. On the basis of all available data on the company, in the final part of the article the approach is to generalize the strategy and to point out the importance of well-targeted marketing and its relation to the communication policy of the company.

Keywords: *Communication policy, Customer, Freebie marketing, Well-targeted marketing*

1. INTRODUCTION

In order to process the article and highlight the importance of well-targeted marketing, we decided to work with the Freebie marketing business model. It is a business model whose aim is to ensure the sale of the second product, which is triggered by the sale of the first product (Huang, Kuo, Shih, 2017, p. 18-28). Ludbrook also emphasize the importance of applying the business model in relation to building a business strategy (Ludbrook, Frajtova Michalikova,

Musova, Suler, 2019, p. 21-26). The article analyzes the company Modelleisenbahn-Holding GmbH, which focuses on the production of railway models. The company wants to achieve quality products in the starting network (usually at a lower price) that the customer is interested in expanding this set and thus building their own railway world. It is here that one can see the application of the basic elements of Freebie marketing as a business model. Individual railway models that the customer will buy are significantly more expensive than the price of the starter set. Consequently, the final form of the model rail will greatly exceed the price of the starting set. Based on the analyzed and found data, the article describes the communication policy, which will be part of the generalized marketing strategy. Křižanova, Majerova, Klietstik and Majercak who claim that a marketing strategy can help to strengthen the brand in the market, is also important (Křižanova, Majerova, Klietstik, Majercak, 2013, p. 105-112).

2. ANALYSIS OF COMPANY

Modelleisenbahn-Holding GmbH is the parent company of the German model railway manufacturer Fleischmann and the manufacturer of the Austrian railway models Roco. The Roco brand primarily started the production of mini-tanks, which immediately expanded into the US. The export was successful for the brand due to its expansion. In addition to the production of mini-tanks began to produce model trains in scale H0 and N. Railway models have become so successful for the company that in addition to exports to the US, exports have expanded to other European countries such as Germany, Spain, Switzerland, Sweden and the Netherlands. On July 15, 2005, the Roco brand went bankrupt and became part of the Modelleisenbahn holding on 25 July. In 2008, the second Fleischmann brand also joined and became, together with Roco, the most successful “siblings” in the model railway world. Both brands became part of the Modelleisenbahn due to their further development in order to promote sales. (Fleischmann.de) Modelleisenbahn is constantly striving to achieve economies of scale through joint development projects, marketing and public procurement through both brands. However, the essence is that both brands act as separate ones that compete with each other. The importance of cooperative partnerships, which aim to effectively manage relationships in terms of cooperation to promote competitiveness in a market environment, can also be seen in this sense. Modelleisenbahn Holding GmbH has a subsidiary Roco Slovakia s. r. about. based in Banská Bystrica. The plant currently employs 250 - 499 employees. The subsidiary takes over a significant part of the canceled plants from the German sister plant Fleischmann. In 2018, sales in the Slovak subsidiary amounted to € 4,898,243, which represents only a slight decrease by 0.5% compared to 2017 (Finstat.sk). The general analysis of the initial situation of the company is also its market penetration on the European and American markets. During 2020, the company intends to strengthen the range of both brands (Fleischmann and Roco) by producing more than 500 new models and issuing twenty new redesigns. This means that the company will support its market penetration, eventually the expansion of the product portfolio in the European and American market environment. On the US market, the company plans to offer a steam locomotive S 160 of the US Army from 1945 after the H0 scale at a selling price of € 504. In addition to the production of models, the company wants to work on the development of the Next Generation game, which was successful in 2014. On the basis of the above, it can be argued that the company intends to expand its product portfolio and expand with existing products to the current markets. The company intends to achieve this by supporting a communication policy and an appropriate strategy (Register.cz).

2.1. Creating and targeting the product to the customer segment

The company offers a wide portfolio of products to meet the needs of its customers. In production, the company is committed to the quality of products and attention to detail. The products are oriented at different price levels. For the purpose of processing the article, the

product line of railway models and the game "Next Generation" will be considered. The product portfolio of both brands is very extensive. The brands offer models of locomotives, coaches and freight wagons, railcars and electric units of railway companies, rails and track accessories (tunnels, bridges, lights). Buses with wagons represent the main product portfolio. They are manufactured as realistic models, based on the fleet of individual transport companies in Europe. Built locally are divided into two categories: hobby and professional. For beginners model trains and wagons are provided in plastic design in combination with metal elements. The price of these models ranges from 150 € to 300 €. Limited editions of locomotives and wagons are produced for professional modelers, the price of which is twice as high. A large part of the products has already been digitized (lights, noise locomotive). The advantageous alternative for beginners of modelers is to buy a starter set, which includes a round rail, a switch with an electric switchboard, a locomotive with three wagons. Starting price ranges from € 199 to € 399. In 2014, the Roco brand produced the railway model game "Next Generation", which is a customer segment for children aged 6-12. It is the first railway game to bring together virtual and real worlds together so the child can move with their toy in a new future. The name Next Generation speaks of a new generation of games that are controlled by a tablet or smartphone. The game contains virtual tasks that need to be solved in the real world of the game (through a model train). The new concept of the game combines several elements: the real model railroad is controlled by the application "Roco Next", which allows for example to accurately determine the way, solve logical puzzles in different stories. The app can be downloaded for Apple and Android. The game can be played by one or more players and can be downloaded in two versions, Detective Tom and Amusement Park. The basic set of the game is priced at 149 €, for which you can also buy other turnout sets worth 39,90 € and an additional turnout set worth 19,90 €. In this case, you can see the business model of Freebie marketing. The customer will not only buy this starter kit, he will want to build his country by buying additional components. With this game, the company wants to show that it provides fun and adventure for children. The company claims that it does not provide a simple model of railways that children build and play with. Monotonous playing wants to break down through a new game. It wants to provide an interactive gaming experience and show that even a simple model railroad game can be fun and adventurous by solving various virtual tasks in the real world of railways. Within the customer segments, the company focuses on specific customers, who primarily belong to the group of well-targeted marketing. The primary segment for the company is men aged 40-55 who enjoy the model railways. In this case, they are more like "fanatics" and passionate collectors. Brands try to support this segment with a variety of images and slogans (such as "It's man world", "Forever young") that are specifically targeted to this segment. The images that are also targeted to this segment also include slogans such as "He just wants to play" or "So you can convince men to play". Thanks to the offered value, men can feel eternal youth through trains. (Product catalog, 2015, pp. 5-160) The secondary segment is children aged 6-12 years, assuming they have a smartphone, tablet or laptop. This segment is associated with the advent of Next Generation. It is important for the company because of future investments in building a model railroad, and partners and manufacturers are also using it to maintain the model railroad as an intergenerational hobby. This is also supported by YouTube videos with the motto "Best devices inherited through generations."

2.2. Creating and targeting the product to the customer segment

The communication policy of the company is primarily closely oriented. The company uses low-cost marketing campaigns. They try to communicate via Facebook and YouTube. Both brands (Roco, Fleischmann) have their own website, where customers can find all important information not only about news, but also about other products. The website also serves as an e-shop where customers can order a specific product.

Through YouTube channels, the company is trying to present its current models, including the latest in the market. The videos are also focused on demonstrations of various railway lines, where they try to point out the depiction of reality by model railway. The fact that these videos are being searched for by customer segments is evidenced by the number of views, which represents approximately 2,605,533 as of 27/02/2020. and company-held actions or interview-focused videos with managers. Model railways are a specific product that gives the owner a sense of uniqueness that he wants to share with other people. It is this feeling that he wants to emphasize through YouTube channel through which he seeks to reveal his personal world of trains, including personal experience. The individual videos not only emphasize the passion and experience of the customer, but can also contribute to the positive promotion of both brands, as evidenced by the fact that one of these customers has 66,192 views on February 27, 2020. Another tool used in communication policy is the Facebook social network. In the form of contributions, the company promotes various novelties and train models. Roco 36 058, Fleischmann 31 118 and Modelleisenbahn parent company 6 469 numbers. In addition to public sites, there are closed groups on Modelleisenbahn model railways, where users deal with model sales, exchange information about exhibitions model rails, counseling and the like. The approximate number of fans of these closed groups is on average 2 195. Gavurova argue that social networks can currently influence buying behavior (Gavurova, Bacik, Fedorko, Nastisin, 2018, p. 72-84). On the basis of the above, it can be argued that an enterprise should continue to use social networks intensively in the future in order to influence Generation Z's purchasing behavior. Because it is a passion and hobby, it is assumed that customers do not just buy model railways, but want to build their own country through the purchase of other material things. In this case, the company uses the current annual catalog as a means of communication. Based on the above information, it can be argued that the company's communication policy is very narrow and explicitly specializes only in a well-defined marketing segment. It is sufficient to apply that form of communication in relation to the company's sales.

2.3. Marketing strategy of company

The definition of individual strategies is based on an analysis of available information from previous chapters. The identified strategies for Modelleisenbahn Holding GmbH can be divided into two primary groups:

- **Strategy focused on the customer** - both brands (Roco, Fleischmann) since their inception focused on producing quality models according to realistic model. Their primary values were reliability, creativity and providing high added value to the customer. The quality of the models depends on their manual craftsmanship based on the technical skills of qualified employees. This was the primary strategy from the very beginning of both companies. During that time, they tried to primarily provide value to the customer through rail models, where the customer could buy additional accessories, models, so that his "railroad country" could grow, and so they contributed to customer satisfaction. In the period after 2000 there was already a generation Z on the market, which no longer saw the sense of "playing" with model railways. It is a generation that is mainly influenced by technological progress. (Koníčková, 2016) In 2005 and 2008, both brands became part of Modelleisenbahn Holding GmbH and tried to come up with a strategy to help them strengthen their market position. So they came up with a new product, which also carried a new strategy in an effort to apply modern technologies to the model railroad game and thus enhance the gaming experience ("Next Generation"). The company assumes that this combination is very appealing especially for the secondary segment, as the game provides digital access to the game interface that children have been using since young age. The company defines its mission as: "return of model railways to children's rooms". The main objective is to strengthen the market leader position in the rail sector and thus contribute to the expansion of international

sales. The company wants to provide its customers with a real rail model through which it seeks to expand its target audience by appealing to the younger generation (the secondary segment) from which it wants to build a base of passionate modelers in the future. The company wants to achieve this goal mainly by digital technology. If the company focuses primarily on the Z generation and provides them with a “hobby” associated with modern technology, this will be a prerequisite for expanding the target audience, an approach to building new passionate modelers, which will later lead to expanding international sales to meet the strategic goal (Annual report, 2015, p. 3-5). An essential element of this strategy is the primary focus on the customer in order to achieve overall marketing performance. In addition, it can be influenced by a number of external factors (Kramarova Gregova, Cisco, 2014, p. 263-271).

- **Innovation strategy** - since Roco and Fleischmann have become part of Modelleisenbahn Holding GmbH, innovation has also been introduced. Both brands participated in the development of innovation. Z21 - control of the locomotive from the real driver's perspective “smartRail”, which was launched in 2012. This strategy should also primarily provide value to the customer in order to enhance the unique gaming experience. Through this system, the customer can control the game with his model railroad via smartphone or tablet. The company, in collaboration with both brands, plans to continue to expand product innovations that have been introduced through excellent manufacturing structure, precise manufacturing methods and the use of modern technology. Digitization of model railways is also part of the innovation strategy. Through digitization, the company wants to continuously bring and improve new model operations such as motion, lighting and noise. As mentioned in the previous strategy, the company is trying to focus its activities on the younger segment. As it is now assumed that a tablet, laptop or PC is already being used in everyday routine, Modelleisenbahn Holding GmbH is approaching to support and strengthen both segments through various innovative strategies. The main objective of the innovation strategy is to ensure a unique position in the industry. The uniqueness of the implementation of the innovation strategy is emphasized by Milward (Milward, Popescu, Frajtova Michalikova, Musova, Machova, 2019, 37-43). In connection with the innovation strategy, the company has built an excellent production structure. Its aim is to create European networks and global public procurement, while constantly striving to integrate new technologies into production processes, aiming to continually increase leadership in the interactive model rail world. However, the question is to what extent the strategy can also be applied to the environment. Moravcikova claims that the application of the principles of environmental marketing can strengthen the competitive position on the market (Moravcikova, Krizanova, Kliestikova, Rypakova, 2017). Based on the information gathered, it can be argued that working with data is important for the correct implementation of these strategies. Kovacova et. al. they claim that the use and processing of data is very time and cost intensive for businesses (Kovacova et. Al, 2019, p. 126-132). Therefore, the company should try to build its own database of customers with efficient use of data (Graessley, Scott, Suler, Kliestik, Kicova, 2019, p. 23-29).

Based on previous strategies it is possible to proceed to generalization of marketing strategy. The company strives to target its products to a well-targeted segment, which is also reflected in the targeted application of communication policy tools. By continually improving their products, we approach the satisfaction of luxury needs of customers (hobbies, hobbies). The main principles of generalization of the strategy are: targeting a narrow segment, low-cost marketing campaigns, product improvement, meeting luxury needs (hobbies, hobbies), the price corresponds to the quality of the product.

The implementation of the marketing strategy should be part of the applied business model of Freebie marketing. This should lead to the fulfillment of the basic objectives of the strategy and thus strengthen the position of the company in the global market environment. Andrijauskiene, Dumciuviene agrees with this. (Andrijauskiene, Dumciuviene, 2018, p. 47-67.)

3. DISCUSSION

The above-mentioned Freebie marketing strategies and concepts are popular in the market today. One of the areas where similar strategies are used in the form of microtransactions and supplements are computer and mobile games. After purchase or free download, the games then require real money for character improvement or land development to continue working. Some microtransactions are necessary to use the basic features of the game (eg Payday, Metal Gear). A different case is The Sims 4, which offers extensions and add-ons as a standalone product to the game. Based on the above, it is possible to see the form of application of the Freebie marketing business concept. Nadanyiova also speaks about its importance and importance, which claims that it can help in the correct application of CRM (Nadanyiova, 2013, p. 87-92). A different market in which the strategy can be used is toys that offer collections and a large number of accessories in conjunction with technological improvements to products. Mattel offers in the Barbie or HotWheels collections accessories to the basic product (doll, toy car) a large number of accessories such as. Barbie dream House, clothes, doll cars, Barbie friends, HotWheels track construction components, HotWheels car collections, various launch pads and more. In addition to these brands, this group may also include the Lego brand, which is also based on the functioning of the so-called. Freebie Marketing. As mentioned in the previous chapters, the application of the Freebie marketing principles is currently widespread. Brands using this concept can strengthen their market position, gain a competitive advantage and achieve higher profits. Based on the information and findings, it is possible to bring your own topics to the discussion. The first is the incorporation of “Real Station Simulation”, focusing on the primary segment. The company could develop a new application that simulates the real operation of the railway station. The application should be linked to the model railway. The company would provide 5 universal types of railway stations (4-track, 2-track, cargo station, 6-track and 8-track). One application will be available for each type of station to simulate its real operation. In order to function properly, the user must purchase a railway station package containing switches, track and signal. After purchasing a railway station package, you can download the app. The company can provide higher added value to these users because the user will be able to create a simulation of the operation of a railway station in the comfort of their home where they could build a train path. This proposal can effectively meet the goals of the above mentioned innovation strategy of the company, which, according to Valaskova and Kramarova, can strengthen the overall marketing performance of the company (Valaskova, Kramarova, 2015, p. 834-844). Another topic for discussion is marketing support for the development of railway cafes. Nowadays, there are cafes where a train will deliver a drink to customers. Some cafes are developed in more countries such as the Czech Republic, Germany or Austria. The point is, however, that the owner of these cafes is another business. In order to build and strengthen the community, we suggest that the company create similar cafes as their environment resembles a real image of the train's interior. Cafes emphasize that the customer can experience a stylish atmosphere right on the train, which never misses. As the company focuses on producing quality and innovative products, these cafes could be furnished in a stylish, contemporary and designed especially for the middle class of people. In his personal opinion, “product development” can intensively help to improve the company's marketing performance, making it not only more popular among its segments, but could build a new customer base in the form of attracting Generation Z.

In this support it is possible to see interconnectivity marketing processes. According to Alexandr, this is an important part of building the overall strategy of the company (Alexander, 2018, p. 96-105).

4. CONCLUSION

The analytical and discussion part of the article showed that Modelleisenbahn Holding GmbH provides its products with high quality and added value to the customer. The company is a typical example of well-targeted marketing, as it does not seek to apply communication policy tools massively, but only to a selected segment. This segment also targets its products. The primary segment includes men aged 40-50 years who are fond of modeling and building their own railways, or who work as drivers. In particular, the application of communication policy instruments should focus on the hobby factor that characterizes the primary segment. Communication policy tools should also be used intensively by the enterprise in relation to the secondary segment, as there is a general assumption that the primary segment will not be sufficient for the enterprise in the future. Therefore, it should exploit all the technological and innovative opportunities offered to the global market. In this way, the business should also strongly influence the purchasing behavior of the Z generation. However, it is important to perceive consumer attitudes. Those under the influence of various factors can also influence brand perception (Valaskova, Kliestikova, Krizanova, 2018, p. 149-163). In the primary segment, it wants to make the customer get a greater gaming experience through the innovative Z21 system. For the secondary segment, he wants to return the model railroad to children's rooms through the Next Generation model game. Through both brands, the company wants to continuously expand its presence in international markets and thus achieve a leading position in the industry. He wants to achieve this with his innovative activity, through which he tries to connect modern technologies with model railways. By using the above tools, the company can also strengthen its brand, which is irreplaceable in building the overall marketing strategy of the company (Majerova, Kliestik, 2015, p. 546-552).

ACKNOWLEDGEMENT: *This paper is an output of scientific project VEGA no. 1/0718/18: The impact of psychographic aspects of pricing on the marketing strategy of companies across products and markets.*

LITERATURE:

1. Alexandrova, M. (2018). A principal component analysis of project portfolio management practices. *Ekonomicko-manazerske spectrum*, p. 96-105.
2. Andrijauskiene, M., Dumciuvienė, D. (2018), National culture as a determinant of firms' innovative performance. *Forum Scientiae Oeconomia*, p. 47-67.
3. Annual report. The Modelleisenbahn Group. (2015). Retrieved 27.02.2020 from https://www.spielwarenmesse.de/uploads/tx_dkdtoyfairepb/11__-_The_company_2015__Modelleisenbahn_Muenchen_GmbH_.pdf
4. Gavurova, B., Bacik, R., Fedorko, R., Ludovit Nastisin, L. (2018). The Customer's Brand Experience in the Light of Selected Performance Indicators in the Social Media Environment. *Journal of Competitiveness*, p. 72 – 84.
5. Graessley, S., Suler, P., Kliestik T., Kicova, E. (2019). Industrial Big Data Analytics for Cognitive Internet of Things: Wireless Sensor Networks, Smart Computing Algorithms, and Machine Learning Techniques. *Analysis and Metaphysics*, p. 23–29.
6. Huang, KL., Kuo, CW., Shih HJ. (2017). Advance selling with freebies and limited production capacity. *Omega-International Journal of Management Science*, p. 18-28.
7. Finstat.sk Average revenue. Retrieved 25.2.2020 from <http://www.finstat.sk/31581820>

8. Fleischmann.de Information about company. Retrieved 25.02.2020 from <http://www.fleischmann.de/en/aboutus/history/index.html>
9. Konickova, J. (2016). *Aká je generácia Z?*. Retrieved 27.02.2020 from <https://eduworld.sk/cd/jaroslava-konickova/325/aka-je-generacia-z>
10. Kovacova, M., Klietk T., Pera, A., Grecu J., Gheorghe G. (2019). Big Data Governance of Automated Algorithmic. *Decision-Making Processes, Review of Contemporary Philosophy*, p. 126–132.
11. Kramarova, K., Gregova, E., Cisko, S. (2014). CHANGES IN THE CORPORATE TAX IN SLOVAKIA - TAX LICENSE. *Conference: 8th International Scientific Conference on Business and Management*. Location: Vilnius, LITHUANIA
12. Krizanova, A., Majerova, J., Klietk, T., Majercak, P. (2013). Theoretical Aspects of Brand Building in Seafood Industry. *NAŠE MORE*, p. 105-112.
13. Ludbrook, F., Frajtova Michalikova, K., Musova, Z., Suler, P. (2019). Business Models for Sustainable Innovation in Industry 4.0: Smart Manufacturing Processes, Digitalization of Production Systems, and Data-driven Decision Making. *Journal of Self-Governance and Management Economics*, p. 21–26.
14. Majerova, J., Klietk, T. (2015). Brand valuation as an immanent component of brand value building and managing. *Conference: 4th World Conference on Business, Economics and Management (WCBEM)* Location: Ephesus, Turkey.
15. Milward, R., Popescu, G. H., Frajtova Michalikova, K., Musova, Z., Machova, V. (2019). Sensing, Smart, and Sustainable Technologies in Industry 4.0: Cyber-Physical Networks, Machine Data Capturing Systems, and Digitized Mass Production. *Economics, Management, and Financial Markets*, p. 37–43.
16. Moravcikova, D., Krizanova, A., Klietkova, A., Rypakova, M. 2017. Green Marketing as the Source of the Competitive Advantage of the Business. *Sustainability*.
17. Nadanyiova, M. (2013). The Possibility of Introducing the CRM System in Railway Company Cargo Slovakia. *Conference: 17th International Conference on Transport Means* Location: Kaunas Univ Technol, Kaunas, Lithuania
18. Product catalog. (2015). Retrieved 25.2.2020 from <http://www.elektrickevlacky.cz/documents/RO2015.pdf>
19. ROCO – SLOVAKIA, spol. s r. o. Register. Retrieved 27.2.2020 from <http://www.registeruz.sk/cruz-public/domain/accountingentity/show/163253>
20. The Number of looks. (2013). Retrieved 27.2.2020 from <https://www.youtube.com/watch?v=GlSuz5XyffA>
21. Valaskova, K., Klietkova, J., Krizanova, A. (2018). Consumer Perception of Private Label Products: An Empirical Research. *Journal of Competitiveness*, p. 149-163.
22. Valaskova, K., Kramarova, K. (2015). ANALYSIS OF A MARKET PERFORMANCE IN THE EUROPEAN UNION AND SLOVAKIA. *Conference: 15th International Scientific Conference on Globalization and its Socio-Economic Consequences*. Location: Rajcke Teplice, Slovakia

DIRECTIONS AND PROBLEMS OF INVESTMENT ACTIVITY IN THE NOVOSIBIRSK REGION

Vyacheslav Markelov

*Vice-President of the Novosibirsk Chamber of Commerce and Industry,
Associate Professor at Novosibirsk State University of Economics and Management,
Candidate of Technical Sciences
Novosibirsk, Russia
mva054@gmail.com*

ABSTRACT

The paper assesses the state of the investment climate in the Novosibirsk region and compares the situation in this area with neighbouring regions and the Russian Federation as a whole. Regional legislation and measures of state support to enterprises are analysed. Promising areas of investing activity are considered in detail, such as modernization, expansion or construction of production facilities in the field of biotechnology and biopharmaceuticals; modernization, expansion or construction of socially significant objects in the field of education, culture, physical culture and sports, health care; modernization, expansion or development of transport and logistics infrastructure; modernization, expansion or establishment of machinery and equipment production. The results are summarized in the establishment of innovative infrastructure and Park projects, such as Scientific and Technological Park of Novosibirsk Akademgorodok, the science and technology Park of Biotechnologies, Innovative Medical Technology Center. The innovative infrastructure created in higher education institutions, as well as children's technoparks, is considered separately. Favorable conditions for the development of innovations in the Novosibirsk region will facilitate effective development of regional innovative clusters: information technology, biopharmaceutical, biotechnologies and biomedicine, medical technology clusters. Along with the development of the Siberian Science Polis, the establishment of clusters covering the areas of agriculture, mechanical engineering, metallurgy, instrument-making and new materials is promising. Thus, the goal of the Siberian metallurgical and machine-building cluster of additive digital technologies and productions is to create a digital production of metal products using additive technologies based on its own production of additive machines, including 3D printers, and powder materials. However, despite the progress made, there are a number of challenges to improve the investment performance. A set of measures is proposed in this direction: organizational, legislative, marketing. In particular, public authorities responsible for attracting investments should collaborate more closely with Chambers of Commerce and Industry.

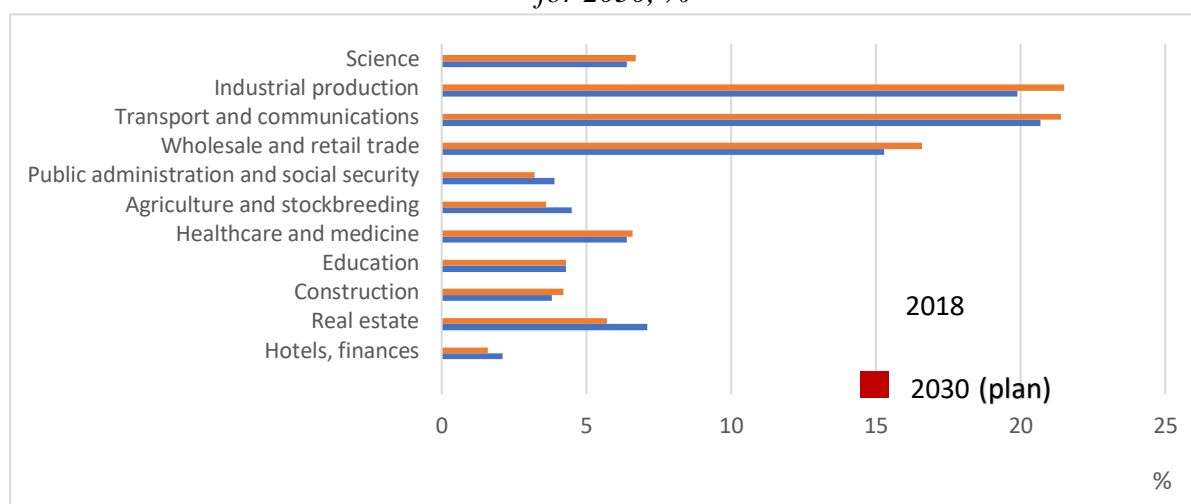
Keywords: *investing activities, innovations, package projects, modernization, cluster*

1. INTRODUCTION

A lot of RF regions are currently facing the challenge of finding new ways and mechanisms of attracting investment into the development of infrastructure complexes. The success of a particular region in attracting investment has become dependent not only on objective factors, such as the volume of the consumer market, availability of raw materials, and geographical location, but also on the investment climate created by the executive authorities of the RF subjects. In the Novosibirsk region, as in other regions, it is essential to create conditions for active participation of business in the implementation of investment projects. A carefully designed investment policy, both at the federal and regional levels, is one of the most important components of the country's successful economic development. In addition to tax revenue on the invested capital, the economy benefits in the form of new jobs, implementing social

programs, etc. Novosibirsk region is one of the industrial regions of the Russian Federation, located in the Siberian Federal Okrug. The region is characterized by the following: equal distance from the Eastern and Western country borders, poor mineral resource base, high diversification of economic sectors (see Fig.1), the development of high-tech industries and a powerful scientific and educational complex, the Central trade and logistics infrastructure for the mega region, which is home to 13 million people.

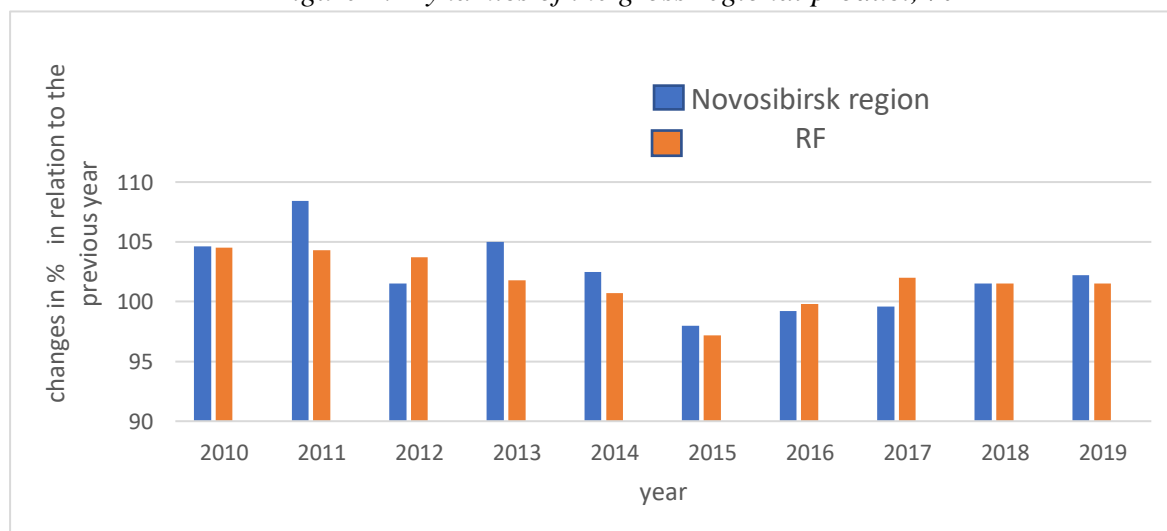
Figure 1: Structure of the gross regional product of the Novosibirsk region in 2018 and plans for 2030, %



Source: Information and analytical website of the Novosibirsk region <http://econom.nso.ru>

In recent years, the region has shown a substantial growth rate of the gross regional product, which is ahead of the overall growth rate over the country (Fig.2).

Figure 2: Dynamics of the gross regional product, %



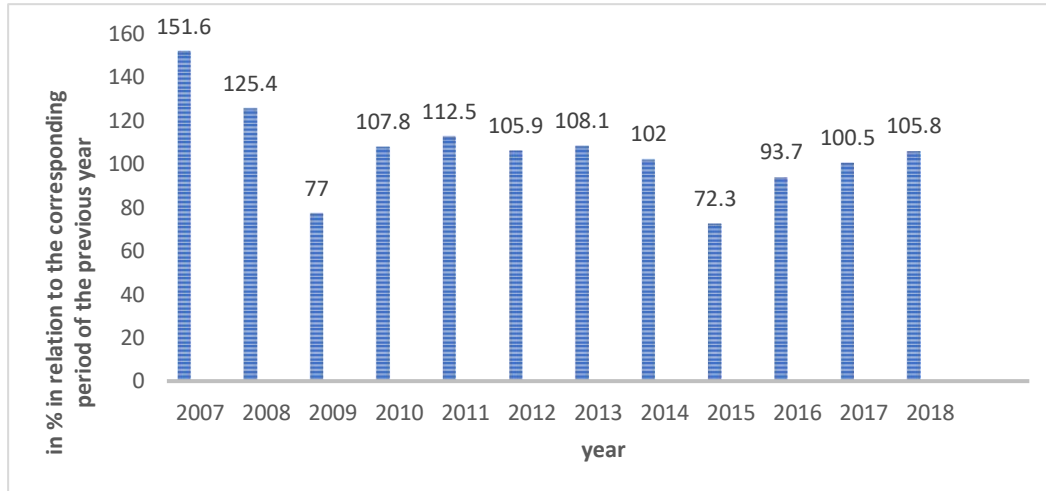
Source: Information and analytical website of the Novosibirsk region <http://econom.nso.ru>

2. INVESTING ACTIVITIES

The strong physical obsolescence of the technological equipment in the region makes it essential to further stimulate the investment process and optimize the investment structure. Against the background of increasing the competition in Russian regions for the financial resources, as well as taking into account the high cost of borrowed funds for the development

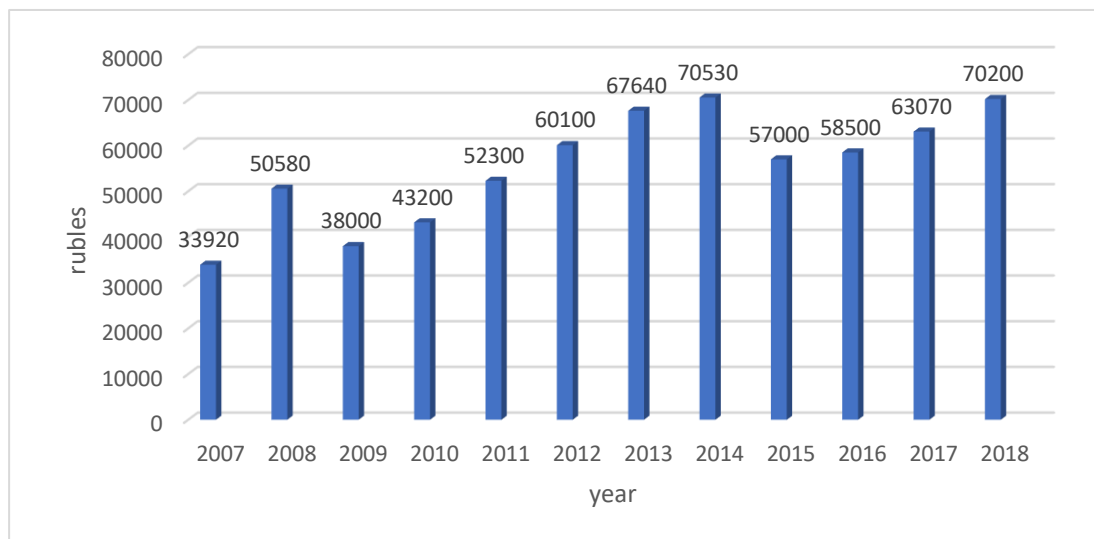
of production and development of new products, investments are the most important factor determining the dynamic economic development of the Novosibirsk region. Since 2016, the region has shown positive growth in fixed capital investment (Fig.3,4)

Figure 3: Dynamics of attracting investments on an annual basis in the Novosibirsk region coming from all sources of financing at comparable prices



Source: Information and analytical website of the Novosibirsk region <http://econom.nso.ru>

Figure 4: Volume of fixed capital investments per capita in the Novosibirsk region



Source: Information and analytical website of the Novosibirsk region <http://econom.nso.ru>

For a comparative assessment of the state of the Russian Federation region's economy ratings, formed on the basis of state statistics and expert assessments, are used. Over the past two years, the Novosibirsk region has ranked 19th in the national rating of the investment climate (out of 85). In general, there is a positive dynamic of the region's position in the national rating. The rating is calculated with 44 indicators in 4 areas: regulatory environment, institutions for business, infrastructure and resources, support for small businesses. In order to actively attract investment to the Novosibirsk region, measures developed by the regional government are to be implemented: legal, financial, tax, property, infrastructure, information and consulting services. The executive authorities of the Novosibirsk region have developed an extensive system of influence on the development of the region's economy, a system of stimulating investment activity, including support measures, as shown in Fig.5.

Figure 5: System of stimulating measures of investment activities in the Novosibirsk region

Target programmes	Agencies	Funds
<ul style="list-style-type: none"> •Credit support •State guarantees and subsidies for repayment of interest on loans and leasing payments •Provision of technological infrastructure (technoparks, business incubators, technology support centers) 	<ul style="list-style-type: none"> •Compensation of expenses for technical re-equipment, R & D, development of business plans, patenting •Infrastructure development of investment sites (industrial parks) 	<ul style="list-style-type: none"> •Benefits and preferences •Information support (consulting centers, websites, congress activities)

Source: Compiled by the author

The peculiarities of the region serve as a justification for the development of two areas in which investment activities should be built:

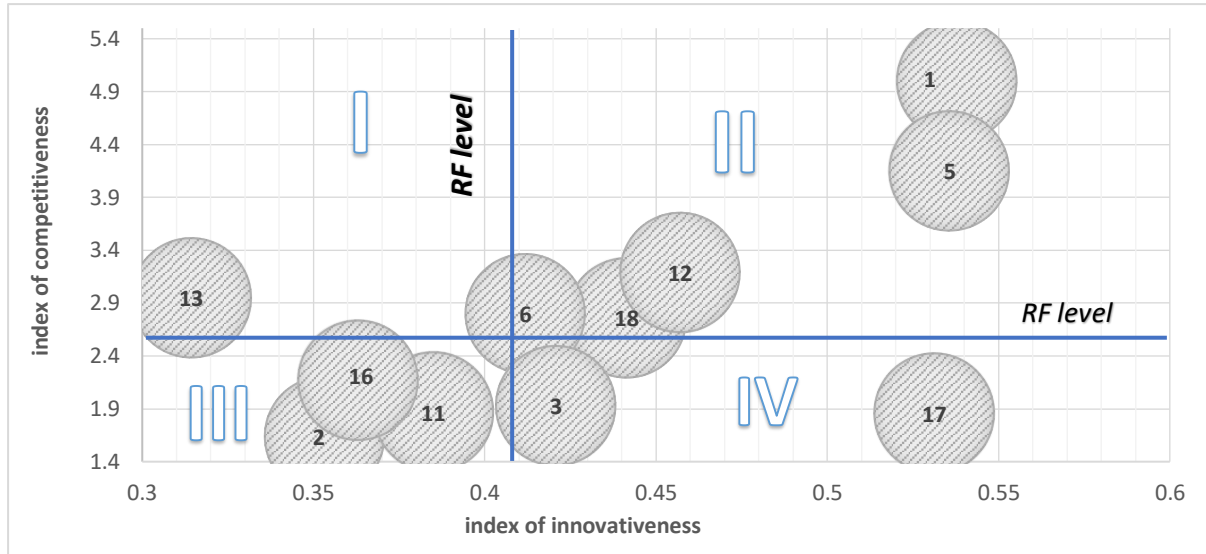
1. High-tech, innovative industries with a high share of added value in the price of manufactured products, which is not affected by the transport component.
2. Industries producing goods and services that will be consumed within the region.

Promising areas of investment activity in the region are indicated modernization, expansion or creation of production facilities: innovative products and services, new materials and technologies; medical devices; in the field of biotechnologies and Biopharmaceuticals; food and processing industry; modern building materials and construction structures; in the field of mining; in the field of wood processing; machinery and equipment. As well as the modernization, expansion or creation of transport and logistics infrastructure; in the field of education, culture, physical culture and sports, and health care.

3. INNOVATIONS

Another rating that characterizes the region's position is the Rating of Innovative Development of Russian Regions. The Novosibirsk region occupies a leading position in the Russian Federation in terms of the main characteristics of the scientific potential, but the region lags far behind Moscow, St. Petersburg, Moscow, Samara and Nizhny Novgorod regions in terms of the number of advanced technologies used in production. This fact is confirmed by the fact that the expenses for technological innovations of organizations by types of innovative activities per capita in 2018 amounted to only 2900 rubles, while in the country this figure amounted to 10,000 rubles, and in the leading regions (Moscow, the Moscow region, Tatarstan, KHMAO) - 20-30 thousand rubles. A significant gap between the high scientific and technical potential and the low susceptibility of the region's production system to innovation is one of the specific problems of the Novosibirsk region's development. Technological lag of industrial enterprises, insufficient funds for R&D financing and related technological risks, low labour productivity and the shortage of a highly qualified personnel hinder the active introduction of new competitive technologies into production. The insufficient development of the mechanisms of new technologies commercialization and transfer and developments is also a limiting factor. Figures 6 and 7 illustrate the difference in investment into the innovative development by region.

Figure 6: Leading regions competitiveness, 2018

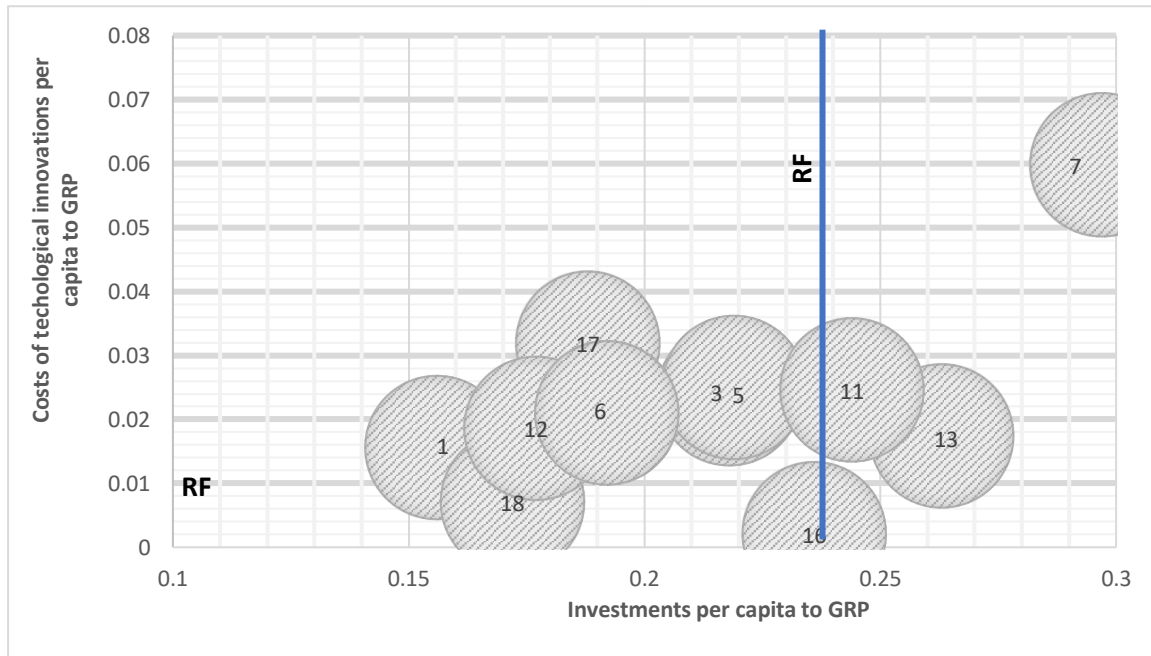


The numbers in the circles correspond to the region number in table 1.

I - area of stimulating development; II - area of innovative development;
III - the area of arrested development; IV - the area of inertial development.
Source: Compiled by the author

As you can see, the Novosibirsk region (18) is within the area of innovative development. But, on the other hand, the level of investment in the innovation structure is low (Fig.7).

Figure 7: Costs of technological innovations by region, depending on fixed capital investments, 2018



Source: Compiled by the author

Public-private partnership is an important tool of attracting investment to the region's economy. For a number of years, the region has been among the top ten in the country. Table 1 summarizes the development indicators of the regions that have the leading positions in all of the three ratings: investment, innovation and public-private partnership.

Table 1: The indicators of the regional development. (Compiled by the author according to the Rating of innovative development of the RF subjects <https://www.hse.ru/primarydata/rir/>; Regions of Russia. Socio-economic indicators.

No	Region	GRP billion rubles	Investments billion rubles	Costs of technological innovations billion rubles	Competitiveness index 2015	Innovative development index 2017
1	Moscow	1,5724,909	2,485,176	249,579	5	0.5378
2	Tambov region	300,554	106,230	5,797	1.03	0.3532
3	Kaluga region	417,065	91,138	10,401	2.19	0.4207
4	Moscow region	3,802,953	945,424	136,923	4.1	0.4616
5	Saint Petersburg	3,866,402	852,923	94,160	3.95	0.5356
6	Republic of Bashkortostan	1,396,411	267,929	29,252	2.94	0.4118
7	Republic of Tatarstan	2,114,176	629,731	126,908	3.98	0.5375
8	Perm region	1,191,101	243,613	36,915	2.52	0.3971
9	Nizhny Novgorod region	1,260,219	259,393	95,618	2.61	0.4957
10	Samara region	1,349,886	264,989	42,524	3.24	0.4167
11	Ulyanovsk region	340,639	82,924	8,328	1.88	0.3850
12	Sverdlovsk region	2,142,514	378,662	39,781	3.47	0.4570
13	Khanty-Mansi Autonomous Okrug	3,511,127	930,721	61,623	3.07	0.3143
14	Krasnoyarsk region	1,882,315	421,780	61,568	2.98	0.4124
15	Irkutsk region	1,192,080	318,787	26,776	3.03	0.3551
16	Kemerovo region	1,058,113	248,665	2,225	1.85	0.3630
17	Tomsk region	511,025	96,223	16,337	2.37	0.5312
18	Novosibirsk region	1,140,863	197,114	8,122	2.52	0.4414

Retrieved from <https://www.gks.ru/folder/210/document/13204>

Science and innovation retrieved from <https://www.gks.ru/folder/14477>

Regional competitiveness index - Russia's growth poles (AV RCI-2015 retrieved from <https://av-group.ru>)

4. PARK PROJECTS

It is necessary to preserve the strengths of the Novosibirsk region, namely a favourable environment for innovations. The major priority of the Novosibirsk region innovation policy is to reduce the significant gap between the high scientific and technical potential of the region and the existing low susceptibility of its production system to innovation in the region, as well as the development of innovation infrastructure, providing significant competitive advantages of the region. Park projects of the Novosibirsk region serve as a foundation for the innovative infrastructure. There is a successful experience in developing state and non-state park projects in the Novosibirsk region. To provide comfortable conditions for investors and innovative firms, the infrastructure of the largest Park projects will be further developed in the Novosibirsk region: Scientific and Technological Park of the Novosibirsk Akademgorodok (hereinafter-Academpark); Scientific and Technological Park for biotechnologies in the science centre of Koltsovo, Novosibirsk region; Innovative Medical and Technological Centre (IMTC); Medical Industrial Park. Academpark is a complex science and technology Park with a unique infrastructure that creates the best conditions for the establishment and development of innovative companies.

The area of constructed objects exceeds 100 thousand square meters. Academpark has 209 residents and created about 5 thousand jobs. In 2015, Academpark was recognized as the most successful technopark in Russia. The innovation infrastructure network, created in higher education institutions, contributes to the training of highly professional personnel with unique experience in commercialization of scientific projects, increasing the number of students employed by organizations that carry out innovative activities. Innovative infrastructure of higher education institutions includes: two technoparks, more than 100 test laboratories, 12 collective centers, 10 business incubators, 10 engineering centers, and 4 technology transfer centers. On the basis of the innovative infrastructure of higher education institutions, almost 250 projects are being implemented in various fields, including architecture and construction, communications, low-temperature plasma and nanofilm synthesis, optics and molecular physics, nanostructure research methods, instrumentation and geoinformatics. In the Novosibirsk region, the children's technological parks will be further developed under the brand name Quantorium within the the agreement with ASI (Agency for Strategic Initiatives). Since 2015, the region has been developing the Children's Technopark in Akademgorodok, as well as school and municipal children's technoparks. In addition, resource centres for engineering competencies, STEM centers, NSU STEM laboratory, centres for youth innovative creativity were established. When developing innovative infrastructure and parks, the main problem is to attract private investors.

5. CLUSTERS

The availability of favourable conditions for the development of innovations in the Novosibirsk region will facilitate effective development of innovative territorial clusters in the region. Park projects are regarded as a good venue for clusters, for example, Novosibirsk Academpark, Biotechpark, Medtechnopark, Medical Industrial Park. The Novosibirsk region is an example of one of the best practices for the development of innovative clusters in Russia. The implementation of the cluster policy contributes to the competitiveness growth of each individual participant and the entire cluster as a whole by realizing the potential for effective interaction between cluster participants, related to expanding the access to innovations, technologies, modern management methods, the latest equipment, specialized services and highly qualified personnel, increasing opportunities for attracting investment and entering international markets, as well as reducing transaction costs. In the process of innovation system transformation in the Novosibirsk region and implementation of federal initiatives in the area of cluster policy in the region the Siberian Science Polis - Innovative cluster of information and biopharmaceutical technologies of Novosibirsk region - has been established. It was included into the List of pilot innovative territorial clusters of the Russian Federation. The major trends of the Siberian Science Polis development are:

- the development of the cluster's innovation and production infrastructure;
- the support of R&D in cooperation with international companies, research institutes and world-class universities;
- ensuring technological leadership in the cluster's areas;
- the development of universities and human capital;
- the creation of a complete added-value chain within the cluster by developing cooperation, including with neighbouring regions;
- the improvement the investment climate and actively attracting investors.

Along with the development of the Siberian Science Polis, the establishment of clusters specialized in agriculture, mechanical engineering, metallurgy, instrument-making and new materials is promising. The following clusters are currently undergoing the stage of institutional design and programmes development: cluster of agricultural machinery manufacturers,

machinery and equipment producers, first grain cluster; Siberian metallurgical and machine-building cluster of additive digital technologies and production of the Novosibirsk region. Thus, the goal of the latter is to launch a digital production of metal products using additive technologies based on its own production of additive machines, including 3D printers, and powder materials.

6. CONCLUSION

The implementation of these measures is aimed at achieving the following results by 2022:

- 12th place in the National Rating of the Investment Climate;
- 4th place in the rating of public-private partnership development;
- 35 residents of existing Park projects in the Novosibirsk region;
- 7 institutional clusters in the region;
- 35 municipalities of the Novosibirsk region that have implemented a tourist navigation system;
- listing of the region in the rating of innovative regions of Russia, developed by the Association of innovative regions of Russia, in the "strong innovators" group;
- the share of organizations that implement technological innovations in the total number of organizations in the Novosibirsk region is 7.7%.

In our view, to ensure a breakthrough economic development based on the most important competitive advantages of the Novosibirsk region, namely knowledge, technologies, and competencies, the regional government programmes should be supplemented with the following proposals:

1. The regional government should more clearly define the priorities and goals of its investment policy, focusing on competitive areas in the region. Update the investment strategy of the Novosibirsk region up to 2030. To set a target of increasing investment into fixed capital as a proportion of GRP up to 27%, the share of fixed capital investment per capita to 100 thousand rubles.
2. As additional support measures:
 - to adopt a regional law on investment tax deduction;
 - to increase the capitalization of the regional industry fund, established to support investment activities in the industrial sector;
 - to reduce the tax rate under the simplified tax system for certain categories of taxpayers.
3. The regional government should collaborate more actively with investors and interested organizations. Actively cooperate with the Chamber of Commerce and Industry in finding and attracting investors.
4. To introduce new tools of attracting investment, namely:
 - to implement the ideology of integrated development of the territory with the advanced infrastructure development and coordination of schedules and volumes of investment into industry and infrastructure projects.
 - to implement the principle of urgency, return on investment, and profitability of private investments in infrastructure profitability due to budget participation in payments for infrastructure, taking into account the growth of budget revenues from the implementation of territory's integrated development projects (Tax Increment Financing mechanism).
 - to implement the principle of delegating responsibility to private investors for the development and operation of infrastructure within the framework of life cycle contracts.

- to implement opportunities to attract long-term institutional investors to infrastructure development in the framework of territory's integrated development and life cycle contracts.
- to attract investors to implement projects that stimulate the development of demand in the macroregion, taking into account the forecast of long-term results of the implementation of territory's integrated development projects.

LITERATURE:

1. Markelov, V. A. (2013). *Public-private partnership as a tool for innovative development of the region's economy. [Gosudarstvenno-chastnoe partnerstvo kak instrument innovacionnogo razvitija jekonomiki regionala]*. Institucional'naja transformacija jekonomiki: uslovija innovacionnogo razvitija. (Institutional transformation of the economy: conditions for innovative development). Collection of articles based on the materials of the III International scientific conference (pp. 92-107)
2. Melnikov, V. V. (2012). *Content of innovation and scientific and technical policy of the state in the construction of the national innovation system [Soderzhanie innovacionnoj i nauchno-tehnicheskoy politiki gosudarstva pri postroenii nacional'noj innovacionnoj sistemy]* TERRA ECONOMICUS. (Volume 10. - No. 4. - pp. 47-61).
3. Rating of innovative development of regions. Retrieved from <https://issek.hse.ru/rir>
4. Regional competitiveness index - Russia's growth poles. Retrieved from <https://av-group.ru>
5. Regions of Russia. Socio-economic indicators. Retrieved from <https://www.gks.ru/folder/14477>
6. Science and innovation. Retrieved from <https://www.gks.ru/folder/14477https://www.gks.ru/folder/210/document/13204>

MANAGEMENT OF NON-PROFIT ORGANIZATIONS

Zuzana Rosnerova

*University of Zilina, Faculty of Operation and Economics of Transport and Communications,
Department of Economics
Univerzitná 1, 010 26 Zilina, Slovak Republic
zuzana.rosnerova@fpedas.uniza.sk*

Dagmar Hraskova

*University of Zilina, Faculty of Operation and Economics of Transport and Communications,
Department of Economics
Univerzitná 1, 010 26 Zilina, Slovak Republic
dagmar.hraskova@fpedas.uniza.sk*

ABSTRACT

The article is focused on the management of non-profit organizations. Since these organizations are entities operating in the non-profit sector, we work with the assumption of a different way of managing a non-profit organization than that which is applicable in the private sector to businesses. The method of management adapts in particular to the mission and objective of the non-profit organization. The main aim of the article was to specify differences in the activities of individual areas of management of non-profit organizations. The first part of the article is devoted to the theoretical aspects of the issue. In the next part of the article we focused on the analysis of management, dividing it into partial sections. In our opinion, non-profit organizations should conduct management on the basis of separate management sections. We divided the management sections as follows: the personnel management section, the strategic management section, the project section and the financial management section. For each management area, we specified important activities that should be undertaken in that management area. We consider this kind of management to be advantageous over “general” management, which would have to solve all kinds of problems at once. If management were to be divided into management areas according to the subject of management, the difficulty of solving problems for the manager would be eliminated. The greatest advantage is that when dividing the management into individual sections is responsible for a given section of a particular manager, who has management of the section in their competence. As non-profit organizations address very many issues, they are the main reason why general management should be divided into sections and entrusted to the appropriate manager. At that time, the management process will become more transparent, with each manager addressing issues for his or her department.

Keywords: *management of non-profit organizations, personnel management, strategic management, project management, financial management and fundraising*

1. INTRODUCTION

The success of non-profit organizations is conditioned by internal processes that take place inside the organization. The most important process in this respect is management, which is understood as the management of a non-profit organization as an independent entity on the market. The future direction of the organization is subject to a number of decisions and it is clear that the functioning of a non-profit organization is not too easy. The non-profit organization must first of all respect its mission under which the reason for the non-profit organization originated. The whole existence of a non-profit organization must follow its mission during its “life”. The management of the non-profit organization, which is responsible for the functioning of the non-profit organization and the results it achieves in the given market,

comes to the forefront. Management as a comprehensive management system is desirable for a non-profit organization, because these types of organizations arise not on the market for making profit but for providing beneficial services to the target entities. The provision of services of general interest takes place in various areas - in particular in the areas of health care, education, culture and sports... The following hypothesis has been established for the issue - the non-profit organization management should not act as one section, but it should be branched into several sections. If only one manager is at the head of a non-profit organization, we consider this to be a shortage factor, because one person cannot solve all problematic issues in a non-profit organization. In our opinion, the management as such should be divided into partial sections and each section would be represented by a separate manager who would be responsible for the section entrusted to it. We see the main advantage in a more precise analysis of the problems that arose and in a more effective solution.

2. THEORETICAL BACKGROUND OF THE SEARCH ISSUE

The term "non-profit organization" refers to an organization that is set up to provide public benefit services in various areas of the economy. In connection with the issue of non-profit organizations we encounter various other terms such as. non-profit sector, third sector, volunteering, independent sector, non-profit organizations or private non-profit sector. In particular, the not-for-profit sector refers to a substantial distinction that distinguishes commercial and profitable organizations from non-profit organizations, where profit and commercial organizations are primarily aimed at making a profit. On the other hand, there are non-profit organizations that have no primary profit-making goal. While they can make a profit, this profit is reused for the operation of a non-profit organization and through it non-profit organizations finance their activities. In general, the profit is used by a non-profit organization to fulfill its mission and its primary objective is to provide public benefit services. By the third sector we mean the space that exists between the public sector, which represents the state or self-government, and the private sector, which is represented by enterprises and also the market. The fact is that non-governmental non-profit organizations provide services that the state does not or does not want to provide, and also these activities are not sufficiently interesting for the private sector because they are not very profitable (Rektorik, 2001). Volunteering is understood in particular as the principle on which non-profit organizations operate. I.e. that a large part of the organization's activities are organized and implemented through volunteers, although there are also paid employees in this sector. The independent sector refers to the independence of the sector from the state or private sector. However, this independence can be considered relative, as non-profit organizations are often subsidized by the state and also by the private sector. Non-governmental organizations are non-governmental organizations, so their establishment and functioning are not subject to the decisions of the state or state authorities. In the private nonprofit sector we can include organizations that are created as private but provide services that are aimed at meeting public objectives (Cibakova et al., 2013). The basic features of non-profit organizations according to Salamon and Anheier consist of five points:

1. have a formal structure - they are some extent formalize, institutionalize,
2. have a private character - they are separate from the state administration,
3. are non-profit-making - they are not intended to generate profits that should be redistributed among owners. Eventual profit is returned to the organization and reused to ensure its operation.
4. they are self-governing - ie they are independent of government control,
5. are voluntary - their activity is based on the activity of volunteer workers (Salamon et al., 1997).

The areas of activity of non-profit organizations are as follows:

- culture, monument protection, art,
- research and education. Data and technology research has been analyzed by Whittle et al. (Whittle et al., 2019).
- health care and social services,
- environmental protection, environmental education. Environmental protection was further elaborated by Csaba et al. (Fogarassy et al., 2018).
- protection of human rights,
- community development,
- work with children and youth,
- recreation, sports, physical education,
- others (eg support of the non-profit sector, its public relations, information services, support of donation and volunteering) (minv).

3. SPECIFICS OF MANAGEMENT IN NON-PROFIT ORGANIZATIONS

Management is an important element of today's organizations. As we look at management as a process of management and direction of the organization, whose task is to meet the set goals, we can say that from management depends in many ways on the success and progress of a particular subject. Every manager in an organization who wants to manage his or her subordinates and achieve the set goals should focus on modern methods and techniques in their managerial practice (Kmecova, 2018). Management as a stand-alone process is used in several areas in today's economies. It has its place in companies, state or self-governing institutions and non-profit organizations use management as well. In each area, management has certain specific features. If we compare management in a private company, that is, in a company and management in a non-profit organization, we would find some differences. The non-profit organization in its management process draws up its own plans, strategies, makes decisions, accepts people, rewards and motivates employees or performs controls. As we have already mentioned, management activities in non-profit organizations are distinguished from commercial enterprises that aim to generate profits (Sedlak, 2008). The primary difference is the relationship with workers in organizations. In companies whose primary objective is to make a profit, employee remuneration and motivation come first. For non-profit organizations, this is primarily motivation. Within a non-profit organization, we can say that workers are motivated primarily by helping others and feeling satisfied in the performance of their work. An employee in a commercial enterprise works mainly because of his remuneration, which is the strongest factor in his motivation. For non-profit organizations, mainly volunteers work, and private enterprises do the work of their employees. The management of non-profit organizations carries out activities aimed at motivating its members. Their motivation, as we have already mentioned, is determined through the mission of a non-profit organization, where its employees are pleased to help others and this activity fulfills them internally - help to others, being useful for others, or simply helping where is the aid much needed and desirable for the other party. The policy of recruiting volunteers in a non-profit organization is closely linked to its mission, and it is through this that non-profit organizations seek to recruit volunteers to carry out their activities and activities (Brozmanova Gregorova, 2012). The follow figure show the basic differences between business and non-profit organization by objective, employee relationship and motivation elements.

Table following on the next page

Table 1: Basic differences between business and non-profit organization by objective, employee relationship and motivation elements

BUSINESS		NON-PROFIT ORGANIZATION	
Primary goal:	Making Profit	Primary goal:	Provision of Public Benefit Services
Employee Relationship	by Remuneration and Motivation	Employee Relationship	By Motivation
Motivation factor	by Salary	Motivation factor	By Mission of Organization

Source: self-processing

Non-profit organization management is characterized by the following specific features:

- non-profit organizations have more complex goal system
- non-profit organizations are undergoing different phases of organizational development. A very important factor to which the development of an organization is subject is a change in market conditions. Changes in the market environment are reflected in quantitative indicators and this issue is described in more detail by Hudakova et al. In her publication (Hudakova et al., 2018).
- personnel management is more complex due to the personnel structure that is made up not only of paid employees but also of volunteers, civilians, workers, field workers, etc.
- the accent is placed on the financial side of the non-profit organization, since it is more or less dependent on external sources and combines the sources of funding so that the non-profit organization is not dependent on one source of funding. I.e. it should have more resources to finance its activities. When comparing the way in which businesses are financed, they can monitor their financial performance through various indicators. On the basis of these, the company is able to assess its economic situation and through the results it can solve a specific way of financing, eg. obtaining a loan (Salaga et al., 2015).
- non-profit organizations also need to address marketing issues, in particular pricing, relationship building, communication and distribution, and marketing is a specific area of governance in a non-profit organization,
- change management, conflict resolution and decision-making - at each in order to do this, the non-profit organization must take into account the specific situation, with particular emphasis on its mission (Majtan, 2005 and Majduchova, 2009).

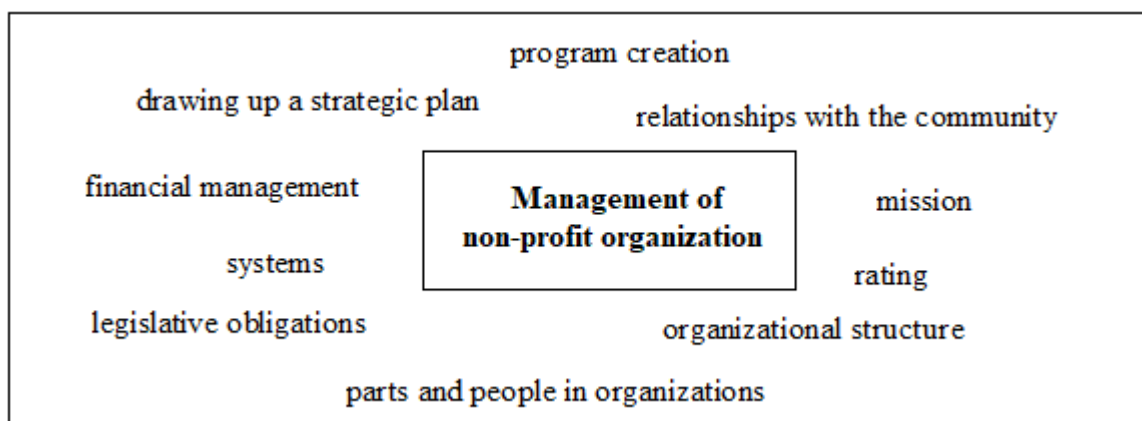
Management in a non-profit organization must take into account the following aspects:

1. Mission - under the mission we understand a clearly defined idea and direction of the non-profit organization, the reason - why the non-profit organization was established and for what purpose.
2. Drawing up a strategic plan - it is the creation of a long-term plan and strategy, the formulation of the main priorities and objectives.
3. Organizational structure: the non-profit organization must determine the type of organizational structure, the distribution of competences among workers and the allocation of responsibilities are important.
4. Organs and people in the organization: it is the specification of the job description for the workers, the way of motivation, education and valuation of the workers and the creation of good working or interpersonal relationships (Butora, 1995).
5. Legislative obligations - knowing and adhering to legal norms related to non-profit organization is very important.
6. Systems: record keeping is essential, information flow and communication are of great importance.

7. Financial management: the emphasis is on budgeting, fundraising as a form of fundraising, accounting, closing of accounts and checking of posted facts are important. According to Michalski et al. the effectiveness of the non-profit organization should be assessed in the context of risk. This is assessed on the basis of the debt-to-property relationship of the organization. (Michalski et al., 2018).
8. Programming: programs include a set of activities to ensure the organization's mission.
9. Relationships with the community: the primary element is communication, monitoring of community needs, responsiveness to identified needs of the target group and provision of services. Issues related to the target group are also addressed by Olah et al. in his paper (Olah et al., 2018).
10. Evaluation: it is a continuous evaluation of the activities of the organization at regular intervals, whether the tasks are fulfilled, and also the effectiveness of people's work in the non-profit organization is evaluated.

Follow figure shows factors to be taken into account by management of non-profit organization.

Figure 1: Factors to be taken into account by management of non-profit organization



Source: self-processing

4. ANALYSIS OF TYPES OF MANAGEMENT IN NON-PROFIT ORGANIZATIONS

Analysis of types of management in non-profit organizations

In order for a non-profit organization to have high-level management, it is necessary to divide the entire management area into partial parts, which would be represented by the following sections. These individual sections of management participate in building the overall quality of management as a separate area in the organization. The quality of management thus depends on the level of the following management sections:

1. personnel management,
2. strategic management,
3. project management,
4. financial management.

4.1. Personnel management

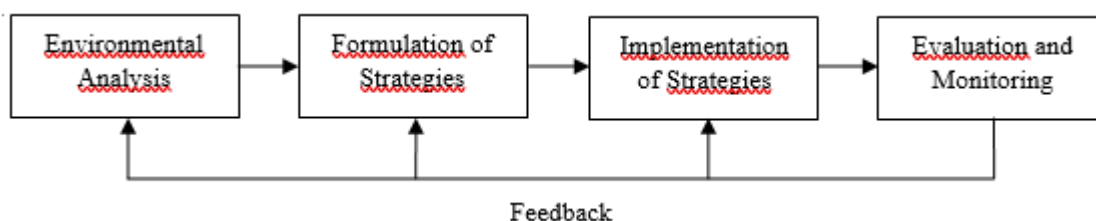
This area of management is in charge of people, who can be said to be the most important entity that determines the success of a non-profit organization and it is people who are the building pillar of a non-profit organization. It is the human factor that depends on the whole functioning of the non-profit organization, because one is responsible for all activities that take place in the non-profit organization. Through the way of managing a non-profit organization as a “living organism”, one is also responsible for the quality of the services provided by the non-profit

organization. It is man who comes up with the idea of helping other subjects and ideas for changing society, which then becomes the mission of a non-profit organization. In our opinion, it is best for a nonprofit organization to have at the top of the people personnel manager, who manages a group of workers and directs them in the right direction in terms of meeting the goals and mission of the organization. Personnel management focuses on the worker in the work process and the role of the personnel manager is the recruitment of workers, their formation, organizing their work, monitoring the worker's work results, his / her working abilities, skills and behavior. The manager in charge of the people therefore gives them the direction and all employees and volunteers orient themselves according to it. We see an advantage in this way of managing employees, because if there were no personnel manager in the organization, there could be several disagreements among people and thus in the presence of a manager who has the management of the people in competence, these shortcomings are eliminated.

4.2. Strategic management

As mentioned in this article, nonprofits are always set up with a particular mission. This mission accompanies them throughout its lifetime. However, it may happen that the mission of a non-profit organization is already fulfilled. At that time, the non-profit organization should strive for further development and try to develop new activities with a changed mission - a new mission. A factor that appears on the market is a changing environment, changing conditions for ensuring the activities of a non-profit organization. Just as commercial businesses monitor market developments and analyze market threats or opportunities, a non-profit organization should also look at the changed conditions. If a non-profit organization perceives potential market opportunities for itself, it should not hesitate to address this. A very suitable method is to carry out a SWOT analysis, through which the non-profit organization can distinguish opportunities respectively. threats in the market and depending on them can also specify its strengths and weaknesses. Then it comes to setting a strategy that represents a long-term plan of a non-profit organization, in which it defines the goals it wants to achieve, as well as the ways and paths by which it can meet the specified goal. It is the choice of the right strategy that gives the company the opportunity to move forward. In this case, the nonprofit must answer the following questions: Where does the organization want to go? What conditions must be respected by her? Which obstacles will an organization have to overcome? Once a strategy has been developed, it is ready for implementation in practice. Once the strategy has been put into practice, a non-profit organization can only specify its effect by conducting an assessment and monitoring of the status that provides feedback to the organization to verify the correctness of the policy. The following figure shows the sequence of steps taken in strategic management.

Figure 2: Phases of the strategic management process



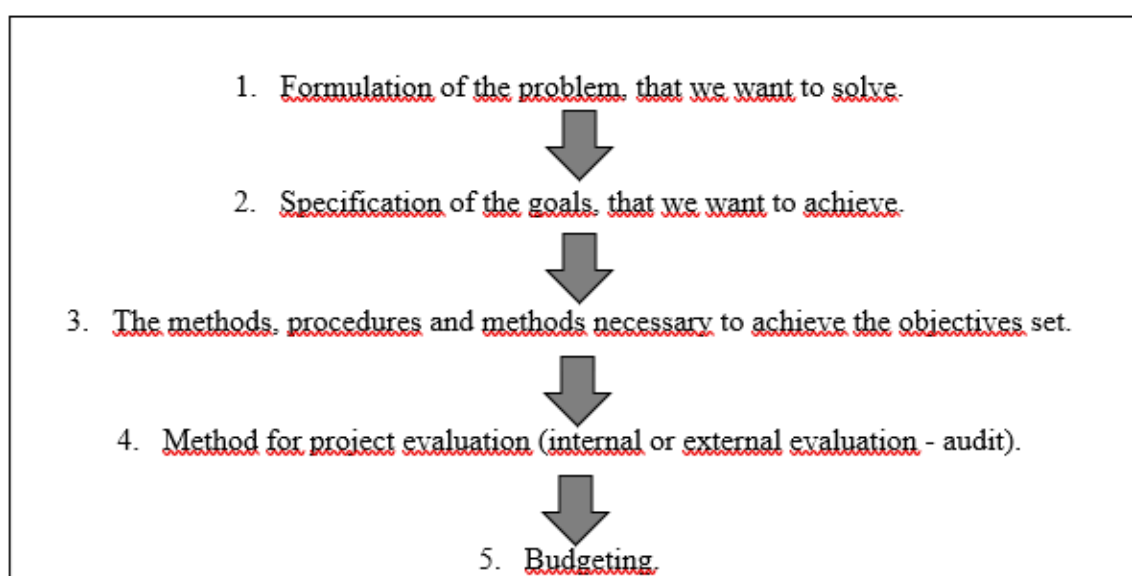
Source: self-processing

4.3. Project management

Project marketing hides activities aimed at planning, managing and verifying certain activities that have been selected to address a specific problem. The project as such must contain basic requirements: it must have specified objectives, set deadlines when the project starts and when

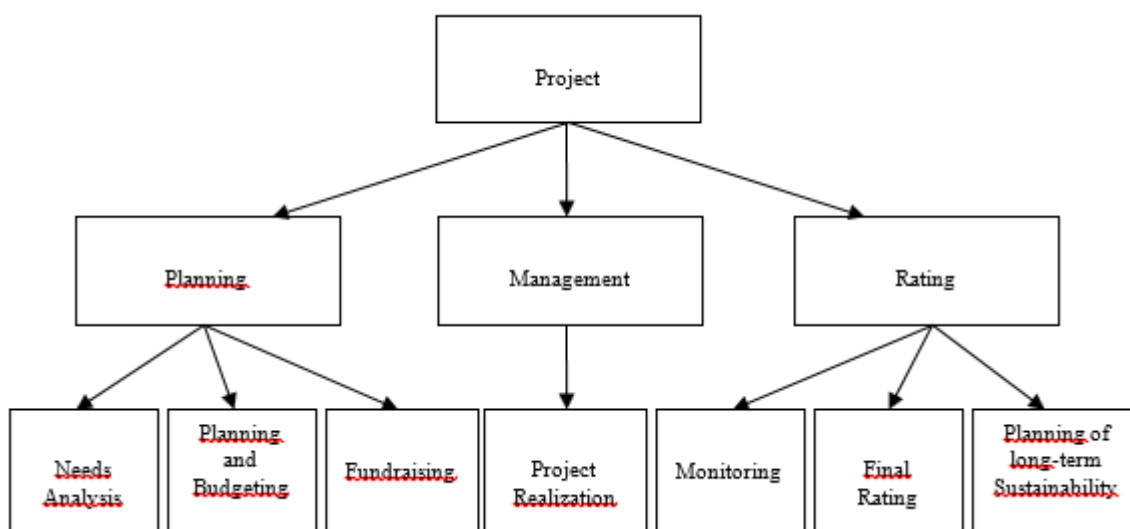
it is planned to be completed, the means to be used in the project implementation must be defined and necessary to fulfill the set objectives; resources, material resources and financial resources - ie budgeting. In connection with the financial aspect of projects and the issue of project portfolio optimization, deal also authors Kral, Valjaskova and Janoskova (Kral et. Al., 2019). In the case of non-profit organizations we are talking about grant projects. A non-profit organization can apply for a grant project announced by donors (the donor can be the state, self-governing institution, but also business entities). This project is, in fact, a plan of activities with a well-defined intention that is set for a certain period (usually within one year) and defines the results to be obtained through the grant project. A grant project is a way for a non-profit organization to raise money for a specific outcome, development of certain problematic areas eg. in the sphere of education, culture, sport, etc. The following figure shows the key questions that a non-profit organization must answer in order to be successful in the fight for a grant project.

Figure 3: Sequence of steps in strategic management



Source: self-processing

Figure 4: Phases of strategic management



Source: self-processing

4.4. Financial management and fundraising

As we mentioned several times, a non-profit organization is an organization where profit is not the primary goal of its existence. But even a non-profit organization can make a profit, which is then used to finance it. Financial management is of great importance when deciding on the finances of a non-profit organization and how to finance it. The financial management of a non-profit organization ensures financial management, which consists of several phases. The first phase is financial planning, whose task is to identify the financial needs of a non-profit organization. The financial planning then depends on the budgeting, which is based on the organization's plan for the next period. Part of the planning phase is fundraising planning, which means the acquisition of financial, but also various other means (eg material) to ensure the operation of a non-profit organization. But mostly fundraising is about getting financial resources. It is a carefully planned, organized and strategically oriented activity of non-profit organizations whose aim is to identify the sources of funding and subsequently raise funds to meet the specific needs of the non-profit organization. Once the non-profit organization has obtained the necessary funds, the issue of managing these financial resources comes to the fore and must be handled in a truly sensible way, since the resources are very limited. It is also true that all activities that a non-profit organization funds must be carefully record and keep accounts. Accounting for non-profit organizations is very important, as all financial operations must be justified and registered by the non-profit organization. The final phase of financial management is represented by the preparation of statements and final reports for donors, ie entities that have provided it with financial resources. In connection with the evaluation of financial activity, rating is used, described in more detail by Valaskova and Zvarikova (Valaskova, Zvarikova, 2014). In the event that the financial situation of the organization is not the best, it is justified to address the state of the financial situation through bankruptcy models, also pointed out by the authors Svabova, Durica and recommend focusing on in-depth statistical analysis of data (Svabova, Durica, 2019). There are several ways of financing non-profit organizations. These may be funds obtained from the state, from private entities (businesses and entrepreneurs), from individual donors, funds obtained from foundations, or from funds obtained from their own activities - from the achieved profit. The issue of ways of financing non-profit organizations will be discussed in another of our publications. The following table shows financial management issues in a non-profit organization.

Table 2: Basic issues of financial management in non-profit organization

Basic Issues of Financial Management in Non-profit Organization	
1. What do we want to realize?	Project
2. What do we need to implement the project?	Budget - Project costs
3. From whom do we get the funds?	Budget - Project Revenue Resources
4. How do we get funds from the source?	Fundraising methods/ Forms of support
5. What do we offer for this?	Equivalent

Source: self-processing

This analysis provides the types of management that non-profit organizations should pay attention to. The main reason why non-profit organizations should set up individual sections of management is to eliminate any shortcomings in the event that the non-profit organization's management functions as one general unit. Therefore, we propose to divide the management into partial areas, and for each area should work one manager who would be in charge of the

management of the section. We analyzed four basic areas of management specifying the issues that should be addressed in each section of management. In the future, we would also like to address the issue of analyzing the ways financing which non-profit organizations can use. The established hypothesis has been verified, namely that non-profit organizations are characterized by certain management specificities that distinguish them from private enterprises.

5. CONCLUSION

Non-profit organizations are becoming an important part of the national economies. Their contribution lies mainly in the provision of services of general interest in various areas of the economy. Non-profit organizations justify their creation by a mission, which is an expression of the purpose for which a non-profit organization is established. During its activities, a non-profit organization has to deal with many issues, a very important area is the area of management, which is addressed in our article. In our publication, we came to the conclusion that it would be of great benefit to non-profit organizations to break down management into partial sections, headed by managers who would be in charge of a specific section of management. The greatest advantage is seen in the elimination of shortcomings that would be present if the non-profit organization had a “general” section of management that would solve all problematic issues in the organization. Therefore, we recommend to divide the management in non-profit organizations individually into basic sections - the personnel management section, the strategic management section, the project management section and the financial management section. Each of these sections would be represented by a specific manager and he would be responsible for the level of that section with respect to his competencies. There are a lot of questions to solve in non-profit organizations and therefore we see an advantage especially if each section is dealt with separately. As changes in the market and in society at large in the economy take place, people's needs are constantly changing, and therefore the activities of non-profit organizations need to be adapted to the changing conditions of society. Since non-profit organizations are focused on providing community service that we consider to be a reflection of the standard of living for the target groups within their remit, clearly the activity of non-profit organizations is very important to the standard of living of the specific communities, to which are the services provides. Management of nonprofit organizations, given the large number of activities it deals with, we consider it to be a key means for properly fulfilling the mission of the nonprofit organization.

ACKNOWLEDGEMENT: *The paper is an output of the science project VEGA 1/0544/19 Formation of the methodological platform to measure and assess the effectiveness and financial status of non-profit organizations in the Slovak Republic.*

LITERATURE:

1. Brozmanova Gregorova, A. A. et al. (2012). *Dobrovolnictvo na Slovensku: Vyskumne reflexive*. Bratislava: Iuventa.
2. Butora, M., Fialova, Z. (1995). *Neziskovy sektor a dobrovolnictvo na Slovensku*. Bratislava: SAIA-SCTS a FOCUS.
3. Cibakova, V, Benova, E, Neubauerova, E. (2013). *Ekonomika verejného sektora*. Bratislava: IURA Edition.
4. Fogarassy, C., Neubauer, E., Mansur, H., Tangl, A., Olah, J., Popp J. (2018) The main transition management issues and the effects of environmental accounting on financial performance – with focus on cement industry. *Administratie si Management Public*, 31, 52-66.

5. Hudakova, M., Masar, M., Luskova, M., Patak, M., R. (2018). The Dependence of Perceived Business Risks on the Size of SMEs. *Journal of Competitiveness*, 10(4), 54–69.
6. Olah, J., Sadaf, R., Mate, D., Popp, J. (2018). The influence of the management success factors of logistics service providers on firms' competitiveness. *Polish Journal of Management Studies*, 17(1), 175-193.
7. Kmecova, I. (2018). The processes of managing human resources and using management methods and techniques in management practice. *Ekonomicko-manazerske spektrum*, 12(1), 44-54.
8. Kral, P., Valjaskova, V., Janoskova, K. (2019). Quantitative approach to project portfolio management: proposal for Slovak companies. *Oeconomia Copernicana*, 10(4), 797-814.
9. Majduchova, H. (2009). *Neziskové organizácie*. Bratislava: Sprint dva.
10. Majtan, M. et al. (2005) *Manazment*. Bratislava: Sprint.
11. Michalski, G., Blendiger, G., Rozsa, Z. et al. (2018). Can We Determine Debt To Equity Levels In Non-Profit Organisations? Answer Based On Polish Case. *Inzinerine Ekonomika-Engineering Economics*, 29(5), 526–535.
12. MINV. (2020). *Informacie o registrovani neziskovych organizacii*. Retrieved 12.02.2020 from <https://www.minv.sk/?informacie-o-registrovani-neziskovych-organizacii>.
13. Rektorik, J. (2001). *Organizace neziskoveho sektoru. Zaklady ekonomiky, teorie a rizeni*. Praha: EKOPRESS.
14. Salaga, J., Bartosova, V., Kicova, E. (2015). Economic Value Added as a measurement tool of financial performance. *Procedia Economics and Finance*, 26, 484-489.
15. Salamon, M., L., Anheier, K., H. (1997). *Defining the nonprofit sector: A Cross-national Analysis*. Manchester: Manchester University Press.
16. Sedlak, M. (2008). *Základy manažmentu*. Bratislava: Iura Edition.
17. Svabova, L., Durica, M. (2009). Being an outlier: a company non-prosperity sign? *Equilibrium – Quarterly Journal of Economics and Economic Policy*, 14(2), 359-375.
18. Valaskova, K. Zvarikova K. (2015). Prediction of credit risk by selected theoretical rating models. *Advances in Social and Behavioral Sciences*, 5, 160-166.
19. Whittle, T., Gregova E., Podhorska, I., Rowland, Z. (2019). Smart Manufacturing Technologies: Data-driven Algorithms in Production Planning, Sustainable Value Creation, and Operational Performance Improvement. *Economics, Management, and Financial Markets*, 14(2), 52–57.

THEORETICAL BACKGROUND OF SIMPLE ACCOUNTING AND COMPARISON OF THE USE OF SIMPLE ACCOUNTING IN THE CONDITIONS OF SLOVAK REPUBLIC AND CZECH REPUBLIC

Filip Rebetak

*University of Žilina, Žilina, Slovakia
filip.rebetak@fpedas.uniza.sk*

Dusan Karpac

*University of Žilina, Žilina, Slovakia
dusan.karpac@fpedas.uniza.sk*

Viera Bartosova

*University of Žilina, Žilina, Slovakia
viera.bartosova@fpedas.uniza.sk*

ABSTRACT

The study deals with the content, structure and reporting ability of simple accounting statements exclusively in the conditions of the Slovak and Czech Republic. The aim of the study is to analyze the theoretical-legislative analysis and to assess the content, structure and reporting ability of simple accounting statements. Based on the results, we recommend that entities use reporting in business practice and suggest ways to improve the current situation. Objects of inquiry are entities that deal with the system of simple accounting. The subject of the survey is simple accounting and reporting of business entities. The paper is based on the theoretical part of accounting, main and auxiliary accounting books, simple accounting records, accounting units and comparison of accounting conditions in the Slovak Republic and the Czech Republic. The practical part shows the analytical part, which compares the content, structure and the ability to report simple accounts in Slovakia and the Czech Republic.

Keywords: *Simple accounting, Accounting unit, Book of receivables and liabilities*

1. INTRODUCTION

The globe is made of mixed economies in which countries vary, where there are developed and developing countries. We are dealing with accounting every day. We do not have to be accounting units either. Every household is in some way an accounting unit. Monthly Accountant checks revenue and expenses. It monitors enough cash to pay a repayment if it has a loan from the bank for housing or the cost of a passenger car. She cares for her property. It rebuilds, restores and invests, because he knows that he will return his value in the future. The objective of each entity is to evaluate its assets, so businesses and entrepreneurs should try to do that (Alshehhi et al. 2017; Radisic & Dobromirov 2017; Klietk et al. 2018). Accounting is an essential part of the information system of accounting units. Information that an entity can obtain from accounting serves as a basis for routine, operational decision-making, but also for decision-making in the future. Trends in the ever-changing international economy are driven by general trends such as internationalization, the strengthening of globalization and glocalization, steady growth in international competition, corporate attempts to outsource and reduce the number of suppliers, research, development and innovation, shortening product life cycles, shifting to time-based competition, and changes in customer buying habits and supply chain strategies, which can all be seen in accounting (Olah et al. 2018; Cygler & Sroka, 2017; Klietk et al. 2018). Accounting is one of the oldest methods of keeping records, the subject of which are records of economic activity. Each entity must decide at the beginning of its business how it will maintain its accounting.

It is up to them whether to be a natural person or a legal person. The law determines which accounting units can carry simple or double-entry bookkeeping. Accounting information helps accounting units to plan, decide, and control business processes. Businesses have a need to have a credible overview of their receivables and liabilities to business partners as well as to the state. The state is accountable for accounting and the result of this management is a normative adjustment in the form of a chart of accounts and binding billing procedures with a possible choice of available solutions (Baulina & Klyushin 2017). Simple Accounting deals with income and expenditure tracking, what is also referred to as a cash principle. This result in a difference in revenue and expenditure is the result of the management. It is accounting, which is the essence of monitoring cash flows (Slosarova 2012).

2. THEORETICAL BACKGROUND

The literature offers several definitions of accounting. Accounting is a method of recording economic activity through accounts, an internally structured system of information and data in value terms. Accounting is a closed, internally structured system of information used to identify, measure and evaluate business activity. It provides monetary information about the financial position and profitability of the entity. It is the most comprehensive economic information system, which accurately and reliably provides economic information on the status of individual items of assets, as well as on revenues and costs, or more precisely income and expenses that result in profit or loss. Another important task of accounting is to provide the basis for the calculation of the income tax base and the tax liability of the entity (Rybicka & Rybicki 2018). General accounting principles and principles include the prudence principle in which the valuation of assets and liabilities should take into account risks and uncertainties. The financial statements shall show only those profits that have actually been achieved. However, losses will be reflected in the financial statements even if their amount is not exactly identifiable at the reporting date. The principle of historical accounting is based on the valuation of assets at cost. The implementation principle is based on the assumption that the revenue is not necessarily connected with the receipt of funds, it arises from the moment of dispatch of the products. Furthermore, it is the principle of the factual connection of the reported data with the relevant period, clarity of information, inter-company comparability and relevance of the reported information (Vojtovic 2016). The principle of consistency between accounting periods is based on methods of economic operations and valuation. This means that items in statements should remain the same not only within, but also between, accounting periods. They must ensure comparability and continuity. Another principle is the materiality principle, which requires the financial statements to contain quantitative information that is material to the entity's potential decisions. The principle of objectivity of accounting information means changes in assets and liabilities and these changes should not be accounted for until they have been objectively identified. The last principle is the priority of content over form, which means that transactions should be published in accordance with their economic substance (Sadaf et al. 2018). An entity that accounts in the single entry bookkeeping accounts in the books and in the cash book, in the receivables and payables book, and in auxiliary books. In the single entry accounting system, the financial statements include a statement of revenue and expenditure and a statement of assets and liabilities. The Moneybook is the general ledger. It contains information on cash and bank balances, income in the accounting period, expenditures in the accounting period, interim items that capture movements of funds that are not yet revenue or expenditure in the accounting period (Brabenec 2010).

3. METHODOLOGY

The elaboration of this article required some methodology and methods to be used. Methods of analysis and synthesis were used for gathering information, decomposing it into groups and

gradually clustering and merging relevant information into a coherent form. The description method was used to describe the accounting situation in each country concerned. Meeting the goal of the article based on its title required a method of comparison for comparing simple accounting in Slovakia and the Czech Republic.

4. RESULTS

The Commercial Code requires entrepreneurs to keep accounts in the scope and manner established by a special law. The Act on Accounting provides for the scope, manner and demonstration of bookkeeping, as well as the scope, content and provability of the financial statements (Hraskova & Bartosova 2014). Accounting is an economic discipline that provides the information needed for decision making. The basis of accounting is presented as a process of systematically recording economic phenomena, which provides data on the economic activity and economic relations of accounting units, relations with the state, municipalities, higher territorial units and the public body in order to give a true and fair view. Accounting is considered one of the oldest methods of evidence (Bastincova 2001; Gavurova et al. 2017). Since 2016, the Amendment to the Act on Accounting has brought several changes for accounting units in the Czech Republic. Some of these changes stemmed from the obligation to introduce European legislation into Czech legislation. Other changes responded to the requirements of practice. It is precisely in the latter group that the introduction of simple accounting is again the case. This adjustment was also based on social demand for simple bookkeeping. The demand was mainly from very small accounting units that were not primarily established for business purposes and are predominantly socially beneficial. They are so small that they do not have sufficient capacities to allow them to keep double-entry bookkeeping. It would be for them financially and also administratively demanding. That's why they wanted a simple accounting that is not so demanding (Kucera 2016). Many bookkeepers do not consider simple bookkeeping for accounting, and therefore they like when the Act on Accounting (Act No. 563/1991 Coll.) Was abolished as of 31 December 2003. However, some types of accounting units may continue to use simple accounting because Section 38a of the Act allows civil associations, churches, religious organizations and hunting communities to meet the limit, and that they have had to receive up to CZK 3,000,000 per year. Since 2004, individuals have had to go to tax records if they have not led double-entry bookkeeping. Since simple accounting has begun to be taken into account since 2016, they have also regulated the types of entities that can use it. The law on accounting again returns the concept of a monetary journal, which is one of the books of simple bookkeeping. Other are the book of receivables and liabilities, auxiliary books on other assets (financial assets, long-term assets, inventories and valuables). Cash and cash receipts and receipts actually received, paid and interim items (transfers between the bank account and the cashier or vice versa) will be recorded in the cash register as in the past cash, bank, savings and credit cooperatives. Simple accounting does not allow you to charge in the marketing year, the accounting period is the same as the calendar year. Within six months after the end of the accounting period, an overview of assets and liabilities and a summary of revenue and expenditure is required. The Decree is intended to provide accurate accounting items, bookkeeping and simple accounting methods. Accounting entities continue to exercise their obligation under Sections 29 and 30 at the end of the accounting period, to inventory assets, and to determine the real estate status. The funds also include funds in cash and accounts, inventories of liabilities and receivables as well as ancillary books. A record is made of the inventory carried out, which becomes an accounting record and the accounting entity has the obligation to prove the inventory for a period of five years after its execution (Fabova, 2008). In modern history, simple bookkeeping appears in the Accounting Act in 1991. The Accounting Act defined the requirements for both simple and double-entry bookkeeping. The then simple accounting was designed for individuals, contributory organizations, political parties and

churches. As of 1 January 2004, the Act on Accounting was amended. Simple bookkeeping has been canceled and replaced by tax records. The tax records are governed by the Income Tax Act. Their purpose is to establish the tax base. Tax records were for individuals. Entrepreneurs can keep it in the scope of simple bookkeeping. The term "double-entry bookkeeping" has been replaced by "accountancy". In Slovakia, simple bookkeeping remained and, in addition, tax records were introduced in 2009 (Fabova, 2012). Moneybook is the most important book in simple bookkeeping. In the journal, the accrual is accounted for in the time sequence of events that represent the income or expense of the cash. The cash register must include information on income, cash and cash balances, in cash and on bank accounts. The moneybook also accounts for interim items. Interim items are similar to the "money on the way" account in double-entry bookkeeping, that is to transfer funds between the treasury and the account or between accounts. If an entity uses a foreign currency, it accounts for a currency box or a foreign currency account. An entity receiving cash payments is required to keep daily sales records and charge them in the cash log at least once a month. Cashbook entries allow you to determine the income tax base after the end of the tax period. The second mandatory book of simple bookkeeping is the book of claims and liabilities. The Book of Receivables and Liabilities includes a record of receivables and payables to other entities. This book distinguishes receivables and payables from business relationships, advances granted and received, receivables and payables from advances granted and received, and other possible liabilities and receivables. This book allows you to obtain all information regarding individual debtors and creditors, liabilities and receivables. An ancillary book is used by an accounting entity only if it is used for it (Kaletova 2002). A non-current intangible and tangible fixed asset, financial asset, inventory and valuables are to be recorded in the asset auxiliary's book. In the statement of income and expense, income and expense are classified as main and economic activity, including aggregate items, and their difference is recognized at the balance sheet date of the current accounting period and at the balance sheet date of the previous accounting period or at any other time to which the income statement and expenditures. Equally, asset and liability items are also included in the statement of assets and liabilities, including aggregate items, and their difference to the balance sheet date of the current accounting period and to the balance sheet date of the prior period, or to the date when the statement of assets and liabilities is prepared. Both the statement of assets and liabilities and the statement of income and expense are compiled in monetary units of the Czech currency and individual items are reported in thousands of Czech money units (Balcerzak 2017). After reading the literature, we have come to the conclusion that the content of accounting documents, the opening of accounting books is the same as in Slovakia and in Bohemia. The cash register must contain at least a summary of the cash and bank accounts broken down into revenue and expenditure, a statement of revenue subject to income tax, income tax exempted or exempt from income tax, a statement of expenditure income tax which is not subject to income tax, or are exempt from income tax, a breakdown of revenue and expenditure broken down by special legislation, and a breakdown of income and expense on interim items. The entity may decide on the next breakdown of the moneybook. The organization of a journal entry must be made in an appropriate, transparent and comprehensible manner. The explanatory notes to this system must be attached (stamping of columns, numbering of accounting documents). The cash book must contain the sum of the income and expense at least at the end of each calendar month and at the time of closing the cash book. The cash-book is an accounting record and must bear the name "Moneybook", the year or period for which it is kept, the number of letters numbered, the signature of the person responsible for keeping the cash register and also the signature of the person responsible for the accounting. The balance of cash and interim items is obligatorily transferred to the journal in the following year (Adamikova 2014).

5. CONCLUSION

The aim of the paper was to assess the content, structure and reporting ability of simple accounting statements on the basis of a theoretical and legislative analysis and propose possibilities for improving the current state. We have split the accounting units, which should be charged in the system of simple and double-entry bookkeeping. For small and medium-sized businesses, to account for a simple bookkeeping system, and for large businesses we have designed a system of double-entry accounting. The proposal is also to keep book-keeping on the basis of records through the proportion of expenditure on taxable income, so-called lump-sums. This registration is very simple and usually does not require the assistance of an external accountant. Based on the theoretical knowledge from the Slovak and the Czech Republic, we believe that all entities should endeavor to effectively control their assets, liabilities, revenues and expenditures. They should be interested in investing so they can optimize tax returns. By having control over their activities, they will also be successful.

ACKNOWLEDGEMENT: *This is paper is an outcome of project VEGA: 1/0544/19 Formation of the methodological platform to measure and assess the effectiveness and financial status of non-profit organizations in the Slovak Republic.*

LITERATURE:

1. Adamikova, M. (2014). Uctovna zavierka podnikateľov uctujúcich v sustave jednoduchého uctovnictva za rok 2014. In *Dane a uctovnictvo v praxi : mesacnik plny informacii z oblasti dani, prava a uctovnictva*, 19, 43 – 55.
2. Alshehhi, Y.Z., Olah, J. (2017). Sectorial analysis: Growth accounting of secondary industries, *Network Intelligence Studies*. 5, 39-45.
3. Balcerzak, A.P., Klietk, T., Streimikiene, D., Smrcka, L. (2017). Non-Parametric Approach to Measuring the Efficiency of Banking Sectors in European Union Countries. *Acta Polytechnica Hungarica*. 14, 51-70.
4. Bastincova, A. (2001). *Danovo uznatelne vydavky v jednoduchom uctovnictve fyzickych osob od A po Z*. Bratislava: Verlag Dashofer.
5. Baulina, O.A., Klyushin, V.V. (2017). Methodical bases of formation of investment policy of enterprises of construction materials industry. *Ekonomicko-manazerske spektrum*, 11, 1-12.
6. Brabenec, T. (2010). Certain important aspects of cost contribution arrangements in financial management. *World Academy of Science, Engineering and Technology*. 43, 921-932.
7. Cygler, J., Sroka, W. (2017). Competition Disadvantages: the Case of the High Tech Companies. *Inzinerine Ekonomika-Engineering Economics*, 28, 494-504.
8. Fabova, Z. (2008). Nove jednoduche uctovnictvo podnikateľov. In *Manazment, mzdy a financie: casopis pre ekonomov, podnikateľov, podniky a organizacie*, 15, 90 – 140.
9. Fabova, Z. (2012). Penazne prostriedky v jednoduchom uctovnictve. In *Dane a uctovnictvo v praxi: mesacnik plny informacii z oblasti dani, prava a uctovnictva*, 17, 47 – 54.
10. Gavurova, B., Packova, M., Misankova, M., Smrcka, L. (2017). Predictive potential and risks of selected bankruptcy prediction models in the Slovak business environment. *Journal of Business Economics and Management*, 18, 1156-1173.
11. Hraskova, D., Bartosova, V. (2014). Emergent Approach to Management of the Transport Company. *Advances in Social and Behavioral Sciences*, 5, 92-96.
12. Kaletova, V. (2002). Pohľadavky v jednoduchom uctovnictve. In *Danovy a uctovny poradca podnikateľa*, 8, 13 – 46

13. Kliestik, T., Kovacova, M., Podhorska, I., Kliestikova, J. (2018). Searching for Key Sources of Goodwill Creation as New Global Managerial Challenge. *Polish Journal of Management Studies*, 17, 144-154.
14. Kliestik, T., Misankova, M., Valaskova, K., Svabova, L. (2018). Bankruptcy prevention: new effort to reflect on legal and social changes. *Science and Engineering Ethics*, 24, 791-803.
15. Kucera, P. (2016). Jednoduché účetnictví v roce 2016, In: *Novela zákona o účetnictví číslo 221/2015 Sb.*
16. Olah, J. Judit, Zeman, Z., Balogh, I., Popp, J. (2018). Future challenges and areas of development for supply chain management. *Logforum*, 14, 127-138.
17. Radisic, M., Dobromirov, D. (2017). Statistical analysis of price returns of regional stock market indices. *Transformations in Business & Economics*, 3, 175-184.
18. Rybicka, K., Rybicki, P. (2018). Chosen aspects of IT systems in management and accounting in companies under globalization. *Ekonomicko-manazerske spektrum*. 12, 57-66.
19. Sadaf, R., Oláh, J., Popp, J., Máté, D. (2018). An Investigation of the Influence of the Worldwide Governance and Competitiveness on Accounting Fraud Cases: A Cross-Country Perspective. *Sustainability*. 10, 588, 1-11.
20. Slosarova, A. (2012). *Zaklady účtovníctva*. Bratislava : Ekonom.
21. Vojtovic, S. (2016). The Impact of The Structural Funds on Competitiveness of Small and Medium-Sized Enterprises. *Journal of Competitiveness*, 8, 30 – 45. DOI: 10.7441/joc.2016.04.02

THE IMPORTANCE OF TIME MANAGEMENT IN NON-PROFIT ORGANIZATIONS

Emilia Gresakova

University of Zilina, Slovakia
emilia.gresakova@fpedas.uniza.sk

Darina Chlebikova

University of Zilina, Slovakia
darina.chlebikova@fpedas.uniza.sk

ABSTRACT

One of the most challenging issues faced by nonprofit managers is improving organizational efficiency. Another challenge for leading nonprofit organizations is managing limited resources in a competitive social services industry to meet growing service requirements. To meet the growing demands of their constrained constituencies, nonprofit leaders could implement effective time management practices to ensure organizational success. Although there is extensive literature on organizational efficiency, there was limited data available specifically for non-profit organizations, especially regarding time management training. The purpose of this article was to identify the perception of time management and the use of effective time management strategies. The study findings revealed statistically significant relationships between the TMPI score and selected demographic data. The findings revealed that leaders perceived the use of time, demographic characteristics, attitudes and time management strategies were factors in the introduction of effective time management techniques to improve the organization's success and efficiency. The results provided a framework for nonprofit managers to adopt time management - strategies that could improve the funding of research efforts and organizational success and efficiency. The results revealed why some nonprofit implementation managers are not implementing effective time management strategies to expand funding opportunities and improve individual and organizational growth and success. This research focuses on the lack of knowledge about the effective use of time management strategies in non-profit organizations. The current study has attempted to provide a realistic analysis of how leaders perceive timing and effective time management strategies that affect organizational success. Focusing on nonprofit groups could be a missing link to help nonprofit leaders to increase the effectiveness of the organization.

Keywords: Disturbances, Non-profit organizations, Stressors, Time management

1. INTRODUCTION

The importance of efficient time use is unique to the non-profit sector because of the likelihood of reduced funding. Time management is a discipline that deals with the organization of time. It is very important in this type of management to set clear goals of its activities and set priorities, ie. to define what is important for us in terms of work or personal activity and how much time and resources we are willing to devote to this activity and last but not least to eliminate unnecessary activities. Efficient use of time means following certain rules and being maximally focused on your work. Among the most recommended principles that, will help managers to better organize their working time are setting clear goals so that managers know what and when to pay attention to them, they must clearly set goals. To analyze the time spent to effectively set up time management, managers must first discover what they spend their time on, then they can reduce the tasks that hold them back and address those that move the business forward. Using the TO-DO letter helps if all the jobs are registered can systematically move from job to job and fulfill their plan.

Prioritizing is effectively assigning importance to the task list. It is a good idea to assign an estimated time to perform the task in addition to the priority. Work organization needs to be done in the performance of all things logical system, which will be based on organization. The delegation says that manager's time is precious. It is necessary to use its potential for important things. The less important ones need to be shifted to other people. The use of seemingly unproductive time also plays a major role in time management. If you're traveling to work, check your emails quickly. Arrange a meeting with your business partner during lunch and make phone calls while waiting at the office. Even if they are trivial, they can ultimately have a huge impact on your productivity. There is a great deal of literature on the effective use of time management techniques, but there are no strategies for strictly developed strategies for non-profit managers. There is a need for effective research into the time management strategy in the non-profit sector. The basis of the research problem is to identify various effective management strategies that could be used by nonprofit managers to positively influence the success and effectiveness of the organization.

2. TIME MANAGEMENT STRATEGIES

Time management strategies are designed to better schedule time, prioritize, use technology, organize your workspace, manage your lists, know which projects are important and complete, and projects that unnecessarily distract attention. O'Brien also recommended several tactics in implementing strategies (Allan, 2015). First, by keeping a diary managers can evaluate how time is spent (Bartosova & Kral, 2016) and eliminate those time losses that do not affect the mission of the organization. Secondly, working during the most productive times of the day, then managers can effectively accomplish important tasks and reduce distractions at work. Third, using productivity-enhancing technologies, managers have much more opportunity in the 21st Century to increase their work efforts. The technology includes mobile phones, updated software, personal digital assistants and similar devices. Another recommended strategy recommended by (Valaskova, et al., 2019) is to organize the workspace by organizing everything in place and keeping the most used items accessible. The goal was to organize the task lists into five lists in order: projects, other actions, waiting, calendar and sometimes / maybe. The list of projects focuses on the vision and other actions the following steps are listed in the priority list. The waiting list depends on other tasks to complete, while the calendar list is time meetings. The list sometimes / maybe contains items that are not ready for the project list. Other strategies include understanding what is important, setting realistic completion dates. In managing several ongoing projects, employees should assess the tasks depending on their importance and addressing less important tasks later to be more efficient. (Allan, 2015).

2.1. ABC prioritization

This technique is generally used in prioritizing, but at the same time, by describing the internal context of business processes, it is possible to know and understand their patterns and their real impact on business activities. The method is based on the philosophy of the percentages of important and less important tasks. This division is based on analogies of inventory management (Tziner, 2015). Using ABC letters, managers should divide individual tasks into three groups, depending on their importance in achieving their goals. Many managers work according to the principle: stick to the most important tasks of group A. Tasks of type A include very important tasks that determine the success of a business. These tasks include personnel and strategic tasks that are both important and urgent at the same time. They represent up to 15% of the scale of total tasks, but account for up to 65% of the results. Type B tasks include important tasks but can be delegated. They have a 20% share in the scope of the activity and in the results.

The latest type C tasks are the least important, routinely correct tasks that can be immediately delegated, according to experts' experience, accounting for about 65% of all tasks, but only 15% of the results (Belas et al., 2018).

2.2. Eisenhower principle

The Eisenhower principle represents a technique called after former US President D. Eisenhower. It is based on the assertion that importance always takes precedence over urgency. In practice, there can be four combinations of the importance and urgency of work tasks. The tasks are divided into four quadrants (Salaga et al., 2015). In the first quadrant, there are tasks that managers need to address immediately and deal with in person. The second quadrant are tasks that can wait. However, they become a problem if sooner or later they become urgent and then the manager has to deal with them himself. They can therefore be partially delegated. In addition to the advantage of gaining employee time, these tasks can become opportunities for personal development and greater motivation of subordinates. The third quadrant represents the tasks that the manager should delegate, but as they need to be done in the shortest time possible, he usually performs them himself. The fourth quadrant represents tasks often found on the manager's desk. The tasks of this category should be taken appropriately by the manager. They are often not so important that subordinate workers deal with them (Gresakova & Chlebkova, 2018).

2.3. Delegation

Delegation of tasks is at the heart of every management and is usually defined as handling things through other people. A manager who is unable to delegate tasks cannot actually manage. The basis for the delegation of tasks is the principle that each task should be equipped with the lowest-ranking job, which still has the necessary expertise to deal with it. Delegating tasks assumes that the entity trusts the worker to whom it delegates tasks. A worker must therefore meet the conditions laid down for the performance of his duties. On the other hand, the manager should give the opportunity to demonstrate competence and credibility (Carol et al., 2019). The problem arises when the knowledge causes of the manager's lack of management knowledge are combined with subjective notions of delegation. At that time, the manager is unable to delegate tasks and tends to interfere with everything (these are the leaders overloaded with the operation). We often meet this type of managers in small companies, where the company owner is also an executive manager. His "personal" relationship with the company and his strong financial involvement prevent him from sufficiently trusting his employees, leading to his overloading. The fear of delegation is not justified. Effective control mechanisms can prevent major damage. The absence of delegation can cause organizations to do much more damage (Gresakova & Chlebkova, 2019).

2.4. Helicopter view

The helicopter view structures the tasks and the time to perform them into six levels, which should help from a "perspective" to decide priorities. We know 6 baseline levels: Baseline level 1 represents activities that are performed operationally as they occur. Level 2 is based on the question of what needs to be done immediately, comparing the priorities (in terms of objectives and not what seems to be more important, less laborious, etc.). Level 3 represents activities to be done in the coming hours. With a view to longer-term objectives, the actions to be addressed today are selected. Level 4 represents activities that need to be done in the next few days or weeks. Level 5 represents what is to be achieved in the coming months. The actual perspective translates into long-term projects, deciding on the priorities of current work goals and on the work-life balance. Level 6 characterizes what is desirable to achieve as an element of the wider environment. The ability to see not only above the present but also above itself is required.

What we want to achieve as a company, team, family, etc (Kushlev et al. 2016). Not everyone is capable of seeing at all levels, but knowing one's own weaknesses is the first step towards eliminating them. Every manager and entrepreneur needs the ability to see at all levels. These skills can be trained (Covey, 2014).

2.5. S.O.R.U.Z.

In defining the tasks to be accomplished, a very effective tool for managers is the S.O.R.U.Z method, whose name is derived from the initial letters of the sub-steps it consists of. Partial steps of the method are: summary of tasks, estimation of time for individual activities, reserve time, prioritization, feedback control. Summing up tasks means that managers should first summarize all the meetings and activities that await them during the day. Be sure to include the rest of the days in these activities. Do not overload and certainly do not overestimate your strength (Janoskova & Kral, 2019). If you have already summarized all the meetings and activities you should manage during the day, estimate how much time you will need for each of these activities. In doing so, build on your previous experience. Managers should be able to plan with a view to resolving operational issues and keep some time from the working day for unforeseen events. The time margin should be between 20 and 50 percent of normal working time. At least count on 20 percent. Once you have set the reserve time, take a close look at the task list for the next day and prioritize it. Schedule the most important tasks for the part of the day you are performing best. Also, consider whether you could delegate some less important tasks to others. Method S.O.R.U.Z. is terminated by retrospective control. This should always be done at the end of working hours. Try to summarize whether your daily plan was realistic or not at all at your pace. Then move any unfinished tasks or new appointments to the next day, and try again to create a new plan adjusted for more time or better priorities (Knoblauch et al., 2012).

2.6. Elephant technique

The elephant technique is used when an extensive task needs to be addressed, e.g. to develop a new product, to learn a foreign language, etc., we are often intimidated by its size and therefore we will not start to solve it. The aid is in splitting the task into small parts that will be solved every day, or a week. If necessary ("consuming an elephant", it can not be done at once, but in regular doses yes). Routine work within each individual part loses the fear of the size of the whole because we have already decided how to manage the whole. The size of the task is not the only problem with this technique. However, there may be problems of a different nature. If we divide the whole - problem into smaller parts, it will make it easier to solve complex tasks, but we lose the sense of connection with the whole (Kundelis & Legenzova, 2019).

2.7. Eat the frog first

"Frog Eating" means that you have to perform the worst or extremely important task as the first thing in the morning before all other tasks. Once you "eat" your "frog", you can be sure that the worst is behind you, so you are likely to have a positive attitude about the rest of your day. An inherent task is a task that managers should focus all your attention on: a call to a demanding client or cost estimates that you need to create for an elusive project (Kmecova, 2018). The worst task is the task you are postponing because it is difficult or simply boring. This can be an extensive project survey or a large amount of paper. (Knoblauch et al. 2012) recommend that managers should embark on the 'ugliest' frog. Furthermore, they should focus on the second, slightly less problematic "frog". After dealing with "frogs", they can start working on other "normal" tasks that day. At the same time, they claim they can prioritize your "frogs" and "regular" tasks using ABCDE. First, managers create a list of tasks that you need to do the following day. Then mark them with letters.

"A" - is the most important task that is likely to have serious consequences if you do not complete it. "B" - the next most important task, it is not so serious in terms of consequences, but still important. "C" - a task you could do, but if you didn't, it would have no real consequences. "D" - a task that you can delegate to someone to free up more time for task "A". "E" - a task that you don't really need to do, you can delete it. The important thing is that you are not moving to task "B" or any other task until you complete task "A". In any case, if they do these "horrible" tasks at a later date, they will feel that they have more time for the tasks that really delight them (Kmecova, 2018).

3. METHODOLOGY

The current study started with a Pfaff-based approach and Inventory of Time Management Procedures for Associate Employees (TMPI) a tool for analyzing the perception of nonprofit managers' time and evaluating survey results (Pfaff and Associates / PAN, 2008). The TMPI is a "standard-based" survey that assesses an individual's time management skills. The tool has "31 statements on a 7-point scale and helps leaders recognize the strengths and weaknesses of task orientation, planning, and prioritization." TMPI measures skills in time management, paperwork, initiatives, planning, confidence, prioritization and deadlines. The current study examined 30 NGOs and their perception of the use of time by managers through the dissemination of the TMPI research tool. The survey focused on the impact of non-profit respondents' demographic data on their own time management. The collected data were analyzed using the Statistical Package (SPSS) software.

4. CONCLUSION

Within non-profit organizations, a problem arises when managers, respectively. Leaders of non-profit organizations do not complete their tasks in time can result in loss of funding for the project. The inefficiency of the time management plan affects the budget of non-profit organizations and organizational success. The aim was to examine the experience of managers non-profit organizations in relation to how they perceive the use of time and how they implement time management into activities related to the operation of non-profit organizations. Table 1 shows the total frequency counts for selected demographic variables including gender, age group, highest educational attainment. Frequency counts for variables performed was (n = 30).

Table 1: total frequency counts for selected demographic variables including gender, age group, highest educational attainment

Variable and category	<i>n</i>
Gender	
Male	821.0
Female	1780.0
Age group	
18 – 25	730.0
29 – 34	412.0
35 – 45	976.0
46 and more	312.0
Highest level of education completed	
High school	210.0
Bachelor's	312.0
Master's	465.0
Doctorate	312.0

Source: Authors

Of the six variables listed in the demographic survey, three demonstrated statistical significance with six out of eight scores. Significant relationships between gender, race and position in the prioritization analysis, deadlines, paperwork, taking action, resisting participation, and overall scores (see Table 2). Table 2 shows descriptive statistics for the eight summarized scale scores sorted from highest to lowest. These scores represent the overall time score management. The highest score is the overall score ($M = 74.15$) and confidence ($M = 71.15$). The lowest score is planning ($M = 60.15$) and taking action ($M = 61.15$). Other the scores presented are prioritization ($M = 69.30$), paperwork ($M = 67.15$), deadlines ($M = 66.65$) and wiring resistance ($M = 63.20$; see Table 2).

Table 2: Descriptive statistics for summative scores sorted by highest mean ($n=30$) with Spearman correlations for time management scores with selected demographic

Score	M	SD	Gender	Age	Education
Overall score	74,15	24.20	.12	-.48**	.9
Self-confidence	71,15	26.80	.38*	-.27	.02
Setting priorities	69.30	21.48	.16	-.31	-.03
Paperwork	67,15	27.24	.08	-.51**	-.03
Deadlines	66.65	32.29	.24	-.44**	.28
Resisting involvement	63.20	31.40	.05	-.14	.44**
Taking action	61,15	23.09	.48**	.33	-.18
Planning	60.15	27,82	-.05	-.30	.20

Source: Authors

Gender was significantly correlated with two of the eight variables at $p < .10$ and $p < .05$, specifically setting priorities ($r_s = .38$, $p < .10$) and taking action ($r_s = .48$, $p < .05$). Because a positive correlation exists between setting priorities and taking action, the women in the sample gave significantly higher responses than men but for the other six scales, no relationship with gender was found (see Table 2). Age was significantly correlated with three of the eight variables at the $p < .05$, specifically overall score ($r_s = -.48$, $p = .01$), paperwork ($r_s = -.51$, $p < .10$) and deadlines ($r_s = -.44$, $p = .05$). For three of the eight variables, significant relationships were found based on age but not for the other five scales (see Table 2). Education was significantly correlated with one of eight variables at the $p < .05$, specifically resisting involvement ($r_s = -.44$, $p < .05$). Historical and current research on time management strategies is universal and can apply to all types of companies, although research continues to focus more on profitable businesses that demand productivity gains rather than mission-based non-profit organizations. Nonprofit leaders have historically not focused on the bottom line, albeit over the past 20 years. For years, many non-profit leaders have recognized the importance of the outcome, but are missing discipline to control it. This could result in a measure of organizational success recognition of employee productivity levels. Literature reported that the use of effective time management strategies are the most effective time management method. (Tziner, 2015) reported that the current trend in philanthropy is business-based models affect the effectiveness and achievement of the objectives of non - profit managers; and organizations that increase the pressure and increase the expectations of non-profit organizations succeed. A work-life balance is essential for success. Author also claimed that leaders can achieve a balanced life by becoming. Explanation of a balanced life could have an impact on how organizations lead time and organization.

ACKNOWLEDGEMENT: *This is paper is an outcome of project VEGA: 1/0544/19 Formation of the methodological platform to measure and assess the effectiveness and financial status of non-profit organizations in the Slovak Republic.*

LITERATURE:

1. Allan, D. (2015). *Getting things done. The art of stress-free productivity*. Bratislava: Piatkus, 318 s. ISBN 978-034-940-894-1.
2. Bartosova, V., Kral, P. (2016). A Methodological Framework of Financial Analysis Results Objectification in the Slovak Republic. In 3rd International Conference on Business and Economics (ed.), *Proceedings of Social and Behavioural Sciences*, pp.189-197, Location: MALAYSIA.
3. Belas, J., Gavurova, B., Toth, P. (2018). Impact of selected characteristics of SMES on the capital structure. *Journal of Business Economics and Management*, vol.19, no.4, pp. 592-608.
4. Carol, T., LazaroIU, G., Grecu, I., Grecu, G. (2019). The Social Sustainability of Citizen centered Urban Governance Networks: Sensor-based Big Data Applications and Real-Time Decision-Making. *Geopolitics, History, and International Relations* vol. 11, no.2, pp. 27–33.
5. Covey, S. R. (2014). *Najdoležitejsie veci ako prve*. Bratislava: Eastone Books, ISBN 978-80-8109-257-2.
6. Gresakova, E., Chlebkova, D. (2018). Time management in the manager's work. Norristown: International business information management association (ed.), *Proceedings of the 33rd International Business Information Management Association Conference*, pp. 5776-5782, Location: Seville, SPAIN.
7. Gresakova, E., Chlebkova, D. (2019). Delegation as the time management tool in the manager's work. Norristown: International business information management association (ed.), *Proceedings of the 33rd International Business Information Management Association Conference*, pp. 9717-9720, Location: Granada, SPAIN.
8. Janoskova, K., Kral, P. (2019). An In-Depth Analysis of the Summary Innovation Index in the V4 Countries. *Journal of Competitiveness*, vol. 11, no.2, pp. 68–83.
9. Kmecova, I. (2018). The processes of managing human resources and using management methods and techniques in management practice. *Ekonomicko-manazerske spektrum*, vol.12, no.1, pp. 44-54.
10. Knoblauch, J., et al. (2012). *Time management. Mejte svůj cas pod kontrolou*. Praha: GradaPublishing. 208 s. ISBN 978-80-247-4431-5.
11. Kundelis, E., Legenzova, R. (2019). Assessing impact of base erosion and profit shifting on performance of subsidiaries of multinational corporations in Baltic countries. *Equilibrium – Quarterly Journal of Economics and Economic Policy*, vol.14, no.2, pp. 277-293.
12. Kushlev, K., Proulx, J., Dunn, E.W., (2016). *Silence Your Phones: Smartphone Notifications Increase Inattention and Hyperactivity Symptoms*. In: 34th annual chiconference on human factors in computing systems, pp. 1011-1020. ISBN:978-1-4503-3362-7.
13. Pfaff and Associates/Performance Assessment Network. (2008). *Time management practices inventory (TMPI)*. Retrieved July 30, 2008, from <http://www.pantesting.com/products/pfaff/tmpi.asp>
14. Salaga, J., Bartosova, V., Kicova, E. (2015). Economic Value Added as a measurement tool of financial performance. *Procedia Economics and Finance*, vol. 26, pp. 484-489.
15. Tziner, A. (2015). Workstress and turnover intentions among hospital physicians: The mediating role of burnout and work satisfaction. *Journal of work and organizational psychology-revista de psicologia del trabajo y de las organizaciones*, pp. 207-213.
16. Valaskova, K., Bartosova, V., Kubala, P. (2019). Behavioural Aspects of the Financial Decision-Making. *Organizacija*, vol. 52, no. 1, pp. 22-32.

SOCIAL EFFECTIVENESS AS METER IN THE DEVELOPMENT OF SOCIAL ECONOMY

Venelin Terziev

*Russian Academy of Natural History, Moscow, Russia
National Military University, Veliko Tarnovo, Bulgaria
University of Rousse, Rousse, Bulgaria
terziev@skmat.com*

ABSTRACT

The present work reviews the social effectiveness of the processes as a basic element for social development. It tries to analyze the term from all its dimensions and to search for its applicability in the assessment of social impact. It reviews the accumulated experience and tries to give particular solutions in this direction. It searches for possibilities for defining criteria for social effectiveness. Social economy being turned to satisfying certain necessities of people, who are from the vulnerable groups, searches for answer to social effectiveness of these processes. Finding meters (system of criteria indicators), which to assess this process is a possibility that is expected to give good results.

Keywords: *social programming, development, social economy, social effectiveness*

1. INTRODUCTION

Speaking about effectiveness as a key term for each social-economic activity, traditionally the stress is put on the economic effectiveness, which manifestation is in the subordination “expenses-effects (benefits)”. And as far as each social activity is conducted with more and more limited resources, the approach is to be as if towards economic activity. More, such an activity is considered to be “each purposeful activity, where the limited resources are distributed and combined among alternatives, while maximizing the effect or minimizing the expenses is possible” (Stankevich, 1998). The correlation between expenses and benefits of a given resource or combination of resources for achieving given, preliminary defined goal stands out in the foreground, and on this basis, the rationalizing of managerial decisions. In this sense, the subordination “expenses-effects” could be used as “method for planning; tool for taking decisions and environment for historic documenting of the taken decisions” (Semerdzhiev, 2007). This fundamental principle that characterizes the economic effectiveness is one of the sides for studying the activity effectiveness. But each activity according its nature is social and defines the necessity of social effects measurability. On this ground in the recent years it is more and more often spoken about the so called social effectiveness. In contrast to the economic one, social effectiveness does not bear so much direct nature; it appears to be more complex category and difficultly lends itself to one-dimensional expressing (Terziev, 2014).

2. MEASURING OF SOCIAL EFFECTIVENESS

There is certain accumulated experience on measuring social effectiveness within the frame of the prognosticated assessment in the foreign practice from the social consequences of the scientific-technical projects and the economic and social programmes. This way, an independent stream of studies in the field of assessing of “social impacts” (SIA-Social Impact Assessment) or more specifically said, the integral social consequences at the realization of various development projects and programmes is built in the beginning of the seventies in the USA. The business and political circles in the USA realize that each technological breakthrough brings “unplanned” losses of ecologic, social, psychological nature, which turn in the end of the day in indirect economic loss. In the field of scientific-technical development - at the level of the companies as well as at the level of national programmes, reorganization of the

whole methodology for planning and management is conducted. And, if earlier it is oriented only towards purely economic criteria for effectiveness, then at present, the social, psychological and other consequences are also taken into consideration at the implementation of scientific-technical projects, yet at the stage of taking decision for their elaboration and realization. Thus the necessity of complex assessment of the various categories of impact of technics and technology upon the society arises (1996). The evaluation of the social impact from the scientific and technical projects and programmes in the USA is defined in an independent stream after a mandatory procedure on assessing their ecological impacts is established by an Act for policy towards the environment in 1969. (1996). All state projects that could exercise significant impact upon the environment as well as the projects of the private companies and entities that require special state sanction are put under ecological expertise. An impressive example for the use of increased ecological requirements at the realization of programmes for economic development in the USA is the organization of the elaboration and realization of the project for the oil pipeline through Alaska in the middle of the seventies (1996). The project's planning has been conducted during the entire period of building, operation and dismantling of the pipeline after the deposit's exhaustion. We should note that the whole complicated multi-level mechanism for the programme's management is formed and functions on the ground of the economic legislation in power in the USA and of special legislative decrees and agreements. That defines the specific of the form of that management mechanism, where its separate parts and elements presented by the state authorities, the companies-owners, the specialized companies, are connected with each other in a unified organizational system of two- and multi-party agreements and contracts. From the positions of the long-term interests of the nation the project is recognized as highly effective and proper. The formulation of the problem of social effectiveness is considered in sociology and economy for debatable for a long time. Until present, no general definition of the term "social effectiveness" is found synonymously either. There is high enough number of works of monographic nature, where the authors try to study social effectiveness from the various types of activities, including the managerial one. After all, most of the authors develop the term for social effectiveness, the criteria and methods for its assessment towards the goals for the public production. The monograph of the Bulgarian scientist M.Markov could be considered classic work on the problem with the social effectiveness. According to him, effective is what leads to result, to effect (from Latin effectus - an act, performance, and afficio – to act, to perform) – effective means efficient (Markov, 1982). A popular model for assessing appears to be the subordination "resources-expenses-result", which characteristic feature is the separation of the role of resource ensuring and the expenses for raising the managerial activity effectiveness. The following three factors are defined in R. Likert's model for effective organization (Turner, 1985; 1996a).

- Internal organizational factors, including in their composition the organization's formal structure, the economic structure and the social policy, the staff's professional-qualification structure;
- Intervening variables such as the human resources, the organizational climate, the methods of taking decisions, the level of trust towards the management, the methods for stimulating and the motivation for acting;
- Result variables such as growth or drop of labour productivity and the revenues, extent of satisfying the consumers' demand, etc.

With such an approach, effectiveness comes as result of complicated interaction among various factors, among which the domination position is of the human one and the social-ecological factors. The approach, according which effectiveness is evaluated according to the extent of protection of the balanced interests of the state and society.

The work of the government apparatus could be recognized as effective only in the case it successfully solves the problem for optimal protection of the interests of people, social groups and each individual. In this dual task, the most important side is the term effectiveness of the government apparatus. According to that approach, effectiveness is widening the possibilities for active civil life of each civilian, of the society and the effectiveness of state. It is determined by a well functioning system for state bodies' activity, from their ability to realize state interests in a legal way, to implement the state policy for social and public development. Another point of view is the one that connects the effectiveness of state activity with the availability of the lack of optimal paradigm for administrative-political management. The word goes about the confrontation of the traditional technocratic paradigm for political management and the new one – the participative one. As a whole, authors connect directly the effectiveness of state activity with the presence of bureaucracy in it, which actually serves the society (1996; Turner, 1985; 1996a). And this is the bureaucracy, which: is found under the real control of society; expresses the interests for social progress; is minimal according its quantity and quality parameters. This statement is based on the internal contradiction of bureaucracy among the wide social goals, because of which it originates and its narrowly corporative interests that tend to dominate. According to the opinion of some authors, the criteria for the social management effectiveness are concluded in the following:

- In the extent of correspondence of the directions, the contents and the results from the activity of managerial structures and from the parameters of its that are defined by the functions and the status;
- In the legitimacy of decisions and actions that corresponding to the managerial structures and the users (the recipients, the beneficiaries);
- In the reality of influence of managerial activity upon the state and the development of the objects for managing;
- In the depth of reporting and expressing in managerial decisions and actions upon the particular and complex needs, interests and goals of people;
- In the nature and the volume of direct and “reverse” relations with the beneficiaries, or said in other words – in the democratism of activity;
- In the extent of authority of decisions and actions of the managerial structures;
- In the fairness and expedience of information transferred to the managerial structures and the beneficiaries;
- Influence of managerial activity towards the external environment.

Each act, each social phenomenon or feature, including social effectiveness, is characterized by quantity and quality sides. And although these two sides of the object exist in inseparable unity and interconnection, they are, anyway, different characteristics of the surrounding social environment. It is accepted in the scientific literature the quality side form the received result (effect) to be indicated with the term “criterion”, and the quantity one - with the term “indicator for effectiveness”. In other studies, slightly different interpretation of the term “criterion for social effectiveness” is suggested, reviewing it from the point of view of the interrelation between the quantity and the quality definiteness of the studied and evaluated object. From quantity side, criterion appear to be method, tool, sample measure for movement towards the desired result, and from quality one, as possibility for separating of “positive sides, forms of that movement in space and time”. Unity of meaning is observed in the understanding of the term “criterion” in all pointed approaches despite all differences. Besides that, their synthesis gives us new, deeper understanding for the social nature of social effectiveness. Thus, “the indicator for effectiveness” (the quantity criterion), fixes the objectified and integral, mainly quantity expressed (for example, from point of view of the natural volume of social goods and the time interval for their ensuring), the evaluation of the achieved by the social system of any

rank. “The criterion for effectiveness” (the quality criterion), is focused to a greater extent on studying the internal mechanisms for achieving the given result, including in itself the extent of limitedness and the so called activation of the human factor as condition for self-development, effective activity, social cost of the achieved, the extent of its limitedness, etc. This distinction is significant and important for elaborating the system for evaluation of social effectiveness. Whatever quantity expresses the effectiveness of the functioning and progressing social system, it always appear to be result of the actions of all factors of the system in their combination, presented as integrative resultativity. It is important to emphasize that whatever extraordinarily effective the activity of the separately taken factors is in the social system, its high effectiveness could be ensured only by the relevant quality of the system social interaction. It originates as its irrevocable organic feature, serves as general algorithm and universal motivating mechanism for the activity for all the factors in a certain system. The connection between economic and social effectiveness has complicated nature. The methodological principle, according which the realization of the social programme is obliged to become catalyst for effective economic development is usually in the base of the economic effectiveness growth. The funds spend by the society for satisfying the social needs, are returned in the end in the form of raising the social and labour activity. The realization of social management in this system appears to be in the end of the day one of the subordinated factors for reaching economic effectiveness. The attempt to explain the impact of the economic factor for achieving integral social effectiveness similar way suffers simplifying approach inevitably. It is already recognized that the classic criterion (the correlation “expenses-profit”) is obviously insufficient at certain nature of social effectiveness. Another approach is necessary, with which help the activeness of social activities could be evaluated. The extent of achieving social effectiveness is defined by the position of movement towards socially significant strategic goal, which meaningfully uncovers as state of maximum full realization of individual’s needs and self-realization of his natural powers, said in other words, his personality. Individual’s wealth as a supreme value for society becomes ending in itself for the social development. From here, the projective goal of each development originates usually as requirement for determining the full wealth and the free comprehensive development of all members of society, whose realization is, after all, in creating just for the individual circumstances of life and creative work. More, number of important methodics specifying are to be made. The notion for social effectiveness as result, evaluated from the positions of getting closer to the socially significant goal, should obligatory be correlated to the changes that correspond to the general line of progressive development of the social system, i.e. with its gradual transition from less to more thorough existence. We can note that before comparing each achieved social result with the expenses, it is necessary to clear the significance of the fact itself of achieving this result, mainly from point of view of its correspondence to the goals of social development. It is also important to consider the time interval necessary for achieving the set goal. The significance of that specifying about the understanding of the basic principle of social effectiveness and its criteria emphasizes expressively the particular attempt for social policy. The American scientist D. Rotblat emphasizes that a fundamental reconsidering of the principle of effective social policy was made in the USA in the thirties (Terner, 1985; 1996a). The government’s measures on widening the insurance funds for unemployment and increasing the number of social aid receivers, who are initially reviewed as completely progressive, in long-term plan manifest more and more their inefficiency as far as they have weak impact upon human resource improvement. Experience shows that “ensuring well-being without suggesting viable alternatives” for development of the individual and his initiative, becomes restraint in the social development as far as raises “reproduction of the culture of poverty from one generation to another”. It is obvious that the evaluation for the social activeness of the conducted activities could radically change to the same extent, to which the time element allows more precise unveiling of the

streamline for social development. So to say, the inclusion of people, who need social support, in the process of labour, bringing perspective from economic as well as social point of view result appears to be more effective than giving aids directed to short-term “smoothing” of social tensions in society. The review of the problem with the social effectiveness according to the notions for social development and its ideal raise additional difficulties. In these cases, when social effect is difficult to be measured in quantity, the extent for getting closer to the goal, to the realization of these values, suggested by it could serve as the only reliable criterion for its evaluation. The predominantly consistent side of the terms “social effect” and “social effectiveness” are reviewed in number of works. As a rule, the authors of publications agree that social effect is definite social result, purposeful activity conducted in life by economic decisions. More, in some cases it is understood like “something, connected with the development of the individual”, which “forms new features in the image of life and activity as individual as well as collective, evidencing raising of social activity, supports the universal development of personality and the forming of a new type of worker”. In other cases it is treated as “result corresponding to the goals of social development”. In third cases, it is reviewed as “stage for raising the social-psychological and sanitary-hygiene comfort of the individual”. The last cases, actually, concern not the social result as such but the effectiveness, i.e. the correlation between the result and the goal, the initial and the consecutive state of social comfort (1996; 1996a). The suggested definitions allow outlining the essential differences between the terms “social effect” and “social effectiveness”. The first reflects a conclusion for reaching certain, quantity or quality evaluable results from the social activity in independent meaning. In the second case there is correlation of these results with the measure or the extent of realization of the normatively set goal or ideal for social development. This measure for the social effect evaluation in turn serves as an important direction for this quality side of social activity, integrated in its system organization. Thanks to it the social effectiveness itself is achieved. This social activity immanent effectiveness - the constitutive quality characteristic could be defined as principle for social effectiveness. It is immediately connected with the criteria for social effectiveness as concrete quality indications and determinants of the meanings, on which base, as original “zero points for reporting”, social activity is assessed as effective or ineffective. Reviewing the indications that distinguish social effectiveness from the result, they correlate it either with the goals, or with the needs. It should be noted that “most effective at equal other conditions, would turn activity, where the goal to a maximum extent expresses human needs”. Alongside, the issue about the concrete social results (effects) from its managerial impact is not set although it is presented in the given context as very significant. The point is that the review of the issue with the social effectiveness and the contents of that term itself, is an inseparable from the concrete analysis of the normatively or ideologically set goals of social development as well as of the needs (expectations, interests, ideals) of the various social subjects. It seems social effectiveness could not be thought of within the categories of an abstract social good or only in the form of the social system movement towards certain ultimately generalized goal of social development. The social object and this is the object of management, towards which the term for social effectiveness falls, is complicated enough for its structure. It embraces the whole combination of exiting in society social connections and relations. The goals for social management themselves concern inevitably the whole “space” of these connections and relations, including the social system (socium) is an integer, social groups (communities) and the separate individuals (personalities). Coming from that and the effectiveness from the social-managerial activity, it is to be considered, in the aggregate evaluation, about the development of all sides, aspects and components of the social system. Obviously, the reviewed above correlation of the effective social activity with the social progress’s goals, indicates one of the important moments of the social relation and inter-subordination between the all-system, social-group and individually-personal dimensions of

social activity, of the aggregate and as a rule long-lasting nature of its manifestation. Reviewing the issue of the social-economic effectiveness from the target complex programmes, it is concluded that “the main purpose of the estimate and the evaluation of social effectiveness within the program-targeted method is ground of the adopted planning-managerial decisions” (Terziev, 2013). Considering the necessity of prognosticating the social consequences from the economic activities that are to be estimated in their effectiveness general evaluation, number of authors note that because of this “the sustainable quality or (although serial) subordinations between production-technical and the social changes among the characteristics of the mapped out undertakings and indicators that reflect the corresponding target norms” (1999; 2000). Some authors associate social effectiveness of economy with the problem of effectiveness. In economy and sociology, debatable appears to be even the issue about the legality of this term, such as “social effectiveness” (in contrast to the more or less clear economic maximum of production at minimum expenses). The scientists, who consider this term for legal, try to give it a more precise definition. In particular, the criterion for social effectiveness for solving ripen social problems in minimal time-terms and minimal expenses for society. The given definition bears debatable nature because the elaboration of criterion for optimality in the social sphere would also significantly move forward the understanding of the criterion for social effectiveness no matter what final formulation this term would get (1999; 2000). The formulation of the issue about social activity optimality as integral criterion for its effectiveness is perspective namely because the complexity of each social object, its dependence by a lot of variables and also, by the availability of multi-vector internal system discrepancies. We have to take into consideration that optimization in mathematical theory for the optimal processes is called the process of choosing the better variant out of the possible ones, taking the system, the object, to the best of the possible (optimal) state, process, where the quantity characteristic of the most desired feature of the object is maximized and the opposite, the least wanted is minimized. The issue about the criteria for optimality (the optimum) appears to be important theoretic result for the optimization of national economy. In the most general form, the criteria for optimality in economy are defined as special economic and mathematic models that express public attitudes. Said in other words, they are special variety of formalization of the economic development goals in analytic shape and in this sense, presumptively set function. The problem about the correlation of the problems on optimality and effectiveness also appears to be debatable. One group of economists identifies them actually, and others try to separate these terms. Here purposeful research work is necessary. For the present, one thing is clear: unconditional relation exists between the criteria for optimality and effectiveness, and there the theoretic clearness in certain regard allows us to achieve significant success in the objective evaluation of consequences from the realization of plans, programmes, projects and decisions. It is obvious that, for example, social effectiveness could be thought of narrowly pragmatically, as for the best result in solving urgent social problem. The strategic and long-term consequences of the undertaken measures are estimated within a wide social approach. Certain discrepancies and contradictions might arise among these approaches. In these conditions, the task for achieving joint social effectiveness is to be predominantly formulated as a task on optimization of the social-managerial activity. Social and economic effectiveness have two-way appearance. Regarding each bearer of a certain kind of labour, it refers as part of the genera, immediately public labour. Regarding the product of each certain labour, it manifests as characteristic or feature possible to satisfy increasing demand. Economic effectiveness brings its criteria for evaluation of results from the labour towards solving the issue of how much the achieving of the received effect for social effectiveness costs, whom and how this effect serves. Coming from there, it could be suggested that in contrast to the criterion for economic effectiveness, the criterion that certifies the social effectiveness is not realized only within the given “closed” system of social action, rather has set in appearance norm-ideal nature.

This significantly complicates the evaluation for social effectiveness of each institute for management, as far as it forces it to keep into consideration in its field “the internal environment” of its activity, where results could be correctly evaluated and measured. Furthermore, the measuring is unique with the quality of the given social-managerial system as well as with “the external environment”, which is within the sphere of its control. But even though, it is a task of norm goals, from which the integral evaluation for social effectiveness is derived. It is expedient to emphasize the differences and the interrelation between the categories effectiveness and quality. Criterion for effectiveness is the correlation expenses and result, and criterion for quality – the correlation between the effect and the goals, the goals and the funds for achieving them. An expression of the effectiveness principle is less expenses – greater result. The principle for quality manifestation is the highest level for achieving the goal at rational and optimal use of the available funds. Obviously, reviewing the principle for social effectiveness this way, the latter is accepted from the positions of quality of social activity, and not as correlation “expenses-effects“. The problems of activity’s social effectiveness are reviewed directly in the particular management. The social consequences from the managerial activity in broad sense of the word are clarified by the already mentioned American system for evaluation of social consequences - SIA (Social Impact Assessment). American authors include to them the economic one in the narrow sense of the word, the political ones, cultural and psychological impacts. From point of view of the one, who is subject of impact, social subjects and organizations distinguish. Such are the society, social groups, social-territorial communities, the individuals. From organization-structural point of view, the impacts on the activity of the managerial bodies, ministries, branches, companies are analyzed (1999; 2000). From the point of view of impact’s spatial scale, the consequences for the state, the region, the district, the municipality, the territorial unit are analyzed – the population of the object of impact or the particular target group of beneficiaries. In the narrow sense of the word, under social impact we understand the impact upon employment, the opening of new job positions, of education and training, self-training, of health and quality of life, of communicating within the social groups and among them, of social solidarity and social segregation within the local territorial community. In this case, the task consists in answering the questions who benefits and who loses if the supposed action takes place, in what social expenses find expression and how they are distributed. In order to assess the managerial decisions’ social effect, we need to have criteria, which allow us to add social consequences to the goods or to the expenses. In other words, the availability of certain standards and value reference points is supposed. Actually, the procedure finishes with defining what some authors call “target” or “necessity’s” effectiveness, i.e. the effectiveness understood in norm-ideal dimension. The mentioned experience allows us to realize number of simple truths, without considering which one cannot proceed to creating socially significant programmes and projects, namely:

- Before proceeding to the implementation of any managerial decision, it is necessary to evaluate its social sense, hence its expedience, too;
- As far as there are no universal criteria for social effectiveness, each concrete managerial decision should be accompanied by giving proof of the expected from it social effect and defining criteria for its assessment;
- The interpretation of social effect depends on the scale of managerial decision, by the level of reviewing the subjects that experience the impact of the innovation, by the motives and the pursued goals, as well as by the time interval, in the course of which the expected result is expected to occur;
- It is important to distinguish the social effect in the broad and the narrow sense of the word, that subordination exists between them. The grounding of managerial decisions increases if the notion of social effect brings complex nature and includes economic, social, psychological, socio-cultural and other significant consequences;

- Assessing the supposed social effect, it is necessary to orient ourselves towards certain value standards that allow us to deliberately judge for the social “value”. For the social “succession of decisions”. Such evaluation is possible only in case of comparing the social effect of the expected from several alternative decisions.

The problem of social effectiveness of management started being actively studied in the end of the sixties and the beginning of the seventies of the last century. Before that it is connected with the development of the theory for the social development, which puts the question not only about the economic but also for the social effect from the managerial activity. The issue with the effectiveness of the managing system, as effectiveness from the activity of the subject of managing or the managing sub-system, is necessary to focus on the following questions: what is the contribution of the managerial system in solving one or other socially significant tasks? What is its participation in achieving the goals standing in front of the particular organization? Primal criterion appears to be the extent of impact of the managed sub-system. But as far as the managing system is relatively independent and functions as an overall complex, it is possible and due to define one more group of criteria. It is formulated on the ground of the primal criterion and gives answer to the questions connected with the internal state of the management system, with its ability to act with increasing level of effectiveness. Alongside the evaluation of the management system effectiveness in the general aspect, it is possible and due to define the effectiveness of the main management components – the functions, the functional structures and the technologies. Effectiveness could be reviewed not only as a phenomenon from the economic sphere. Something more, it appears to be relatively independent social phenomenon. The review of the multistage structure of the elements, value criteria and indicators is in its base. The efficiency of the social programmes and measures, the activity of the various groups of the population, the social consequences from the realization of economic, scientific and technical projects are fixed in them. The indicators for social effectiveness are reviewed as tools for evaluation the realization of the interests and needs of society, the state, the staff and the individuality. Effectiveness, as social phenomenon, appears in the shape of the quality-quantity characteristic for maximum development of human resources, forms of social life activity and management of society, while considering the minimum social, political, economic and moral expenses. This approach allows us to review social effectiveness as universal approach for expressing the extent of efficiency of the positive and the negative functioning in the development of social institutes and processes. Furthermore, the broadly understood principle for social effectiveness gets out of the limits of the given correlation as far as it considers and integrates yet few more important dimensions of the social activity effectiveness. The word goes about its orientation for achieving socially significant, normatively set goals for development of the object for social management, the assessment for the sequence and the actual extent for getting closer to the searched public interest in the order of system’s “self-development”, the orientation towards the managerial activity’s quality. These aspects for measuring the social effectiveness are to find their reflection in the building of the general model or principle for social effectiveness in a law-governed way. The analysis of the problem of social effectiveness shows that, in the course of science’s forming and development, it naturally receives the necessary attention in the context of the various management systems. In particular, we should emphasize the significance of this context regarding the system for state and local governance of the social spheres of society. The public nature of these systems infers their limiting in its activity for social effect and its determining characteristic of social effectiveness in the broad range of social needs and goals. Because of these, the state governance system’s social effectiveness objectively requires the application of poly-modal multi-parameter approach towards its measuring. Substantial appears to be also the connection of the whole complex of social and effective state governance with the social safety of the state

as a whole, and also of each region and territory in its independence. Defining the social programmes effectiveness's complex evaluation, it is expediently to note the following:

- The social programmes effectiveness evaluation is to be reviewed on the background of the quality and quantity indicators: the quantity indicator is expressed in natural volume of social goods as well as in the material expenses for getting them, and the quality indicator or criterion is expressed in the internal mechanisms of achieving the given result, the quality of organizational and governance system, the system norms and values, the norms of law, on which ground the activity in a certain social system is considered effective or not;
- Evaluating the programmes should consider also their economic and social effectiveness. The economic effectiveness is expressed in the fact that the social programme realization itself is obliged to become a catalyst for effective economic development. The funds spent by society for satisfying the social needs should in the end return in the form of raised social and labour activity;
- The extent of reaching social effectiveness is defined by the position of movement towards socially significant goal, which consistently reveals as state of maximum full realization of individual's needs and as self-realization of his essential powers, said in other words, his personality, which is realized before all, in creating worthy for the person conditions for living and development.

In case of complexity or possibility of calculating the economic effectiveness, weight in evaluating appears to be the optimality in achieving the social effect. It should be considered that the results from the programmes are correlated either to the goals of the programme's creators, or with the needs of the ones, towards whom the programmers are directed. The highest effectiveness in the given case is achieved by the programmes, where the goals of the programme's leaders and organizers most fully express the programme subjects' needs (Terziev, 2013).

3. CONCLUSION

We review social effectiveness within the broad social approach at defining social effectiveness because of the extreme complexity of the reporting and evaluating the strategic and the long-term consequences from the social measures, we review social effectiveness from the conducted by the state programmes narrowly practically. And this means highest results when solving particular social problem. The social programmes effectiveness evaluation in the given case concludes to the task of optimization of the social governing activity in the process of solving particular social programmes through the programme approach. And this more than ever requires the defining of criteria for social programmes effectiveness and on this ground, the application of proper evaluating methods. Social economy is turned to satisfying certain needs of people, who are in a difficult situation and searches answer for the social effectiveness of such a process. The most difficult and complicated task, in all that, is finding measurements (system of criteria indicators) to evaluate that process. The lack of these will lead to not very sharp and exact evaluation and from there taking proper and exact decisions – connected with preventive, correcting or following actions. All that is connected with giving new meaning to the activities and actions in this whole social process in the course of its development. The complexity comes from the fact that there is obvious lack of sharp statistical data to support this analysis.

LITERATURE:

1. Markov, M. (1982). *Tehnologiya i effektivnosty sotsialnogo upravleniya*. Per. s bolg. M. 1982.
2. *Osnovy sovremennogo sotsialnogo upravleniya*. (1999). M. 1999.

3. Osnovyi sovremennogo sotsialynogo upravleniya: teoriya i metodologiya. (2000). M. 2000.
4. Semerdzhiev, Ts. (2007). Strategiya: sreda resursi sposobnosti planirane. S. 2007, s.214.
5. Stankevich, V. (1998). Yohanes Gerber edin ot sazdatelite na nemska mikroekonomika na vaorazhenite sili S. UI Stopanstvo, 1998, s.98.
6. Teoriya i metodika sotsialnoy raboty. (1996a). M. 1996.
7. Teoriya sotsialynogo upravleniya, K., 1996.
8. Terner, Dzh. (1985). Struktura sotsiologicheskoy teorii. M. 1985.
9. Terziev, Venelin. (2013). Vazdeystvie na politikite na pazara na truda za osiguryavane na zaetost. Izdatelstvo „Dema Pres – Ruse“, 2013.
10. Terziev, Venelin. (2014). Vazmozhnosti za povishavane na effektivnostta na sotsialnata adaptatsiya na voennosluzheshti, osvobodeni ot voenna sluzhba. Izdatelstvo „Primaks“ – Ruse, 2014.

INTERNATIONALIZATION, CONCENTRATION AND BUSINESS SUCCESS OF RETAILERS: THE CASE OF CROATIA

Ivan Kovac

*University of Zagreb, Faculty of Economics and Business, Croatia
ivan.kovac@efzg.hr*

ABSTRACT

The aim of this paper is to investigate the effects of concentration of the Croatian retail market on individual market players. The author's focus is to determine the extent to which differences in the concentration of the retail market in the Republic of Croatia are related to differences in productivity and business results of Croatian retail companies. The paper starts from the basic assumption that differences in market share have a statistically significant influence on differences related to the business result of retailers in the Republic of Croatia. The results of the research confirm a significant correlation between the size of the market share of retailers and their business performance. Namely, the results of the research show that there is a statistically significant difference between the five groups of retailers, grouped by different market shares, when it comes to gross profit per employee. The paper also presents the basic limitations of the research as well as recommendations for future research.

Keywords: retail, market concentration, internationalization, Croatian retail market

1. INTRODUCTION

On the wings of internationalization and globalization, whose development started to accelerate at the beginning of the 1980s, there begins a strong global expansion of the leading retail companies outside their home countries. The desire to grow, on one hand, and fierce competition on the domestic market on the other, in most cases represents the main motives of retail market players for entering the international market. For a long time, the literature has been gathering different researches highlighting internationalization and concentration as two key trends in retail industry (Tordjman, 1995). Undoubtedly, internationalization and concentration have largely determined the structure and dynamics of today's global retail market (Dawson, 2006). We are witnessing the retail becoming a highly globalized industry with strong and fast dynamics of changes and challenges. Namely, this industry is characterized by the emergence of new forms of retail on one hand, and the rising expectations and demands set by the consumers on the other. Due to the strong movement of retail companies on the international markets, some of them have become extremely big and powerful (Burt et al., 2003). Naturally, in conditions of retail internationalization, global players in retail industry have to consider specificities of certain local markets and special habits and expectations of the consumers. Today, retail industry is a very important economic sector that is in many countries characterized by intensive dynamics of growth and so, it is becoming even greater and stronger generator of the GDP and added value. Most of all, it is becoming an economic branch that provides employment for more and more people (Bronnenberg and Ellickson, 2015). It is the intense competition on the domestic market that is considered by many authors to be one of the main reasons for internationalization of their business i.e. exit of retailers onto new markets, outside their domestic boundaries (Papadopoulos and Martin Martin, 2011). In this strong process of internationalization of retail i.e. business exit of the leading retail companies outside their primary market, we can encounter a really small number of exceptions that are not following this modern trend of expanding onto international markets (Treadgold, 1991). One of them is The Kroger Co., (USA), the third largest retail company in the world and the only one in the first ten companies in the world that does not operate outside its home country. This company proves that it is possible to be successful in retail without internationalizing your

business. However, the size and the purchasing power of a country like the USA where this successful retail giant operates have to be taken into consideration. The success of the leading retail companies on a new market depends on many different factors. More recent studies suggest that, besides to other factors, the attention should be given to the speed of the very market internationalization, format diversification etc. (Hoppner and Griffith, 2015). Today, we are witnesses of an intensive and aggressive expansion of the leading global retail companies that spread to many countries worldwide by using different (multiple) store formats (Shi, et. al., 2018.). Many of these global players are successful in their campaigns to conquer foreign markets and are characterized by the general approach of globalization and internationalization. But, under no means should we forget those that are for any reasons unsuccessful (Swoboda et al., 2018). Bearing in mind that modern retail is characterized by internationalization and concentration, along with the fast changes and great challenges they bring. Namely, today's global retailers are often facing slow economies in the countries they operate in and are dealing with demands that are becoming more and more specific regarding shopping options or social experience related to these options (Smith et al., 2018). Due to the fact that the retail market in the Republic of Croatia has been facing important changes in recent years, this paper analyzes the processes of retail market concentration and changes connected with them.

2. LITERATURE OVERVIEW

Over the years, the literature has been offering many papers that investigate the connection between the level of internationalization of certain companies and their business success. Assuredly, the authors offer many different opinions, be it from the theoretical point of view, or from the practical aspects of this important phenomenon in retail (Hitt et al., 2006.). In general, the literature offers perspectives from different authors that clearly suggest how internationalization in business brings the benefits and costs to the business subject. Those authors who highlight the benefits mostly point to economies of scale and scope (Caves, 1971). Some other authors, in the context of the advantages of internationalization, list other benefits as well, like, for example, operative flexibility, knowledge development and the advantages of organizational learning (Chang, 1995). On the other hand, some other scientists have pointed out how internationalization brings costs. This is mainly related to the difficulties in managing and coordinating different activities connected with doing business in more than one country (Gomes and Ramaswamy, 1999). It is understandable that high level of business internationalization leads to the increased costs of processing the information. Namely, in order for such a company to be successful, it should focus on the specificities of each market regarding, for example, the logistics, local consumers, trade regulations etc. (Sundaram and Black, 1992). The literature, as previously mentioned, offers quite a number of papers, mostly from the area of international business and strategic management, and focusing on the research of the relationship between the level of internationalization of the individual business subjects and their business performance. Opposite to that, there are much fewer theoretical and empirical papers that scientifically analyse internationalization–performance, I–P and the relationship between business success and internationalization of business subjects. However, it is important to point out that the findings of those scientific researches do not show the consensus regarding a clear contribution of business internationalization of retail companies to their business success. Moreover, such and similar results related to this important topic we can also find in the researches dealing with the international business and strategic management. Some papers show the results that support positive connection between internationalization and business performance of retail companies (Etgar and Rachman-Moore, 2008). On the contrary, there are papers that suggest internationalization have negative influence on the business success of retailers (Mohr and Batsakis, 2014). But, above all, it is interesting to note more recent results of the studies dealing with this topic.

In this context, the paper presenting the ideas of the undulating relationship between internationalization and business success of retail companies based on theoretical and empirical analyses, should be mentioned (Dimitrova et al., 2019). Namely, the authors come to the conclusion that internationalization first has a negative impact, then a positive one, then again assumes negative influence on business performance of the retailers over a longer period of time. Moreover, the same authors suggest that the two variables, the expansion of the foreign market and format diversification in retail, moderate the relationship between internationalization and business success of retail companies. The growth of foreign market builds up the S-curve relationship between internationalization and business performance, while the format diversification in retail does exactly the opposite. It is understandable that internationalization and globalization of the retail market has the consequence of the arising concentration of this market globally, and locally. Namely, the leading retail chains, in the conditions of expanding onto international market, have achieved fast growth. It has especially been evident in the EU, where the leading (foreign) retailers have had a far bigger growth rate than it has been the average growth on the level of retail as industry (Dawson, 2006). If we want to simplify the defining of the concentration as a market phenomenon, then we could say that the retail market is characterized by a high concentration if there are few retail companies with high market shares. Opposite to that, the market is less concentrated if there are many business subjects operating there with each having only a small share. On the global scale, in 2017, the first ten retail companies generated 31.6% of the revenue of the top 250 biggest retailers in the world (Deloitte, 2019), while their concentration in 2016 was 30.7%. In other words, the concentration grew in 2017 in relation to 2016. Internationalization and globalization on the global retail market, generally speaking, have the consequence of higher concentration on the market, with all their advantages and disadvantages for the economy in general, the retail companies and the consumers. Retail chains, due to their extremely strong business activities and big market shares, have created considerable market power. They have built an especially dominant position regarding food retail (Lloyd et al., 2015). The process of retail market concentration has the phases of lower and higher intensity, but it has been taking place continuously for almost three decades. It is interesting to note that this process of concentration on the specific market has been in progress according to an almost well-tried recipe. Namely, retail chains come to the specific market and achieve fast and above-average growth and therein market concentration in several ways. They achieve it through organic growth, acquisition or mergers, depending on the specificities of individual markets and the risks related to them. In that way, those retail companies become dominant in the channel of distribution in relation to other companies, and especially in relation to the manufacturers. Their strong negotiating position in relation to their suppliers enables them to obtain lower purchase prices and costs rationalization in general, which creates preconditions for a more rational and successful business. Pursuant to that, due to their privileged position, their business is characterized by a higher productivity in relation to their rivals on the market. Generally, they grow faster and have a strong accumulation that enables them to invest in new technologies and to implement innovations into their business. It has been long known that new technologies and above all, innovations are among the most important factors of development of the economy and the companies individually (Kosala, 2015). Many studies confirm the importance, but also the necessity of innovations in retail, particularly those related to the continual introduction of new formats in retail (Reinartz et al., 2011). Namely, many researches show that understanding the current phases of the life cycle of certain formats in retail is of great significance (Klein and Schmitz, 2016; Maruyama et al., 2016). Today, we are witnessing the situation in which leading companies in retail strive to continuously develop retail formats in order to remain successful on this extremely demanding and competitive market (Hino, 2014). Introduction and development of new retail formats is becoming one of the key determinants of modern retail

that especially concerns food retail. This process did not start yesterday, it has been running for years, and lately, it has intensified. In line with that, it is clear that with products and retail formats, there are different phases through which a retail format goes through during its life cycle. Moreover, the studies have shown that retailer market concentration can have a significant influence on macro-economic movement in the entire economy of a country. Namely, the researches conducted in Japan suggest how retail market concentration, especially the discounts (rebates on the amount of goods procured from the supplier), connected with the volume of the purchased goods by the biggest retailers, has led to deflation of about 0.1% annually during „the lost decades“ (Ojima et. al., 2018).

3. RESEARCH AND METHODOLOGY

The primary aim of this research paper was to investigate the influence of the concentration of the Croatian retail market on individual market players i.e. on their productivity and business results. Namely, the literature offers papers that prove a direct correlation between market concentration and business success i.e. profitability of the retailers (Hovhannisyan and Bozic 2016; Rickert et. al., 2018). In line with these facts and for the purpose of this research, 36 leading retail firms in Croatia have been chosen. The criterium for isolating the leading firms was their market share. The author of this paper first and foremost wanted to answer the question of to what extent the differences in concentration of the Croatian retail market are linked to the differences in productivity and business result of the retailers that operate on this market. Since the concentration growth trend has been recorded on the Croatian retail market, it was imperative to look into the influence of market concentration growth on retailers that have smaller market shares (local and independent firms). The paper starts out with the basic assumption that on the Croatian retail market, the differences in market shares of the retailers have important impact on the differences in their productivity. Moreover, the assumption is that the differences in market share have a statistically significant influence on the differences linked to the very business results of the retailers in the Republic of Croatia. Following the above-mentioned, the main assumption (hypothesis, H) of this research is: *the market share of the retailers in the Republic of Croatia has a statistically significant influence on their business results (gross result per employee)*. The research was conducted on the sample of 36 leading general retailers of fast-moving consumer goods that mostly deal with food, beverage and sanitary products for households in the Republic of Croatia. The data collected for the period from 2014 to 2018 was processed by the SPSS 20 software package. The research was carried out during the mid - 2019. The data was acquired from the analysis of the financial reports of the leading Croatian retailers available on the Croatian Financial Agency (FINA) website. AZTN (Croatian Agency for Market Regulation) also provided valuable data. The leading business subjects in the sample were divided into five strata, and the criterion for calculating the market share was their total revenue. The division into five strata is presented in Table 1: the retailers with the market share of up to 1%, the retailers with 1% – 5%, the retailers with 5% - 10%, the retailers with 10% - 20% and lastly, those with the market share of over 20%. The retailers were divided into the strata based on the average market share in the period from 2014 – 2018. In this way, the consistency of the elements of the market share was able to be maintained for every stratum in the sample throughout the five targeted years, with the aim of providing a clear analysis of the fast-moving consumer goods retail market (primarily food, beverage and sanitary products) in Croatia. In the analysed sample, the first stratum are those retailers that own more than 20% of the fast-moving consumer goods retail market (food, beverage and sanitary products) in Croatia. In this stratum, there is only one retailer, Konzum, the biggest retail chain in Croatia. The average market share of Konzum from 2014 to 2018 was 30%. However, we deem it necessary to further explain the business trends connected with not just Konzum, but the business group it belongs to as well.

Today, Konzum belongs to the "Forte nova" Group (the former Agrokor Group) that has been undergoing a turbulent phase over the last couple of years, due to business restructuring and the ownership scheme.

Table 1: Research sample

Concentration of retailers	Number of retailers	Structure of the sample (%)	Total share in retail (%)
> 20%	1	2,80%	30,00%
10% - 20%	2	5,60%	20,90%
5% - 10%	3	8,30%	23,20%
1% - 5%	8	22,20%	16,40%
< 1%	22	61,10%	9,40%
Total	36	100%	100%

Source: Author's calculation

After a relatively long period of over-borrowing and inefficient business decisions, the creditors and investors (with the help of the government and a special law passed – Lex Agrokor) took over the Group, which inevitably had further negative consequence on the activities of Konzum as one of the biggest subjects in the Group. In such circumstances, Konzum faced a strong decrease of revenue in 2016 and 2017. Therefore, the market share of Konzum dropped significantly in the analysed period (2014 – 2018). Namely, the share held by Konzum on the fast-moving consumer goods retail market in Croatia in 2014 was 32.27 %, while in 2018, its share dropped to 23.38% (Table 2). In the five-year-period, the market shares of Konzum dropped by 27.5% i.e. 8.89 percentage points. We think that this happened for the above-mentioned reasons which had influenced the structure and the concentration of the fast-moving consumer goods retail market in the Republic of Croatia. But, Konzum has also lost a portion of the market due to the growing influence of other retailers that are becoming its main competitors (Lidl, Plodine, Kaufland, Spar, Tommy). There are two retailers with the share between 10 and 20% in the second stratum of the sample, occupying the average 20.9 % of the entire analysed market. Then follows the stratum with the share between 5 and 10% with three retailers whose average share on the fast-moving consumer goods retail market in the analysed period was 23.2 %. Eight retailers belong to the stratum with the market share of 1 – 5%, which is 16.4% of the entire market. The last stratum in the sample are the firms with the market share below 1% (19 retailers). Their average market share in the analysed period was 9.4% of the total market turnover. Table 1 shows that the three leading retailers held the average of 50.9% of the fast-moving consumer goods retail market in the Republic of Croatia for the observed period from 2014 – 2018. It is very important to note that, in the same period, the average market share of the six leading retailers on the same market was 74.1%. Table 2 shows in detail the movement of the concentration of the fast-moving consumer goods market in the Republic of Croatia for the period from 2014 – 2018. The Table 2 also shows that the concentration of the first six retailers was mildly dropping by several percentage points in 2016 compared to the previous year. It is also evident that the concentration of the six subjects remains almost unchanged in 2017. But, in 2018, the six leading retailers on the fast-moving consumer goods retail market in Croatia began to increase their market concentration again. This trend is in line with a similar concentration trend found in the research by the Croatian Agency for Market Regulation (AZTN, 2018). This research shows that in 2017, the first five top retailers owned a little under 2/3 of the Croatian market, while the top ten retailers held just over 4/5 of the entire retail market of the listed products in Croatia.

Table 2: Market concentration of the Republic of Croatia (2014 – 2018)

Revenue (mil. HRK)	2014	2015	2016	2017	2018
> 20% individual share (1 firm)	13450	14600	10200	8900	9530
Total share	37,27%	36,99%	29,16%	23,8%	23,38%
10-20% individual share (2 firms)	6750	7580	7300	8400	9390
Total share	18,70%	19,2%	20,87%	22,46%	23,03%
5-10% individual share (3 firms)	7310	8010	7900	9600	11000
Total share	20,25%	20,29%	22,59%	25,78%	26,98%
1-5% individual share (8 firms)	5267,23	5830	6128,97	6771,42	7031,81
Total share	14,59%	14,77%	17,52%	18,11%	17,25%
< 1% individual share (22 firms)	3314,28	3452,37	3446,02	3723,82	3815,30
Total share	9,18%	8,75%	9,85%	9,96%	9,36%
Total (top 36)	36091,51	39472,38	34974,99	37395,24	40767,11

Source: Author's calculation

4. RESULTS AND DISCUSSION

The revenue per employee measures employees' efficiency at the specific retailer. Each retailer strives at accomplishing the highest ratio of revenue per employee as possible, since it is the indicator of higher productivity. Due to the fact that the revenue per employee is a sensible analytical means, Table 3 shows in detail the average revenues per employee for each of the five strata, for every year in the analysed period. The retailers with high revenue per employee ratio are mostly profitable. This also shows how investing in human capital and creating highly efficient employees is of great importance. Indeed, productive employees create preconditions for the retailers' profitability. Table 3. clearly shows how the retailers with the market share of 10 – 20% have the highest average productivity in the period from 2014 – 2018 on the fast-moving consumer market (i.e. food, beverage and sanitary household products) in the Republic of Croatia. Their revenue (1,709.540 HRK per employee) is double than in the retailers with the market share from 1-5%. Furthermore, the retailers with 10 – 20% market share have the revenue that is by 47.6% higher than the revenue generated by the retailers with the share from 5 – 10%. It is also evident that the retailers with the share from 10 – 20% have the revenue that is by almost 70% higher than that of the retailer with the highest share (Konzum). However, this exception is understandable, since the reasons for business inefficiency of Konzum have been previously explained. The findings are in line with the previous studies and suggest that market concentration of the retailers, as well as the increase of the retail capacities are directly connected with their productivity (Goodman et al., 2009; Usova, 2017). Namely, it is clear that productivity also largely depends on the level of efficiency of the business processes that are connected with the type of the retail format the specific retailer uses. Research shows that in 2017 in Croatia, 70% of the sales revenue of the listed products the retailers generated in the large format retail stores. More accurately, 47% of the sales was generated in the supermarkets, 23 % in the hypermarkets and 21% in the self-service stores, and only 9% in the small stores (AZTN, 2018). This basically coincides with the structure of the total net sales area of the Croatian retail market mentioned in the opening chapter of the paper.

Table following on the next page

Table 3: Revenue per employee in the period 2014-2018

Variables	Market share	2014	2015	2016	2017	2018	Mean
Revenue per employee (000 HRK)	> 20% individual share (top1)	1131,58	1158,55	886,96	848,67	1011,78	1007,51
	10-20% individual share (2 firms)	1674,55	1738,38	1575,65	1686,05	1873,08	1709,54
	5-10% individual share (3 firms)	1199,6	1089,32	1037,84	1213,97	1250,59	1158,26
	1-5% individual share (8 firms)	757,26	788,99	771,37	804,13	801,17	784,58
	< 1% individual share (22 firms)	773,6	765,98	739,69	795,24	783,95	771,69
	Total (top 36)	1107,32	1108,24	1002,3	1069,61	1144,11	1086,32

Source: Author's calculation

As has already been mentioned, the main assumption of the research is imbedded in the starting hypothesis (H): the market share of the retailers in the Republic of Croatia has a statistically significant influence on their business results (gross/net result per employee). Starting from all of the above-mentioned facts, we assume that the differences connected with the market shares of the retailers have a statistically significant influence on the differences regarding their business success on the Croatian market. We think that there are (statistically) significant differences in the business result (gross/net revenue per employee) between the Croatian retailers depending on the percentage of the market share they hold.

Table 4: Gross profit per employee in the period 2014-2018

Variables	Market share	2014	2015	2016	2017	2018	Mean
Gross profit per employee (000 HRK)	> 20% (top1)	14,3	23,81	-160,87	-376,67	-29,73	-105,83
	10-20% (2 firms)	39,91	68,33	89,77	98,8	29,94	65,35
	5-10% (3 firms)	-6,77	-9,9	-1,83	4,99	10,99	-0,5
	1-5% (8 firms)	21,25	26,03	28,21	36,51	35,53	29,51
	< 1% (22 firms)	14,63	22,46	20,8	25,5	28,33	22,34
	Total (top 36)	16,64	26,15	-4,78	-42,7	15,01	2,06

Source: Author's calculation

The main part of the research is conceptualized in such a way that dependent variable represents the average values of the gross profit per employee of the analysed Croatian retailers in the period from 2014 – 2018. The gross profit here represents the value gained from subtracting the costs of goods sold from the total business income. Contrary to that, the independent joint variable is the market share of the analysed business subjects, being the main measure of the market concentration. In line with that, Table 4 provides a detailed representation of the movement of the gross profit per employee for the analysed period, taking into consideration their market share. Since the main goal of this paper was to investigate the influence of the Croatian retail market concentration on individual market players i.e. their business results, the one-way analysis of variance – ANOVA has been used.

The aim was to determine whether the differences in market share have a statistically significant impact on the differences connected with the gross profit per employee. We have used descriptive indicators to present the variables of measurement.

Table 5: Descriptive indicators for gross profit per employee (000 HRK)

Variables	Market share	N	Mean	Minimum	Maximum	Std.Dev.	Standard Error
Gros profit per employee (000 HRK)	> 20%	1,00	-105,83	-105,83	-105,83		
	10-20%	2,00	65,35	26,94	103,76	54,32	38,41
	5-10%	3,00	-0,50	-34,99	48,94	43,92	25,36
	1-5%	8,00	29,51	4,66	48,70	15,05	5,32
	< 1%	22,00	22,35	-11,17	131,14	31,10	6,63
	Total (top 36)	36,00	20,86	-105,83	131,14	38,07	6,35

Source: Author's calculation

Table 5 clearly shows that the highest gross profit per employee (M = 65 350 HRK) is generated by the retailers with the market share of 10 – 20%. These are the same retailers that also generated the highest revenue per employee. The retailers with the share of over 20% and those with the share of 5 – 10% generated loss (negative gross profit per employee). The reason for this negative result of Konzum (>20%) has already been explained. The other strata of the retailers (with 5 – 10% share) with the negative gross profit per employee is dominated by two foreign retail chains (Kaufland and Spar), that have been operating at a loss ever since they entered the Croatian market (some ten years ago).

Table 6: Values of F-statistics

Effect	Univariate Tests of Significance for TOTAL Sigma-restricted parameterization Effective hypothesis decomposition				
	SS	Degr. of Freedom	MS	F	p
Intercept	58,95	1	58,950	0,063666	0,802458
CATEGORIES	22024,77	4	5506,194	5,946652	0,001135
Error	28703,88	31	925,932		

Source: Author's calculation

The results acquired with the one-way analysis of variance ANOVA (Table 6) confirm that the differences in market share have a statistically significant influence on the differences connected with the business results of the Croatian retailers. Namely, the research findings suggest that, among the five strata of the retailers grouped according to different market shares, there is statistically significant difference in the gross profit per employee ($F = 5,946$; $p < 0,01$). To confirm the acquired results, we used the Post hoc test (Scheffe). Based on the test results, we can conclude that there is the largest statistically significant difference between the retailers that have over 20% market share and with all other groups except those who have 10 – 20% market share. The results of the research are in line with the results found in the literature which also support the direct correlation between the market concentration and business success of the retailers (Hovhannisyan and Bozic 2016; Rickert et al., 2018).

5. CONCLUSION

The processes of globalization, internationalization and concentration of the global economy are clearly reflected in the movements in retail globally and in Croatia likewise. These processes have undoubtedly had much influence in determining the structure and the dynamics of the changes on the Croatian retail market. Namely, the retail in the Republic of Croatia is characterized by the emergence of new types of retail on one hand, and the growing

expectations and demands placed before the retailers by the customers on the other. We are the witnesses of how the Croatian retail market has become internationalized and concentrated, defined by strong and fast changes and considerably great challenges. The main research focus of this paper was to look into the influence of the concentration of the Croatian retail market on the specific market players i.e. their productivity and business results. The author of the paper primarily wanted to explore the differences in the market share of the Croatian retailers and how these differences are connected with the differences in their productivity and especially with the differences in their business results. Therefore, 36 retail firms dealing with the fast-moving consumer goods (mostly food, beverage and sanitary household products) were selected. The research included the selected Croatian retailers in the period from 2014 – 2018. It was important to investigate the influence of the growth of the market concentration on the business activity of the leading market players, but also the influence of the market concentration on the retailers with the smaller market share (local and independent retailers). The paper starts out from the main assumption that on the Croatian retail market, the differences in the market share of the retailers have a statistically significant influence on the differences connected with the very business result of the retailers in the Republic of Croatia (gross profit per employee). Based on the conducted research and the analyses, the results confirm that the differences in the market share on the Croatian retail market have a statistically significant influence on the differences connected with the very business results of the retailers. The findings suggest that there is a statistically significant difference regarding the gross profit per employee among the five strata of the retailers, grouped according to the different market shares. The basic limitations to this study concern the unavailability of a more detailed data on the retailers operating in Croatia. The research was conducted based on an insufficient number of indicators of the gross profit per employee, which can lead to a simplified conclusion. With this in mind, future research should encompass more indicators such as: the net result per employee), ROE (return on equity), ROA (return on total assets), the inventory turnover, etc. They should also include comparative analyses concerning the market concentration of the specific NUTS 2 regions in Croatia and also in relation to other EU members, which would be a logical and scientifically meaningful comparison.

LITERATURE:

1. AZTN, Croatian Agency for Market Regulation (Agencija za zaštitu tržišnog natjecanja), (2018). Prikaz tržišta trgovine na malo mješovitom robom, pretežno hranom, pićima i higijenskim proizvodima za domaćinstvo u Republici Hrvatskoj u 2018. Retrieved 12.02.2020 from <http://www.aztn.hr/ea/wp-content/uploads/2019/07/PRIKAZ-STANJA-TRGOVINA-2018.pdf>.
2. Bronnenberg, B.J. and Ellickson, P.B. (2015). *Adolescence and the Path to Maturity in Global Retail*. Journal of Economics Perspectives, 29(4), pp. 113-134.
3. Burt, S., Dawson, J. and Sparks, L. (2003). Failure in International Retailing: Research Propositions. *International Review of Retail, Distribution and Consumer Research*, 13(4), pp. 355-373.
4. Caves, R. E. (1971). International corporations: The industrial economics of foreign investment. *Economica*, 38(149), pp. S-6.
5. Chang, S. J. (1995). International expansion strategy of Japanese firms: capability building through sequential entry. *Academy of Management Journal*, 38(2), pp. 383–407.
6. Dawson, J. (2006). Retail Trends in Europe. In Kraft, M., Mantrala, M. K. (Eds.), *Retailing in the 21st Century* (pp. 41-58). Berlin: Springer.
7. Deloitte, *Global Powers of Retailing 2019*, Retrieved 17,01,2020 from <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Consumer-Business/cons-global-powers-retailing-2019>.

8. Dimitrova, B., Kim, S. and Smith, B. (2019). Performance of International Retailers: Empirical Evidence of an S-Curve Relationship, *Journal of Global Marketing*, 32(3), pp. 154-176.
9. Etgar, M. and Rachman-Moore, D. (2008). International expansion and retail sales: an empirical study. *International Journal of Retail & Distribution Management*, 36(4), pp. 241-259.
10. Gomes, L. and Ramaswamy, K. (1999). An empirical examination of the form of the relationship between multinationality and performance. *Journal of International Business Studies*, 30(1), pp. 173-187.
11. Goodman, C., Kachur, S.P., Abdulla, S., Bloland, P. and Mills, A. (2009). Concentration and drug prices in the retail market for malaria treatment in rural Tanzania. *Health Economics*, 18(6), pp. 727-742.
12. Hino, H. (2014). Shopping at different food retail formats. *European Journal of Marketing*, 48(3/4), pp. 674 -698.
13. Hitt, M. A., Tihanyi, L., Miller, T. and Connelly, B. (2006). International Diversification: Antecedents, Outcomes, and Moderators. *Journal of management*, 32(6), pp. 831–867.
14. Hoppner, J. J. and Griffith, D. A. (2015). Looking back to move forward: A review of the evolution of research in international marketing channels. *Journal of Retailing*, 91(4), pp. 610-626.
15. Hovhannisyan, V. and Bozic, M. (2016). The effects of retail concentration on retail dairy product prices in the United States. *Journal of Dairy Science*, 99(6), pp. 4928-4938.
16. Klein, A., Schmitz, G. (2016). Main-format dominance in consumers' FMCG cross-format shopping patterns. *Journal of Retailing and Consumer Services*, Vol. 30, pp. 105-115.
17. Kosała, M. (2015). Innovation Processes as a Stimulant of Internationalisation Process of Firms. *Entrepreneurial Business and Economics Review*, 3(2), pp. 65-84.
18. Lloyd, T. A., McCorriston, S. and Morgan, C. W. (2015) Experience of food inflation across the EU, In McCorriston, S. (ed.), *Food Price Dynamics and Price Adjustment in the EU*. Oxford: Oxford University Press.
19. Maruyama, M., Wu, L. and Huang, L. (2016). The modernization of fresh food retailing in China: The role of consumers. *Journal of Retailing and Consumer Services*, Vol. 30, pp. 33-39.
20. Mohr, A. and Batsakis, G. (2014). Intangible assets, international experience and the internationalisation speed of retailers. *International Marketing Review*, 31(6), pp. 601-620.
21. Ojima, M., Shino, J. and Ueda, K. (2018). Retailer Market Concentration, Buyer-Sizediscounts and Inflation Dynamics, *The Japanese Economic Review*, 69(1), pp. 101-127.
22. Papadopoulos, N. and O. Martin Martin. 2011. International market selection and segmentation: Perspectives and challenges, *International Marketing Review*, 28(2), pp. 183-200.
23. Reinartz, W., Dellaert, B., Krafft, M., Kumard, V. and Varadarajan, R. (2011). Retailing *Innovations in a Globalizing Retail Market Environment*. *Journal of Retailing*, 87(1), pp. 53-66.
24. Rickert, D., Schain, J.P. and Stiebale, J. (2018). *Local market structure and consumer prices: Evidence from a retail merger*. DICE Discussion Paper, 1-47; 280; <http://hdl.handle.net/10419/173247>.
25. Shi, Y., Lim, J. M., Weitz, B. A. and France, S. L. (2018). The impact of retail format diversification on retailers' financial performance. *Journal of the Academy of Marketing Science*, 46(1), pp. 147-167.
26. Smith, B., Rippe, C. B. and Dubinsky, A. J. (2018). India's lonely and isolated consumers shopping for an in-store social experience. *Marketing Intelligence & Planning*, 36(7), pp. 722-736.

27. Sundaram, A. K. and Black, J. S. (1992). The environment and internal organization of multinational enterprises. *Academy of Management Review*, 17(4), pp. 729-757.
28. Swoboda, B., Morbe, L. and Hirschmann, J. (2018). International strategy's effects on retailers' local implementation and performance. *International Business Review*, 27(3), pp. 642-653.
29. Tordjman, A. (1995). European Retailing: convergences, differences and perspectives. In P.J. McGoldrick, P.J., Davies, G. (Eds.) *International Retailing* (pp. 17-42). London: Pitman Publishing.
30. Treadgold, A.D. (1991). The emerging internationalization of retailing: Present status and future challenges, *Irish Marketing Review*, 5(2), pp. 1-27.
31. Usova, N.V. (2017). Identification of consumer development trends in a major city: a market-based approach. *R-economy*, 3(1), pp. 50-58.

TAXATION OF LUXURY GOODS

Maris Juruss

*Riga Technical University
Kalnciema str. 6, Riga, Latvia
maris.juruss@rtu.lv*

Janis Brizga

*University of Latvia
Raiņa bulvāris 19, Rīga, Latvia
janis@zalabriviba.lv*

Liga Gasune

*Riga Technical University
Kalnciema str. 6, Riga, Latvia
liga.gasune@inbox.lv*

Valerijs Skribans

*Riga Technical University
Kalnciema str. 6, Riga, Latvia
valerijs.skribans@rtu.lv*

ABSTRACT

Countries are engaged in a tax competition that leads to a reduction of the budget revenue. The aim of this research is to evaluate taxation of the luxury goods, to evaluate their potential distributional effect and types of goods to be taxed. Results demonstrate that tax on luxury goods could be used to compensate the reduction of tax revenues. The tax on luxury goods would reduce the regressive tax burden of consumption taxes. However, there is a need for more studies of what goods could be considered a luxury as well as how to organize tax administration in open markets.

Keywords: *consumption tax, luxury goods, tax on luxury goods, the tax burden*

1. INTRODUCTION

Due to globalization, countries have been engaged in a tax competition that leads to a reduction of the tax burden in order to attract investors and make taxpayers more competitive. As a result, state budget revenues are falling. It needs to be compensated by an increase of other taxes. The most popular taxes are taxes on consumption, such as excise taxes or environmental taxes. However, such opportunities are limited by the purchasing power of consumers and the expansion of the illicit market. Environmental taxes cannot significantly contribute to the state revenues and in many cases have an adverse effect on low-income earners (Juruss & Brizga, 2017). In 2014, taxes on labour in OECD countries constituted the largest tax revenue share with total amount 59.9% (taxes on income and profit accounted for 33.7% and social security contributions accounted for 26.2%). The revenue share coming from taxes on goods and services was 32.6% (consumption taxes amounted to 30.5%). This proportion has not significantly changed for the last 35 years, there were only some changes on components of the tax burden on labour - tax burden on income and profit from 1980 to 2009 decreased and simultaneously tax burden on social security contributions increased (OECD, 2016). In addition, one of the challenges facing the world is income inequality. For example, average GINI coefficient of income inequality in OECD countries in the mid-1980s was 0.29 but by 2013 it had increased in 17 of 22 OECD countries by 10% to 0.32 (OECD, 2015).

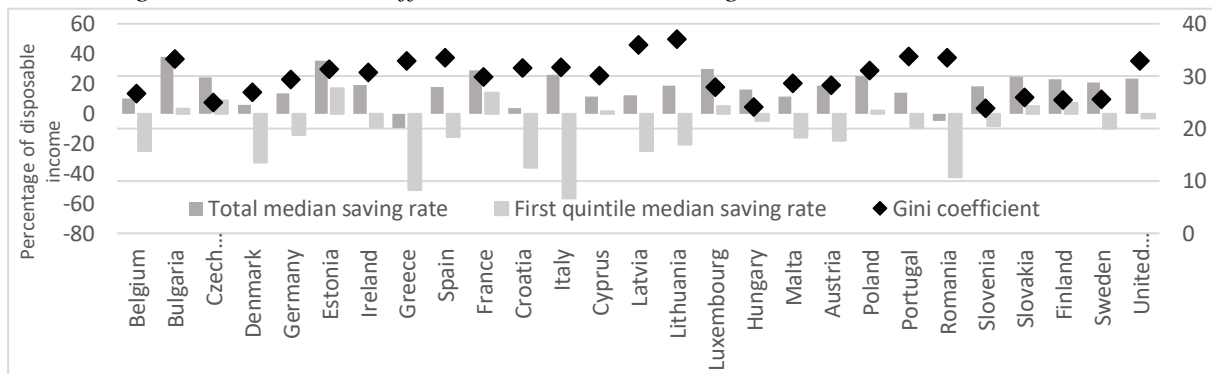
We can also see that the average income of the top income earners is growing faster than any other income bracket (Euromonitor, 2017), creating greater demand for luxury goods and overconsumption. This is also linked to environmental sustainability as the top 10% of world population, are responsible for about 34% of household-related direct and indirect greenhouse gas emissions (Hubacek et al., 2017). These figures show that the highest tax burden is on labour taxes and income inequality across the countries remains very high, but the unsustainable consumption patterns of the high-income earners have a significant contribution to the environmental degradation. We can see that current tax instruments are not effective both fiscally and social-economically. One of the ways to increase tax revenues, reduce income inequality and environmental impact and simultaneously deflect tax burden from labour taxes to consumption taxes is to introduce the luxury tax - additional tax on luxury goods that might raise revenues and would not leave harmful tax burden on low incomes earners. The aim of this paper is to evaluate taxation of the luxury goods with an additional consumption tax. The tasks of the research are to study the research literature on this topic, to evaluate the potential distributional effect of such taxes and to evaluate the potential types of goods to be taxed. To do this we have been using quantitative data analyses to analyse consumption of luxury goods, taxation and other data for the three Baltic States and Poland, as well as qualitative desk research to study existing literature on this topic.

2. LITERATURE REVIEW

2.1. Income inequality and luxury goods

Year by year one of the main social and economic problems is inequality of income, the gap between the rich and the poor in the world gets bigger because the rich people become richer but the poor become poorer. In 2010, the average Gini coefficient in the EU was 30.5 and in 13 out of 28 EU member states Gini coefficient was above the EU average (Fig.1.). Analysing median saving rate by income quintile mostly these countries had a problem with savings when people of the first quintile could not use disposable income for savings.

Figure 1: The Gini coefficient and median saving rate in EU countries in 2010



Source: EUROSTAT, 2018

In some countries, this problem reaches up to the third income quintile (including) but in Greece even to the fourth quintile (in this quintile savings form -0.4% of disposable income). It indicates that people spend all or the biggest part of their income on everyday consumption. For example, in 2010 the aggregate propensity to consume in the first quintile forms 168.1% of disposable income in Latvia; the same situation can be also observed in Lithuania where the aggregate propensity to consume was 164.2% of disposable income). In contrast, in Latvia in the fifth quintile the above-mentioned indicator forms only 68.2 and in Lithuania only 53.1% of disposable income. This demonstrated that high-income earners could spend a significant part of their income on inessential luxury goods.

Inequality and luxury goods have existed for centuries (Som & Blanckaert, 2015); however, there is no one clear definition of luxury. One of the most commonly used definitions is that luxury goods are goods for which the usage or display of a particular branded product provides status or prestige to its owner along with any functional utility (Grossman & Sharpiro, 1988). Status symbols the goods are providing, of course, are important not only for the high-income earners; however, they have more means to satisfy these needs. In different cultures, consumption patterns can be different, which are influenced by various factors, for example, in Arab culture individual's exhibit an affiliation-oriented nature whereby collective interests and family and group values are set as a priority compared to one's private life. In any case, in Arab culture, strong religion and culture boundaries exist and consumers do not purchase luxury products due to poor lifestyle, social status and low salary. However, Arab consumers are willing to buy conspicuous products that demonstrate social rank (Farah & Fawaz, 2016). In the luxury goods industry, different risk factors should be considered, like smuggling and counterfeiting. Luxury brands are one of the main targets for counterfeiting. It is an expanding and increasingly important issue in contemporary markets that have an impact on luxury branded goods. Counterfeiting is a really huge issue to luxury brands' products because then they become more common and luxury brands lose its status, quality and uniqueness compared of other brands (Gistri et al., 2009). The quality, materials and high price are the major factors that make luxury brands so luxury. Most people use luxury brands because it delivers the highest sentimental and ideational value and fulfils their needs of self-esteem. In addition, luxury brands serve to provide respect and recognition from others and demonstrate person's achievements in life (Scholz, 2014). It will be optimal to find out those goods that are consumed primarily to display the owner's wealth and these defined goods charge the luxury tax (Griffith, 2003). Nowadays, luxury goods refer both to luxury for personal use and are the aggregation of designer apparel and footwear (ready-to-wear), luxury bags and accessories (including eyewear), luxury jewelry and watches, and premium cosmetics and fragrances, as well as typical luxury goods as expensive cars, travel and leisure services, boating and yachts, fine art and collectables, and fine wines and spirits. Global luxury goods sales have been growing by 4% in constant terms reached USD 954 billion in 2017 (Euromonitor, 2018). The fastest growing luxury goods markets are in the Asia Pacific, the Middle East and Africa. Top five luxury goods markets are USA, China, Japan, Germany and United Kingdom. In Germany market size of luxury goods grows rapidly because German consumers' the perception of luxury consumption has improved and they have started to increase their spending on personal luxury goods. (Shane, 2017). Luxury cars remain the cornerstone of the industry with sales accounting for almost 53% of all global luxury goods sales in 2017, followed by designer clothing and footwear (13%), fine wines/champagne and spirits (7%), luxury jewellery and watches (7%) (Euromonitor, 2018). The healthy and sustainable living is also becoming the new wealth symbol. It is becoming increasingly important also for luxury brands to increase their social-ecological stances. The world's 100 largest luxury goods companies generated sales of USD 212 billion in the financial year 2015. The total average luxury goods annual sales for a top 100 companies in 2015 was USD 2.1 billion. In 2015, the biggest average size of companies by luxury goods sales (in the amount of USD 6.3 billion) was luxury goods companies that sell multiple luxury goods (companies with substantial sales in more than one product sector). The least average size of companies by luxury goods sales was apparel and footwear companies (USD 1 billion) (Deloitte, 2017). In 2015, LVMH Moët Hennessy Louis Vuitton S.E. took the first place in the sales ranking of Top 100 luxury goods companies and this company's luxury goods sale grew by 15.2%. Compagnie Financière Richemont SA and The Estée Lauder Companies Inc ranked second and third and their sales grew by 6.4 and 4.5% accordingly (Deloitte, 2017) (Table 1).

Table 1: Profile of top 5 luxury product sectors in 2015

No	Question	Number of companies	Luxury goods sales growth compared to the previous fiscal year, %
1.	Apparel and footwear	41	4.4
2.	Bags and accessories	10	13.4
3.	Cosmetics and fragrances	10	6.5
4.	Jewellery and watches	28	2.0
5.	Multiple luxury goods	11	10.8

Source: Deloitte, 2017

2.2. Classification of luxury goods taxes

Taxing luxury goods is not a new idea. One of the biggest booms in taxing luxuries was after the First World War. At that time the main purpose of these taxes was to raise additional resources for destroyed economies. However, the purpose of the luxury tax is not only fiscal but also to repress undesirable and extravagant expenditure and improve income equality. Nevertheless, luxury taxes could take different forms, e.g. of differentiated income tax, property taxes or consumption-based taxes, e.g. differentiated value-added tax or tax on specific products (chocolate, luxury brands, jewelry and watches etc.) (See Table 2.).

Table 2: Principles of luxury taxation

Base	Over-income	Wealth	Extra-consumption
Type of tax	Income tax	Property taxes	Value-added tax Excise duty Import duty Other consumption taxes
Examples	Progressive personal income tax (wage, dividend, interest) Taxes on gambling	The progressive real estate tax Progressive vehicles taxes (luxury cars, yachts etc.) Capital tax	Differentiated value-added tax Tax on specific products (chocolate, luxury brands, jewellery, watches, etc.)

Source: by the authors

The idea behind the luxury tax is that the most remote from necessity must be the most heavily taxed (Orain, 2010). It could be luxury cars (Beijing Review, 2013) which account for the most of the luxury expenditures. In European countries it is common to use taxes if they're connected with good and luxury life, for example, paintings, musical instruments, furniture, etc., what people actually do not need as the main necessity. In France photographs, jewellery, antiques, sporting games, mechanical pianos, motor cars, billiard tables, perfumes, sculptures, yachts, silk underwear, liqueurs, watches, etc. were believed to be obvious luxuries. General articles such as clothing became a luxury when the price exceeded a certain sum. Other countries had also included a miscellaneous assortment of additional excise taxes (Bogart, 1919). It could be also as a tax on aggregate professional sports player salary expenditures above a specified level (Kaplan, 2004). It is rational to collect taxes according to different consumption models because the consumption tax on luxury goods is aimed at consumption at a higher level than usual and it does not affect consumption of everyday products. However, tax on luxury goods consumption is an ineffective solution to narrow down the gap between the rich and the poor both in the short and the long term. Tax on luxury goods can have an effect on people with middle income if they buy luxury products thus such a tax can affect relatively poor (Beijing Review, 2010). Therefore, target groups of the luxury tax can differ and some of the affordable luxuries, e.g. chocolate is already taxed in many countries with excise duty.

3. METHODS

The reason for the introduction of luxury tax should be not only to raise additional state revenues but also to ensure social economic and environmental impact. As there is still very high inequality in many countries (OECD, 2015), luxury taxes would be as one of the tools for redistribution. There are two directions of taxation of luxury: taxing income or expenditure. As rich persons buy luxury goods more, it would be logical to tax income of rich persons more or apply progressive income tax. Another option is to tax expenses of rich behaviour or in other words apply a luxury tax on consumption of rich progressively. There are indirect taxes – value-added tax, excises or others, which are paid by taxpayers (traders, producers) and therefore tax burden is actually passed to persons purchasing the specific goods. Real estate or other property like exclusive luxury cars, yachts or any other such property could be taxed as well. To understand the impact of taxes a method of assessment of consumption tax burden, which was developed by Jurušs and discussed in his doctoral theses, can be used (Jurušs, 1999). The method is based on the theory of consumption by John Maynard Keynes, particularly to a concept of the marginal propensity to consume (MPC). The method is described in more detail in a publication about tax policy impact on income inequality in Latvia (Jurušs, 2016). This method allows to describe the nature of changes of tax burden depending on the level of income, however, in practice, there might be limitations, exceptions and anomalies affecting consumption and income. For example, there may be cases where an individual's behaviour is different for various reasons, and thus a particular case may also have a different result. The results may be affected also by other factors such as illegal economic trends (Jurušs, 1999). This method can be applied in practice to compare tax burden of various income level (or quintile groups) by observation of disposable income and consumption. Particularly, consumption tax burden on a specific level of income can be calculated by the following formula:

$$T_{cn} = T_{ca} (C_n / C_a) / (I_n / I_a) \quad (1)$$

where:

T_{cn} – consumption tax burden on a specific level of income,

T_{ca} – average consumption tax burden,

C_n – consumption of specific level of income,

C_a – average consumption,

I_n – income of specific level of income,

I_a – average income.

In the case study to create a methodology for luxury tax estimation model, consumption tax burden estimation was used. Data from the Central Statistical Bureau about income and expenditures of one person in a household by quintile was used for this model (CSP, 2017) and consumption tax revenue in Latvia (Eurostat, 2017). The methodology consists of three steps:

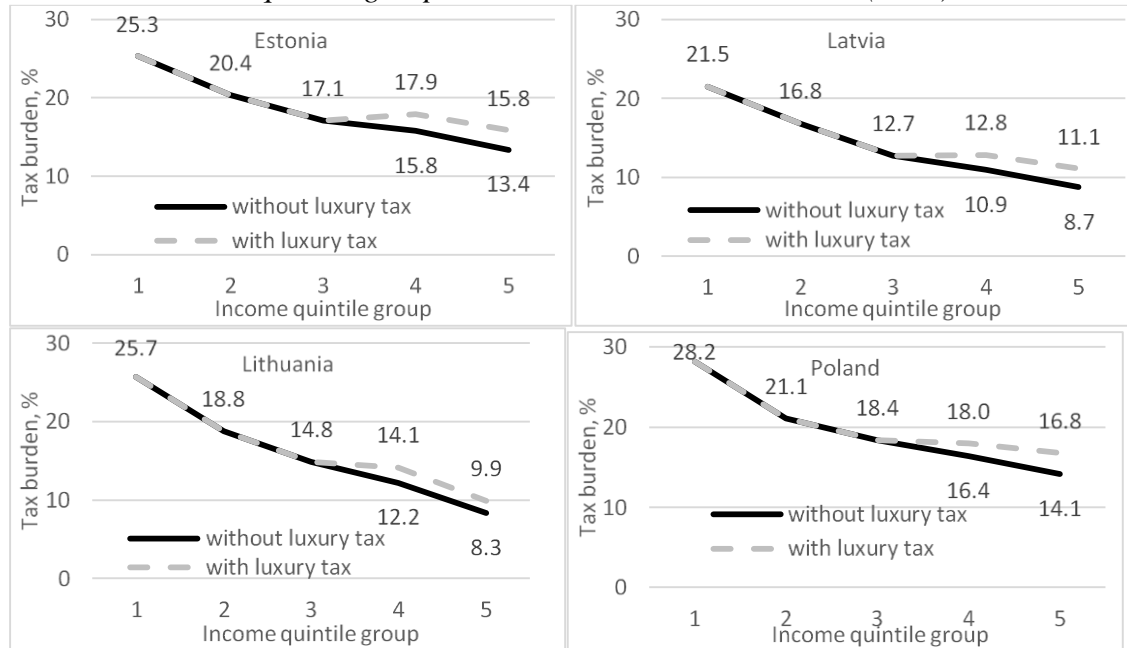
- The first step is to find out the current tax burden (before) of consumption tax according to the data on consumption tax revenue by quintile and by income and expenditure;
- Second step – to determinate luxury expenditure and then find out the tax burden (after) of luxury tax;
- Finally – estimate the impact on the tax burden of luxury tax by quintile before and after luxury expenditure determination.

4. RESULTS

In this case study, the tax burden on consumption by income quintile groups with and without luxury tax in the Baltic States (Estonia, Latvia, and Lithuania) and Poland is analysed.

The luxury expenditure was determined by determination of the difference between the expenditure of fourth and fifth quintile. Then the luxury tax at the rate of 10% was applied (as an additional tax to general consumption taxes). Fig. 2 shows changes in the tax burden of consumption taxes before and after determination of luxury expenditure. In this case study applying the luxury tax of 10%:

Figure 2: The tax burden on consumption without luxury tax and with luxury tax by income quintile groups in the Baltic States and Poland (2010)



Source: author's calculations (based on data from EUROSTAT, 2010)

- In Estonia, the consumption tax burden in the fourth quintile increased by 2.2% and in the fifth quintile by 2.5%. Tax revenue on production and imports increased by 9%;
- In Latvia, the consumption tax burden in the fourth quintile increased by 1.9% and in the fifth quintile by 2.3%. In this case study, the biggest tax revenue from production and imports increase was in Latvia (12%);
- In Lithuania, the consumption tax burden increased by 2% (in the fourth quintile) and by 1.6% (in the fifth quintile). Revenue from taxes on production and imports increased by 9%;
- In Poland, the consumption tax burden increased by 1.6% (in the fourth quintile) and by 2.7% (in the fifth quintile) and revenue from taxes on production and imports increased by 8%.

5. DISCUSSION

Economic growth involves two aspects of sustainability. One of them is the need to use increasing quantities of resources to produce higher growth. The second aspect - during growth there is an additional problem of maintaining a balance between the consumption of the rich and the poor. If the economy grows rapidly, some groups of the population have more than proportionate rise in income and this leads to an increased production of luxury goods. Since the production of luxury goods often requires more resources, it may reduce not only the production of necessary goods but also total production. When an economy experiences initial growth, the high-income earners utilize the growth opportunity better than the low-income earners, leading to increased income inequality.

This inequality increases the demand for luxury goods. The resultant change in the resource allocation may threaten the sustainability of the consumption level of the poor (Datta, 2014). Luxury tax could help diminishing these misbalances, but it is necessary to continue the discussion and study whether and for which goods a luxury tax should be introduced. The tax and terms of the tax may vary between developed and developing countries. The main purpose of the luxury tax is not the fiscal, but rather distributional aspects and drive for more sustainable consumption patterns by taxing non-essential goods. However, the risk of growing illegal markets should be taken into account, as additional taxes will increase prices and people will want to buy it illegally or in other markets. In this respect, international cooperation and access would be required, for example, at the European Union level. A practical solution could be to increase VAT on specific goods. Most countries use both income taxes and expense taxes, e.g. VAT and excise taxes. Therefore, there are options to choose one or the other way to apply a differentiated higher tax to particular goods affecting some of the social groups. The luxury tax is one of these options. It is possible to avoid both income and expense taxes, and therefore tax evasion argument is not so important when considering one or the other approach. In addition, income taxes related to labour supply, which means they have a more significant impact on economic growth. A luxury tax on consumption could be politically easier to approve. Moreover, luxury goods are not essential commodities and their demand is inflexible, so price changes would have less effect on their consumption, thus ensuring more revenue to the state budgets. Literature analysis and our case study shows that the additional tax on luxury goods could be one of the alternatives to compensate the reduction of income tax revenues due to tax competition in the global market. The additional tax burden on luxury goods would reduce the regressive tax burden caused by consumption taxes because such luxury taxes would affect the rich persons. However, there is no clear unified understanding, which products, services, and lifestyles could be considered as a luxury (Wiedmann et al., 2009). A direct implication is that luxury taxes are inefficient tools for achieving distributive objectives (Kaplow, 2011). The expenditures by households are different because poor households' expenditure is based on their needs but richer households can afford more luxury goods. If most consumption taxes were levied on luxury goods, it would be necessary to conclude that they are fundamentally redistributive (Beramendi & Rueda, 2007). Another remedy, if only applied in time, is the imposition of excise taxes instead of tariffs on luxury goods. The luxury tax for goods that are not produced at home functions just like a tariff that is collected on imported goods. However, the luxury tax has equal impact on foreign and home production; inefficient domestic production is not stimulated but at the same time, there are no barriers to efficient domestic production that could compete with the world market (Harberger, 1990). Income inequality is caused by unemployment, emigration and demographic change. However, a significant impact on income inequality is created by an unfair tax policy and an inefficient system of revenue redistributions, social transfers and benefits that are unable to offset the adverse effects of the unfair tax policy. Persons with lower incomes spend proportionally a much bigger part of their income on consumption than persons with higher income, which means that persons with low income have the heaviest consumption tax burden (Jurušs, 2016). Therefore, changes in taxation principles are vitally important to create fair tax policy and minimise income inequality.

6. CONCLUSION

Commodity taxes must be combined with the application of other taxes and depend on, for example, the existence of a proportional or linear income tax or a progressive or non-linear income tax, including taxation of luxury goods. If governments use proportional or linear taxation, taxation of commodity goods at lower rates than luxury goods, have a positive effect on equity but have unclear efficiency effect.

However, in case of optimal non-linear income taxation, commodity taxes should be uniform, even if there are people with limited income (Boadway & Song, 2016). However, there is also the view that commodity taxes would not be the right policy tool to separate entertainment and other goods. Commodity taxes can be used for efficiency reasons in order to stimulate labour supply and thus offset the distortions of the income tax on labour supply (Bastani et al., 2016). There is a need for further studies to better understand some of the aspects of taxing luxury goods and how it could affect inequality, tax administration and state revenue:

- 1) First, there is a need to draw a clear line which goods and when we can identify as a luxury, as there are social and cultural differences among countries;
- 2) Second, there is a need for more in-depth studies to understand which taxes are best to use as well as how to organize tax administration in open markets if there is no common tax harmonization;
- 3) Third, the methodology should be developed for luxury tax' estimation models per specific luxury goods.

ACKNOWLEDGEMENT: Participation in the conference was funded by European Regional Development Fund (ERDF), Measure 1.1.1.5 "Support to international cooperation projects in research and innovation of RTU". Project No. 1.1.1.5/18/I/008. The research has been prepared by the experts of Riga Technical University, University of Latvia and was partly supported by the European Social Fund Operational Programme "Growth and Employment", Post-doctoral Research project "Developing new tools for the Sustainability Assessment of the Bioeconomy".

LITERATURE:

1. Bastani, S., Blomquist, S., Micheletto, L. (2016). *Optimal commodity taxation with varying quality of goods*. Research in Economics, Volume 70, Issue 1, Pages 89-100, ISSN 1090-9443, <https://doi.org/10.1016/j.rie.2015.11.005>.
2. Beijing Review (2010). *Is a Luxury Goods Consumption Tax Useful?* 53(25), 46.
3. Beijing Review (2013). *Tax on Luxury Cars*. 56 (24), 11.
4. Beramendi, P. & Rueda, D. (2007). *Social democracy constrained: indirect taxation in industrialized democracies*. British Journal of Political Science, 37(4), 619-641. DOI: 10.1017/S0007123407000348
5. Boadway, R. & Song, Z. (2016). *Indirect taxes for redistribution: Should necessity goods be favored?* Research in Economics, Volume 70, Issue 1, Pages 64-88, ISSN 1090-9443, <https://doi.org/10.1016/j.rie.2015.06.002>.
6. Bogart, E. L. (1919). *Luxury taxes*. The Bulletin of the National Tax Association, 4(9), 237-239.
7. CSP (2017). *General statistic*. Central Statistical Bureau in Latvia. Retrieved from: <http://www.csb.gov.lv/>
8. Datta, D. (2014). *Economic growth and the problem of balancing consumption between rich and poor*. Economic Analysis and Policy 44, 85-94. DOI: 10.1016/j.eap.2014.02.002
9. Deloitte (2017). *The fourth Global Powers of Luxury Goods 2017. The new luxury consumer*. Retrived from: <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/consumer-industrial-products/gx-cip-global-powers-luxury-2017.pdf>
10. Euromonitor (2017). *Consumer Expenditure by Income*.
11. Euromonitor (2018). *The world market for luxury goods*.
12. Eurostat (2010, 2018). *Eurostat database*. European Commission. Retrieved from: <http://ec.europa.eu/eurostat/web/main>

13. Eurostat (2017). *Tax revenue*. Retrieved from: http://ec.europa.eu/eurostat/statistics-explained/index.php/Tax_revenue_statistics#Database
14. Farah, M. F., & Fawaz, R. S. (2016). *A Comparison of the Influence of Personal and Cultural Values on the Consumption of Luxury Goods across Arab Regions: Levant versus Gulf*. *Contemporary Management Research*, 12(2), 139-167. doi:10.7903/cmr.15067
15. Gistri, G., Romani, S., Pace, S., Gabrielli, V., & Grappi, S. (2009). *Consumption practices of counterfeit luxury goods in the Italian context*. *Journal of Brand Management*, 16(5-6), 364-374. DOI:10.1057/bm.2008.44.
16. Griffith, T. D. (2003). *Progressive taxation and happiness*. *BCL Rev.*, 45, 1363.
17. Grossman, G.M. & Shapiro, C. (1988). *Counterfeit-product trade*. *The American Economic Review*, 78, 59-75.
18. Harberger, A. C. (1990). *Principles of taxation applied to developing countries: what have we learned*. *World Tax Reform: Case Studies of Developed and Developing Countries*, 25-46.
19. Hubacek, K., Baiocchi, G., Feng, K., Castillo, R.M., Sun, L. and Xue, J. (2017). *Global carbon inequality*. *Energy, Ecology and Environment*, 2(6), pp.361-369.
20. Jurušs, M. (1999). *Nodokļu sistēmas teorētiskie pilnveidošanas aspekti*. (in English: Theoretical aspects of tax system development). Doctoral theses. Riga: RTU.
21. Jurušs, M. (2016). *Tax policy impact on income inequality in Latvia*. *Daugavpils Universitātes 58. Starptautiskās zinātniskās konferences rakstu krājums*, 100.
22. Juruss, M., Brizga, J. (2017). *Assessment of the Environmental Tax System in Latvia*. *NISPAcee Journal of Public Administration and Policy*, 10(2), pp.135-154.
23. Kaplan, R. A. (2004). *The NBA luxury tax model: A misguided regulatory regime*. *Columbia Law Review*, 104(6), 1615-1650.
24. Kaplow, L. (2011). *The theory of taxation and public economics*. Princeton University Press.
25. OECD (2015). *In it Together: Why Less Inequality Benefits All*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264235120-en>
26. OECD (2016). *Revenue Statistic 2016*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264283183-en>
27. Orain, A. (2010). *Progressive indirect taxation and social justice in eighteenth-century France: Forbonnais and Graslin's fiscal system*. *The European Journal of the History of Economic Thought*, 17(4), 659-685.
28. Scholz, L. (2014). *Brand management and marketing of luxury goods*. Anchor Academic Publishing (aap_verlag).
29. Shane, N. (2017). *The Country-of-Origin Effect and its Potential Impact on How German Consumers Perceive Chinese Luxury Goods*.
30. Som, A., & Blanckaert, C. (2015). *Luxury: concepts, facts, markets and strategies*. John Wiley & Sons, Incorporated, Singapore.
31. Wiedmann, K., Hennigs, N., & Siebels, A. (2009). *Value-based segmentation of luxury consumption behavior*. *Psychology and Marketing*, 26(7), 625-651. DOI:10.1002/mar.20292

TESTING THE IMPACT OF GLOBAL FINANCIAL CRISIS ON GLOBAL TRADE INTEGRATION

Ahliman Abbasov

Azerbaijan State University of Economics, Azerbaijan

ABSTRACT

The end of the Cold War, technological progress and vast trade liberalization intensified the global trade integration since the end of 1980s. But the rapid growth of global trade halted as the global financial crisis erupted in 2008. Some researches claim that post-crisis rising protectionism and cyclical factors have been the main reason behind the slow growth of global trade since the financial crisis. Cyclical factors are the ones that have occurred in relation with 2008-2009 crisis and had only short-term impact on the global trade level. But some also point out the role of structural changes of global economy on the weakened world trade. This paper estimates the role of 2008-2009 financial crisis on the weakening of global trade integration using Panel ARDL model. The estimation results reflects that the global financial crisis had both short run and long run negative impact on trade globalization. But the long impact of financial crisis have been much stronger than its short run impact on trade integration.

Keywords: *Crisis, Financial, Global, Impact, Integration, Trade*

1. INTRODUCTION

The end of Cold War, technological progress and liberalization of trade policies intensified the integration of global trade since the end of 1980s. This process of rapid trade globalization played an important role on the economic development of many countries. Liberalization of global trade policies caused the expansion of global supply chains and gradual change of geographical location of global production. But the onset of global financial crisis in 2008 halted the decades of rapid growth of global trade integration. The growth rate of global trade had been around 7 per cent until the beginning of the global financial crisis, it reduced to 3 per cent during 2008-2014, and decreased even further during 2015-2016. Two decades until the global financial crisis global trade growth had been almost 2 times higher than the global output growth. But global trade and output started to grow by similar rates after the Great Recession. Some researches claim that post-crisis rising protectionism and other cyclical factors have been the main reason behind the slow growth of global trade. Cyclical factors are the ones that have occurred in relation with 2008-2009 crisis and had only short-term impact on the global trade level. But some authors also point out the role of structural changes of global economy on the weakened world trade. Defenders of this view claim that as a result of trade policy liberalisation, technological advancement, rapid expansion of global value chains and deepening globalization of developing countries from mid 1990s until mid 2000s global trade experienced its unprecedented development period. But as this processes have come close to its full capacity, world trade will not show its initial high growth pace without any fundamental changes in technology. In this paper, I aim to evaluate the role of 2008-2009 financial crisis on slow global trade growth. I use panel data regression with 41 countries and period of 2000-2016. The next section presents the model and data of the regression. 3rd section presents the methodology of the estimation. Results are discussed in the 4th section. Last section makes the concluding statements.

2. MODEL AND DATA

To evaluate the impact of global financial crisis on global trade integration the following panel regression model has been used:

$$Trflow_{it} = \alpha_{0i} + \alpha_{1i}Finflow_{it} + \alpha_{2i}Growth_{it} + \alpha_{3i}Crisis_{it} + u_{it}, \quad i=1, \dots, N; \quad t=1, \dots, T \quad (2)$$

Where “Trflow” is the trade integration level, “Finflow” is the financial integration level, “Growth” is the GDP growth level, “Crisis” is a dummy variable for the 2008-2009 global financial crisis and u_t is the error term of the regression. The subscripts i and t denote country and time, respectively.

In this study panel data for 41 countries and period of 2000-2016 has been used to examine the impact of global financial crisis on international trade integration. Table 1 indicates the list of countries that have been included to the analysis. The data for trade integration and financial integration have been obtained from KOF Globalization Index 2018. De facto trade globalization index, de facto financial globalization index are used for trade integration and financial integration, respectively. The KOF Globalization index originally was introduced by Dreher (2005), but the Gygli et al. (2019) developed them and provided a more comprehensive subset of indexes. Niklas Potrafke (2014) summarizes more than hundred empirical studies that have used these indexes. The data for GDP growth has been taken from World Bank database.

Table 1: Selected 41 countries

Argentina	Australia	Austria	Belgium	Brazil	Canada	Switzerland
Chile	China	Czechia	Germany	Denmark	Italy	Ireland
Iceland	France	Luxembourg	Norway	Portugal	Spain	Greece
Turkey	USA	UK	Japan	Finland	New	Holland
Estonia	Hungary	Poland	Slovak	South	Zealand	Lithuania
Russia	Mexico	Indonesia	Rep. India	Korea	Latvia	
				South Africa	Saudi Arabia	

Table 2: Variables that have been used to calculate the KOF trade and financial globalization

De facto economic globalization	
Trade Globalization	Financial Globalization
<ul style="list-style-type: none"> - Exports and imports of goods (% of GDP). - Exports and imports of services (% of GDP). - Average of the Herfindahl-Hirschman market concentration index for exports and imports of goods (inverted). 	<ul style="list-style-type: none"> - Sum of stocks of assets and liabilities of foreign direct investments (% of GDP). - Sum of stocks of assets and liabilities of international equity portfolio investments (% of GDP) - Sum of inward and outward stocks of international portfolio debt securities and international bank loans and deposits (% of GDP). - Includes foreign exchange (excluding gold), SDR holdings and reserve position in the IMF (% of GDP). - Sum of capital and labour income to foreign nationals and from abroad (% of GDP).

Source: Gygli, Savina, Florian Haelg, Niklas Potrafke vā Jan-Egbert Sturm (2019), “The KOF Globalisation Index – Revisited, Review of International Organizations”

KOF de facto trade globalization indices which indicates the global trade integration level of countries have shown different tendencies since the global financial crisis. The trade globalization index for the world economy as a whole (which is the average of the all countries' indices) significantly dropped in 2009 and in 2016 had been lower than in 2007. The average of de facto trade globalization index for high income, upper middle income, lower middle income and low income group of countries also decreased in 2009. But the trade globalization index for high income countries was higher in 2016 than 2007. But the trade globalization index of 2016 for low income countries is lower than the pre-crisis period. The average indices of 2016 both for upper middle income and lower middle income countries are much lower than its level in 2007 and 2008. It indicates that the middle income countries had been particularly influential on the drop of world average trade globalization index. De facto trade globalization index decreased in 2009 in all the included countries, except Belgium, Ireland, Hungary. De facto trade globalization index had been lower in 2016 than its 2008 level in 22 countries among the analyzed 41 countries. Although the trade integration indicator recovered after the crisis years, it started to decrease in some countries as result of rising global uncertainties, slower GDP growth, rising protectionism after 2015.

3. METHODOLOGY

The panel autoregressive distributed lag (ARDL) model has been used in order to capture both the long run and short run relationship between dependent and explanatory variables. According to Pesaran and Shin (1999) panel ARDL can be employed to estimate the models with variables that are $I(0)$, $I(1)$, or both $I(0)$ and $I(1)$. Even in case of the possible endogeneity problem the coefficients of ARDL estimation are considered consistent, as the model includes lags of both dependent and independent variables. The Panel ARDL model can be introduced as follows:

$$Y_{it} = \sum_{j=1}^{pi} \lambda_{ij} Y_{i,t-j} + \sum_{j=1}^q \delta_{ij} X_{i,t-j} + \mu_i + \varepsilon_{it} \quad (1)$$

where Y_{it} is the scalar dependent variable (financial integration), λ_{ij} are scalar coefficients of lagged dependent variables, X_{it} is the $(k \times 1)$ vector of regressors (financial liberalization, trade integration, growth and crisis dummy) for group i , δ_{ij} are $(k \times 1)$ are coefficient vectors, μ_i indicates fixed effects (Pesaran et al., 1997). Pesaran et al. (1997) also presented the re-parameterized form of equation (1):

$$\Delta Y_{it} = \phi Y_{i,t-1} + \beta_i X_{i,t} + \sum_{j=1}^{p-1} \lambda_{ij}^* \Delta Y_{i,t-j} + \sum_{j=1}^{q-1} \delta_{ij}^* \Delta X_{i,t-j} + \mu_i + \varepsilon_{it} \quad (2)$$

Pooled mean group technique introduced by Pesaran et al. (1999) has been chosen to estimate the panel ARDL model. Pooled mean group (PMG) estimator of dynamic panels is very useful for large number of time observations and large number of groups. In PMG estimation the long-run coefficients are not allowed to vary across countries, but it allows the short-run coefficients and error variances to differ. Long run coefficients and the group specific error-correction coefficients are computed through maximum likelihood estimation.

4. RESULTS AND DISCUSSIONS

Unit root tests have been conducted to determine which model is more appropriate for the included panel data. Levin-Lun-Chu test, Im-Pesaran-Shin test, ADF-Fisher test, PP-Fisher test and Breitung tests have been used to investigate the stationarity of the variables.

Tables 12-16 provide the results of the mentioned unit root tests. Majority of the unit root tests indicate that variables of trade integration and financial integration are not stationary at the level, but are stationary at their first differences. But the test results indicate that the variable of growth is stationary at the level. As the variables are not integrated at the same order, Panel Autoregressive Distributed Lag Model is the more appropriate model to estimate. I have chosen ARDL(1,1,1,1) as the optimal model to estimate after the AIC lag selection procedure. Statistically significant negative error correction term of the estimation output indicates the long run relationship between trade integration, financial integration, GDP growth and financial crisis. Regression output reflects that in the long run global financial crisis has affected the trade integration index of countries to be 6.304536 point lower. Global financial crisis has also caused trade integration level to be 4.151288 points lower in the short run. Results also indicate that in the long run one point increase of financial integration measure causes trade integration measure to be 2.832843 points higher. This means that rise of the capital flows deepens countries' integration to the global trade system. Regression results also confirm the positive influence of the GDP growth on trade integration level of countries. According to the regression output 1 per cent rise of the GDP growth level causes trade integration index to be 0.764451 point higher. In general the estimation results reflects that global financial crisis influence on trade integration happened with lags. And the long impact of financial crisis had been much stronger than its short run impact on trade integration.

Table 3: Estimation results of ARDL(1,1,1) model, Dependent variable: Trflow

Long run equation				
Variable	Coefficient	Std.error	t-stat.	Prob.
Finflow	2.832843	0.148078	19.13069	0.0000***
Growth	0.764451	0.215174	3.552714	0.0000***
Crisis	-6.304536	1.139701	-5.531744	0.0000***
Short-run equation				
Cointeq01	-0.073527	0.039160	-1.877597	0.0613*
D(Trflow(-1))	-0.231084	0.062477	-3.698700	0.0003***
D(FinFlow)	-0.053129	0.199304	-0.266571	0.7900
D(Finflow(-1))	-0.288460	0.215745	-1.337044	0.1821
D(Growth)	-0.022147	0.091631	-0.241701	0.8092
D(Growth(-1))	-0.308819	0.164237	-1.880320	0.0610*
D(Crisis)	1.619958	0.549459	2.948276	0.0034***
D(Crisis(-1))	-4.151288	0.718095	-5.780973	0.0000***
C	-15.79398	6.693371	-2.359645	0.0189**

5. CONCLUSION

The onset of global financial crisis in 2008 halted the decades of rapid growth of global trade integration. The growth rate of global trade had been around 7 per cent until the beginning of the global financial crisis, it reduced to 3 per cent during 2008-2014, and even further reduction observed during 2015-2016. This paper estimates the role of 2008-2009 financial crisis on the weakening of global trade integration using Panel ARDL model. The estimation results reflects that the global financial crisis had both short run and long run negative impact on trade globalization. But the long impact of financial crisis have been much stronger than its short run impact on trade integration. Regression output reflects that in the long run global financial crisis has affected the trade integration index of countries to be 6.304536 point lower. Global financial crisis has also caused trade integration level to be 4.151288 points lower in the short run. Results also indicate that in the long run one point increase of financial integration measure causes trade integration measure to be 2.832843 points higher.

This means that rise of the capital flows deepens countries' integration to the global trade system. Regression results also confirm the positive influence of the GDP growth on trade integration level of countries. According to the regression output 1 per cent rise of the GDP growth level causes trade integration index to be 0.764451 point higher. In general the estimation results reflects that global financial crisis influence on trade integration happened with lags. And the long impact of financial crisis had been much stronger than its short run impact on trade integration.

LITERATURE:

1. Axel Dreher. (2006). Does Globalization Affect Growth? Evidence from a new Index of Globalization. *Applied Economics*, 38(10), 1091-1110.
2. Cristina Constantinescu, Aaditya Mattoo & Michele Ruta. (2015), The Global Trade Slowdown: Cyclical or Structural?, IMF Working Paper
3. Jarkko Jääskelä, Thomas Mathews , (2015), Explaining the Slowdown in Global Trade, Reserv Bank of Australia
4. Michael Francis, Louis Morel, (2015) The slowdown in Global trade , Bank of Canada Review
5. Michael Mussa, (2000), Factors Driving Global Economic Integration, Presented in Jackson Hole, Wyoming at a symposium sponsored by the Federal Reserve Bank of Kansas City on "Global Opportunities and Challenges,"
6. Niklas Potrafke. (2015). The Evidence on Globalization. *The World Economy*, 38(3), 509-552.
7. Pesaran, M. H., & Shin, Y. (1999). An Autoregressive Distributed Lag Modelling Approach to Cointegration Analysis. In Strom, S. (Ed.), Chapter 11 in *Econometrics and Economic Theory in the 20th Century the Ragnar Frisch Centennial Symposium* (pp. 371-413). Cambridge University Press, Cambridge.
8. Pesaran, M. H., Shin, Y., & Smith, R. P. (1997). Pooled estimation of long-run relationships in dynamic heterogeneous panels, University of Cambridge, Department of Applied Economics.
9. Pesaran, M. H., Shin, Y., & Smith, R.P. (1999). Pooled mean group estimation of dynamic heterogeneous panels. *Journal of the American Statistical Association*, 94(446), 621-634.
10. Przemyslaw Wozniak, Malgorzata Galar, (2018) Understanding the Weakness in Global Trade, European Comission Economic Briefs 033
11. Savina Gygli, Florian Haelg, Niklas Potrafke, & Jan-Egbert Sturm. (2019). The KOF Globalisation Index – Revisited. Review of International Organizations.

APPENDIX

Table 4: De-facto trade globalization index, 2007-2016

Years	World	High income countries	Upper-middle income countries	Lower-middle income countries	Low income countries
2007	57.30460358	61.76641083	58.07748032	57.49808121	46.48466492
2008	58.14888763	62.71424103	58.61901093	58.20929718	47.83023834
2009	54.2677002	59.31407928	54.63446045	54.02947998	43.57580948
2010	55.75849915	60.53836823	55.39667511	54.87028503	47.82698822
2011	57.66438675	62.26177979	56.97351837	56.2424202	51.46416092
2012	57.70277023	63.48010254	57.15836334	55.40598679	50.11427689
2013	57.36184692	63.44101334	56.86359787	54.90642548	49.30667114
2014	57.56562042	63.55239868	57.52120972	54.60017395	49.68209076
2015	56.35333252	62.89391708	55.87121964	54.09790421	47.02122116
2016	55.26148605	62.13428116	54.75682449	52.40230179	46.177948

Table 5: De-facto trade globalization index, 2007-2016

Years	Argentina	Brazil	Chile	Mexico	Canada	USA
2007	29.74744034	21.92695427	54.61471558	22.46927834	34.3069458	23.7598362
2008	29.63650894	22.20286942	58.26273346	23.56391716	35.53717804	24.94997787
2009	25.44335556	19.59987259	49.66749954	22.41451454	31.19685745	21.95410538
2010	24.87504959	19.91777229	50.70759583	25.21324921	32.02666473	23.5067482
2011	25.24443054	20.64666176	52.42620468	26.09239388	32.80762863	25.66113663
2012	24.74217224	21.47387314	49.33308792	27.17470551	32.97551346	26.01072502
2013	24.60126495	21.15262985	47.25764084	26.48014069	33.04200363	25.30654907
2014	24.08179283	21.88205147	46.74543762	26.99352455	33.97048187	25.26589584
2015	21.98348045	23.31239891	43.03215027	29.26245689	35.13300705	24.61450005
2016	23.32278252	21.53687096	39.6166153	31.34793091	34.97439575	23.82790756

Table 6: De-facto trade globalization index, 2007-2016

Years	Austria	Belgium	Switzerland	Czechia	Germany	Denmark
2007	67.81052399	80.74912262	67.38056946	68.01946259	57.99777985	71.89667511
2008	68.70343018	82.31502533	67.49567413	67.58108521	58.89177704	73.95795441
2009	63.187397	82.5858078	65.00734711	66.1857605	54.12008286	68.41966248
2010	66.51238251	83.95786285	65.72314453	69.9786377	58.64563751	69.96046448
2011	68.93561554	84.66121674	65.02143097	71.52713013	61.21381378	72.46694183
2012	69.14370728	85.15276337	78.72557831	73.41098785	62.13581467	73.2389679
2013	70.33409119	85.39678192	81.65540314	73.51263428	62.61634827	72.89366913
2014	70.49485779	86.82746887	77.77261353	74.95819092	62.37532425	72.40900421
2015	69.97276306	87.6217041	77.01768494	74.33743286	63.73384094	73.03524017
2016	69.22745514	87.44018555	80.33926392	73.80582428	63.83653259	71.98387909

Table 7: De-facto trade globalization index, 2007-2016

Years	Italy	Ireland	Iceland	France	Luxembourg	Norway
2007	40.95606613	80.72209167	64.62400818	42.50867844	83.1444397	59.4005661
2008	40.59337616	81.61587524	69.77812958	44.08932114	83.58750916	60.53721237
2009	32.27745819	81.80767059	69.74583435	38.75717163	82.61277008	55.4394455
2010	38.5329361	83.65328217	72.03822327	43.12674332	80.7462616	56.89461899
2011	40.97089767	84.23326874	74.59223175	46.8121376	79.72108459	55.44550323
2012	42.08391571	84.20886993	76.37630463	47.93318176	79.62112427	56.84799957
2013	41.46177673	84.00131226	75.13554382	48.29734421	76.09713745	55.26583862
2014	41.78131485	84.19233704	73.27613831	49.60817719	74.76634979	56.69747925
2015	42.59629059	81.19937134	73.21739197	51.16876602	75.6210022	58.60883713
2016	41.92679977	80.96234131	68.17024231	50.5772438	73.24895477	57.12373352

Table 8: De-facto trade globalization index, 2007-2016

Years	Portugal	Spain	Greece	Turkey	Russia	UK
2007	46.93353271	41.12047195	47.58975983	33.13075256	36.62700272	44.30474091
2008	49.20975876	41.19367218	50.12170029	35.72501373	37.75562286	48.32958984
2009	42.32608795	32.85747528	42.59674072	33.17910767	34.71425247	48.2406311
2010	46.62343216	37.87161255	48.07929993	32.03046799	34.20110703	50.90193939
2011	52.37770844	44.58171463	51.68470383	36.51685715	32.13930511	54.42620087
2012	54.99732208	46.70697021	55.54348755	36.8909874	32.44033432	54.15302277
2013	56.66885376	47.21202087	57.01740265	35.8963089	32.79653549	54.58517456
2014	57.77318573	49.05558014	59.28757477	36.84703445	34.70402145	51.26485062
2015	57.41727829	49.53353119	55.04455566	36.13895416	38.48088074	50.38227081
2016	57.55985641	49.26502609	53.27112198	33.03725433	35.79544067	52.45477676

Table 9: De-facto trade globalization index, 2007-2016

Years	Finland	Holland	Estonia	Latvia	Lithuania	Hungary
2007	60.39091873	81.03672028	81.75901794	68.49128723	74.03936005	76.2504425
2008	66.7745285	81.76145935	81.67268372	68.37414551	75.50483704	77.53717041
2009	57.21264648	80.8969574	80.37862396	67.24454498	71.46220398	78.40496826
2010	61.69165039	82.82215881	84.23117828	75.22279358	76.02184296	79.56655884
2011	64.34718323	83.73058319	86.84749603	77.73058319	78.21128082	80.90325928
2012	65.45435333	84.94491577	87.7593689	78.40219879	80.49911499	80.60341644
2013	64.3032608	85.00098419	86.75713348	77.07318878	83.1414566	80.81030273
2014	62.75118637	85.83211517	86.30554199	76.77074432	83.6142807	81.13185883
2015	62.09332275	86.3508606	85.34173584	76.67977905	83.34674835	81.2661972
2016	60.89871597	85.80099487	85.54824829	76.57800293	83.88033295	81.09889221

Table 10: De-facto trade globalization index, 2007-2016

Years	Poland	Slovakia	Australia	N.Zealand	China
2007	52.53810501	74.4201355	36.86537933	50.0863266	45.94898605
2008	51.84851074	75.90799713	34.92055511	56.34115982	42.79780579
2009	49.24384308	70.12493134	32.82479858	49.46946716	32.38824463
2010	53.2946701	70.80317688	32.3450737	48.879879	35.01784897
2011	55.44922256	70.43617249	32.21903992	50.8552475	36.71903992
2012	57.63007355	71.92476654	29.76690865	49.00561905	34.62830353
2013	59.05973053	75.11289978	26.66197586	47.00067139	33.34101105
2014	60.72443771	74.06719208	28.50457001	47.26154327	33.11278152
2015	60.78227615	74.12467957	27.03645897	48.098423	29.82805252
2016	64.1108551	74.02230835	32.74721146	44.94247437	28.74824905

Table 11: De-facto trade globalization index, 2007-2016

Years	Japan	S.Korea	S.Africa	S.Arabia	Indonesia	India
2007	26.92198944	60.61953735	47.9587059	72.06167603	41.68361282	41.92917252
2008	27.77014923	74.38425446	53.73977661	69.18926239	43.66484451	49.25065231
2009	21.76295662	68.07512665	41.52404022	69.19403839	32.09764481	36.58947372
2010	22.87552643	68.99718475	44.40762329	64.73898315	29.77533913	39.436409
2011	23.97683144	70.94693756	46.88760757	62.34576035	32.87582016	43.61035538
2012	24.33041573	72.93115234	48.37543106	58.49121857	33.41215515	45.11159134
2013	26.25633621	69.38071442	50.31048584	58.49590683	32.5103569	44.21334076
2014	28.82618332	67.35202789	50.7503624	63.21365738	32.62428665	41.46070862
2015	28.9522171	62.91187286	49.70791245	60.21406555	29.33912277	37.76983261
2016	26.49686241	60.58618164	49.373806	52.41481018	26.41856003	35.85730743

Table 12: Results of unit root tests of “Trflow” variable

Individual effects		Individual linear trends		None	
Method	Prob.	Method	Prob.	Method	Prob.
Levin,Lu and Chu t	0.0005	Levin,Lu and Chu t	0.0000	Levin,Lu and Chu t	0.9888
Im,Pesaran vø Shin w-stat.	0.5867	Breitung t-stat.	0.4425	ADF-Fisher Chi-square	0.9982
ADF-Fisher Chi-square	0.3711	Im,Pesaran and Shin w-stat.	0.0073	PP-Fisher Chi-square	0.9590
PP-Fisher Chi-square	0.2967	ADF-Fisher Chi-square	0.0139		
		PP-Fisher Chi-square	0.0003		

Table 13: Results of unit root test for the 1st difference of “Trflow” variable

Individual effects		Individual linear trends		None	
Method	Prob.	Method	Prob.	Method	Prob.
Levin,Lu and Chu t	0.0000	Levin,Lu and Chu t	0.0000	Levin,Lu and Chu t	0.0000
Im,Pesaran and Shin w-stat	0.0000	Breitung t-stat.	0.0000	ADF-Fisher Chi-square	0.0000
ADF-Fisher Chi-square	0.0000	Im,Pesaran and Shin w-stat	0.0000	PP-Fisher Chi-square	0.0000
PP-Fisher Chi-square	0.0000	ADF-Fisher Chi-square	0.0000		
		PP-Fisher Chi-square	0.0000		

Table 14: Results of unit root tests for “Finflow” variable

Individual effects		Individual linear trends		None	
Method	Prob.	Method	Prob.	Method	Prob.
Levin,Lu and Chu t	0.0000	Levin,Lu and Chu t	0.0000	Levin,Lu and Chu t	0.9811
Im,Pesaran and Shin w-stat	0.0000	Breitung t-stat.	0.3341	ADF-Fisher Chi-square	1.0000
ADF-Fisher Chi-square	0.0000	Im,Pesaran vø Shin w-stat	0.2244	PP-Fisher Chi-square	1.0000
PP-Fisher Chi-square	0.0000	ADF-Fisher Chi-square	0.2450		
		PP-Fisher Chi-square	0.7029		

Table 15: Results of unit root test for the 1st difference of “Finflow” variable

Individual effects		Individual linear trends		None	
Method	Prob.	Method	Prob.	Method	Prob.
Levin,Lu and Chu t	0.0000	Levin,Lu and Chu t	0.0000	Levin,Lu and Chu t	0.0000
Im,Pesaran and Shin w-stat	0.0000	Breitung t-stat.	0.0000	ADF-Fisher Chi-square	0.0000
ADF-Fisher Chi-square	0.0000	Im,Pesaran and Shin w-stat	0.0000	PP-Fisher Chi-square	0.0000
PP-Fisher Chi-square	0.0000	ADF-Fisher Chi-square	0.0000		
		PP-Fisher Chi-square	0.0000		

Table 16: Results of unit root tests for “Growth” variable

Individual effects		Individual linear trends		None	
Method	Prob.	Method	Prob.	Method	Prob.
Levin,Lu and Chu t	0.0000	Levin,Lu and Chu t	0.0000	Levin,Lu and Chu t	0.0000
Im,Pesaran and Shin w-stat	0.0000	Breitung t-stat.	0.0000	ADF-Fisher Chi-square	0.0000
ADF-Fisher Chi-square	0.0000	Im,Pesaran and Shin w-stat	0.0000	PP-Fisher Chi-square	0.0000
PP-Fisher Chi-square	0.0000	ADF-Fisher Chi-square	0.0000		
		PP-Fisher Chi-square	0.0000		

