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ANALYSIS OF CURRENT MIGRATION FLOWS IN INTERNATIONAL ENVIRONMENT

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Abstract: The presented article devotes exclusive attention to the analysis of migration flows in the international environment. In addition to the emphasis on the current state of migration waves and listing the countries with the absolute largest and, conversely, the lowest number of migrants, the report also mentions fundamental historical events that mobilized the population and accelerated migration. Migration is viewed as one of the signs of globalization. The article contains three graphs that clearly illustrate the current situation in the field of migration. The countries with the largest and, conversely, the lowest representation of migrants have certain common features that affect the waves of migration in these countries and we refer to them.

Keywords: migration, international community, trends, historic events

JEL: F22

Introduction

Migration in any of its forms is considered a natural phenomenon to which we are exposed not only in social or economic sciences, but also in other spheres of life. To a certain extent, it can be considered as a reaction of a person, that is a migrant, to a series of circumstances, which on the one hand motivate him to migrate and, on the other hand, dissuade him to a certain extent from it. Based on the above, the migrant's decision itself is the result of a series of factors that must be viewed comprehensively. In addition to individual factors that influence the decision to migrate, such as the amount of salary offered, demand for labor, family reunification, etc., the final decision is also influenced by the geopolitical situation and trends and challenges of the world economy and international relations. The stated premise was valid in the past and can be equally applied to the current situation. In the article below, I clearly illustrate the development of migration in the international environment with an emphasis on the events behind the migration waves and the result of which was a massive transfer of people and a subsequent change in either the ethnic or national composition of nation states and territories or other visible consequences. Subsequently, attention is paid to the analysis of current migration flows with an emphasis on the countries with the largest and lowest number of migrants.

Due to the complexity of the issue of migration in the article below, I approach the presentation and analysis of current migration flows in the international environment based on the presentation of the countries with the lowest and, conversely, the largest representation of migrants at the moment. In addition to presenting real data on the representation of migrants in these countries, I also approach their analysis and justification. The goal of the presented paper is to determine the current migration flows in the countries with the largest and, conversely, the lowest representation of migrants through the scientific method of analysis.

1 Brief overview of historical events affecting migration

Migration is a significant trend in the current international environment. It is a natural result of human behavior by which people react to their surroundings and migrate in an effort

to achieve and maximize profits, not only economic ones. We have been confronted with migration for a long time. For example, Koser states that *Homo erectus* and *Homo sapiens* no longer remained settled in one place, but on the contrary migrated mainly from Africa to the territory of today's Europe.¹ The result of which are the findings of *Homo erectus* and *Homo sapiens* not only in Africa, but also in the territory of Germany, Greece and Hungary. Migration continued during other periods of the development of human civilization. Almost always, greater intensities of migration waves compared to the previous period were the result of fundamental scientific discoveries, wars, natural disasters or the discovery of new territories. Significant migration waves and fundamental changes were brought about by the Great Migration, which took place from the second half of the 4th century to the 6th century. These massive movements of mainly Slavic and Germanic tribes in the territory of Europe fundamentally changed the national composition on the map of Europe.² The invasion of the Huns on the territory of Europe in 375, population growth and changes in demographic trends, climate changes and the search for new land for cultivation are considered the main causes of the Great Migration. Of course, the waves of migration continued later and intensified after the overseas discoveries, which essentially lasted from the 15th to the 18th century. The subsequent establishment of colonies and the colonizers' desire to obtain the maximum possible profits caused waves of migration, which, however, in many cases were forced and involuntary and even led to slavery.

Intensive waves of migration were also caused by the economic miracle in the territory of the present United States of America. Economic growth increased the demand for labor and accelerated migration waves. Since the 19th century, due to the relatively favorable wage conditions, this destination has become especially sought after by residents of European countries. As I mentioned above, migration trends largely respond to events in the international community. In view of the above, it is evident that military conflicts in the form of the First and Second World Wars fundamentally influenced migration tendencies. Not only the wars themselves, but also the subsequent need to restore war-ravaged economies or the different economic strength of Western and Eastern European countries influenced migration waves. Migration trends in the second half of the 20th century were fundamentally influenced by the period of the Cold War, the subsequent collapse of the Soviet Union, rapid technological progress or the unstable geopolitical situation in the Middle East and mainly in the central and northern parts of Africa. Currently, in the 21st century, we perceive migration in a broad spectrum. We do not limit the reasons that lead to it to only one group of factors, and it is also not possible, as in the past, to mark one specific event as its main reason. There are also new reasons for migration that occurred in the past, but were not as fundamental as they are today. In this context, I mention, for example, the climate crisis and the so-called environmental or climate migrants, whose total number will increase even more in the future. In the context of the above, Luby claims that it is necessary to modify the current definition of refugees, as in his opinion it does not sufficiently reflect the position of climate refugees who are forced to leave their countries of origin involuntarily due to the unfavorable climate situation.³

2 Migration flows in the international environment

The international community has been confronted with the phenomenon of migration since time immemorial. The search for the most favorable conditions for life has been

¹ KOSER, K. (2007): *International migration: a very short introduction*. New York: Oxford University Press, 2007..

² BYSTRICKÝ, P. (2008): *Sťahovanie národov (454 - 568)*. Ostrogóti, Gepidi, Longobardi a Slovania. Bratislava: Historický ústav SAV, 2008.

³ LUBY, Š. (2019): Modelovanie migračných tokov do Európy a ich súvis s klimatickou zmenou. In: *Životné prostredie*, 2019, ed. 53, n. 2, pp. 116-122.

characteristic of mankind in the past as well. The process of globalization and internationalization has greatly influenced migration trends from a global perspective, which was reflected in the growing number of migrants over the past period, as illustrated by graph no. 1 below. Several authors agree and come to a mutual consensus in identifying migration as one of the most visible trends of globalization. Tacoli and Okali claim that although migration is predominantly perceived as problematic, its positive consequences are evident both for the countries of origin of migrants, especially in the form of receiving remittances, and for the receiving (host) countries, mainly due to the solution of existing problems, such as: a decline in the birth rate, a lack of labor and a significant burden on the social system. At the same time, the authors emphasize the need to study migration from three different aspects, namely: factors related to global changes in production and subsequent trade that affect migration; second, the specific opportunities and constraints of different groups of migrants (for example, women and men, younger and older people); and third, the contribution of migrants to their home country as well as host communities.⁴ Leblang and Peters emphasize that the increase in the number of migrants, which we have continuously recorded since the end of the Second World War and is caused mainly by economic factors, has changed the approach of nation states to this issue. While in the past states approached the issue of migration as an exclusive area of domestic policy, liberalization and the increase in international trade after the Second World War, combined with a significant degree of integration of countries into various organizations, caused migration to cease to be perceived as an exclusive issue of nation states and began to be viewed comprehensively. According to the authors, it was the liberalization of international trade and the integration of countries that accelerated migration waves and significantly simplified them.⁵ Kahanec and Zimmermann emphasize that in the study of migration, it is necessary to pay attention not only to the migrants themselves, but also to the population in the receiving country.⁶ When examining the interaction of these two groups, two different phenomena can be observed, and incoming migrants can be perceived positively or negatively. In general, there is a consensus that migrants are viewed largely positively, given that they become the driving force of scientific progress, economic growth, or bring knowledge and capital that previously did not exist in the receiving country. However, there are also strong currents of opinion and beliefs that do not apply the previously described approach and, on the contrary, consider migrants predominantly a threat. Kahanec and Zimmermann state that it is the mutual relationship between the original and migrating population that should become one of the central objects of migration research in the current international environment, as it largely depends on how either incoming migrants or the host country itself will be able to maximize the benefits from migration.⁷

From 1990 to 2020, the absolute number of migrants increased by almost 128 million. In 2020, we recorded the highest ever number of migrants from a global point of view, and the established trend of increase continued in 2021 and 2022. As illustrated in chart no. 1 fundamental increase in the number of migrants is evident especially when comparing the years 2010 and 2020. During this decade, the global number of migrants increased by almost 61 million. For a better illustration, I state that comparing the years 2000 and 2010, the number of migrants increased by 48 million, and when comparing the first observed decade, from 1900 to 2000, by 20 million. It clearly follows from the above that the rate of growth of the number of

⁴ TACOLI, C. – OKALI, D. (2001): The Links Between Migration, Globalisation and Sustainable Development. [online]. In: International Institute for Environment and Development.

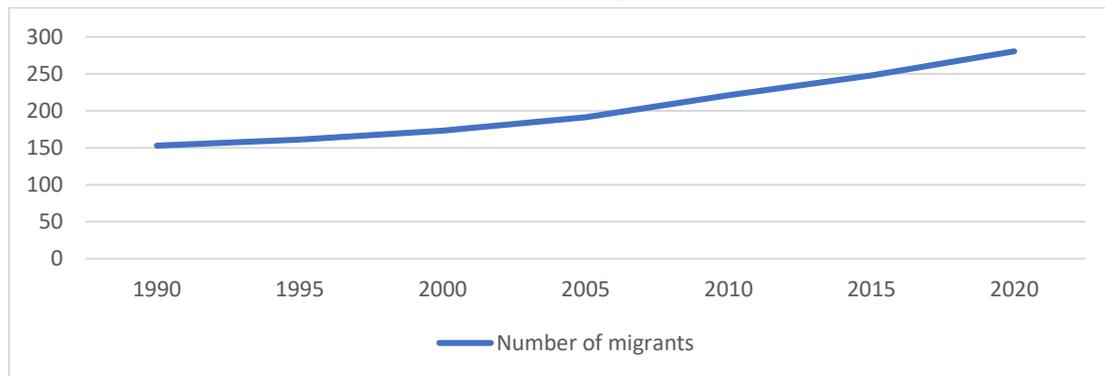
⁵ EBLANG, D. – PETERS, M. E. (2022): Immigration and Globalization (and Deglobalization). In: Annual Review of Political Science, 2022, ed. 25, pp. 377-399.

⁶ KAHANEC, M. – ZIMMERMAN, K. F. (2008): Migration and Globalization: Challenges and Perspectives for the Research Infrastructure. [online]. In: *German Council for Social and Economic Data*.

⁷ KAHANEC, M. – ZIMMERMAN, K. F. (2008): Migration and Globalization: Challenges and Perspectives for the Research Infrastructure. [online]. In: *German Council for Social and Economic Data*.

migrants is constantly increasing, and the assumption of the continuation of this trend is justified.

Chart no. 1: Worldwide development of the number of migrants



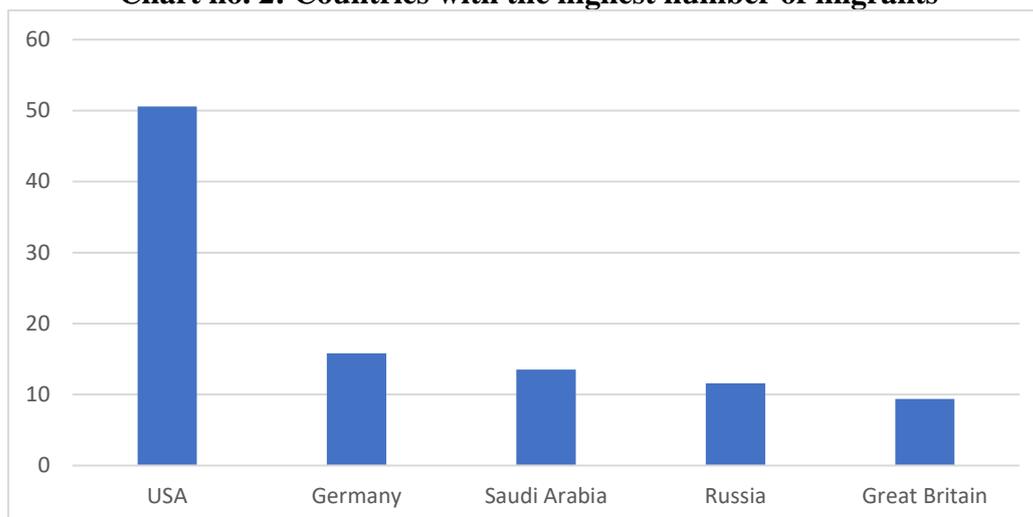
Source: author's own processing according to INTERNATIONAL MIGRATION DATA (2022). Total number of international migrants at mid-year 2020. [online]. In: International migration data. [Cit. 21. 3. 2023.] Available at https://www.migrationdataportal.org/international-data?i=stock_abs_&t=2020

Although migration flows are constantly increasing, they are not evenly distributed in the international environment. In a detailed analysis, we find that the predominant migration flows are between developing countries and subsequently from developing countries to economically developed countries. In terms of intensity, migration flows between economically developed countries continue, and migration flows from economically developed countries to developing countries are the least voluminous. The intensity of these migration flows is logical and we justify it in the state.

In the case of neoclassical theories of migration, the central motive for migration is wage conditions, which are naturally higher in economically developed countries. It is natural that migration flows therefore have this prevailing direction. Massey claims that wage differences cannot be considered the only factors of migration, as in this case, the volumes of migration flows would be several times higher.⁸ In view of the above, it is necessary to look for other causes that justify migration, but the real data on migration flows can largely be justified by neoclassical theories of migration. Economic differences between countries created networks of migrants who migrated in the first waves, which in turn influenced subsequent generations of migrants. It is precisely for migrants who arrive at their destinations later that, in addition to wage conditions, the built-up social ties in the given destinations are key, which is referred to by the theory of social networks. At its base, the volumes of migration flows increase in direct proportion to the number of migrants who migrated in the first waves. Based on the combination of neoclassical theories of migration and the theory of social networks, it can be concluded that at the same time migration flows mainly go to countries with higher wage conditions and at the same time to countries that have historical experience with migration. These statements are also confirmed by the data on the countries with the highest and, conversely, the lowest absolute number of migrants, as illustrated by charts no. 2 and 3.

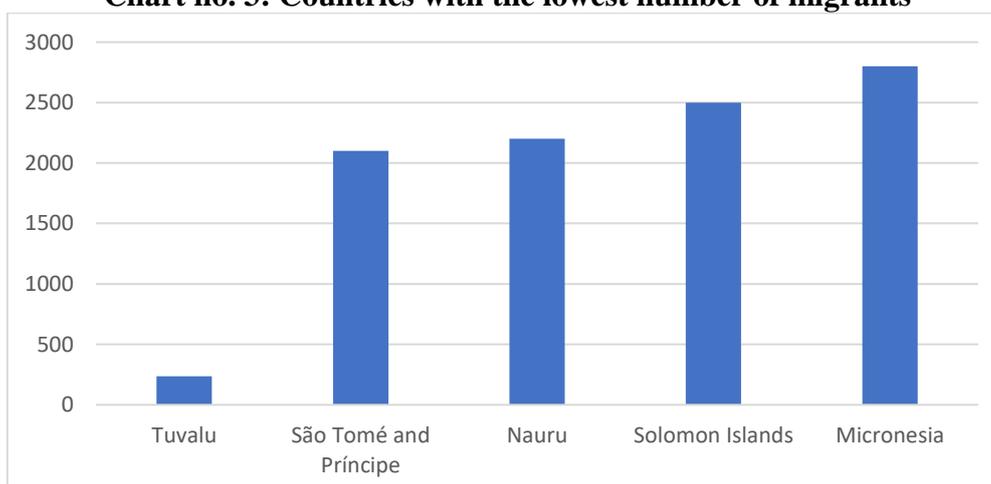
⁸ MASSEY, D. S. et.al. (1993): Theories of International Migration: A Review and Appraisal. In: Population and Development Review). In: *Population and Development Review*, 1993, ed. 19, n. 3, pp. 431-466.

Chart no. 2: Countries with the highest number of migrants



Source: author's own processing according to INTERNATIONAL MIGRATION DATA (2022). Total number of international migrants at mid-year 2020. [online]. In: International migration data. [Cit. 21. 3. 2023.] Available at https://www.migrationdataportal.org/international-data?i=stock_abs_&t=2020

Chart no. 3: Countries with the lowest number of migrants



Source: author's own processing according INTERNATIONAL MIGRATION DATA (2022). Total number of international migrants at mid-year 2020. [online]. In: International migration data. [Cit. 21. 3. 2023.] Available at https://www.migrationdataportal.org/international-data?i=stock_abs_&t=2020

The countries with the highest number of migrants, with the exception of Saudi Arabia and Russia, are the developed economies of the world and members of the OECD. These countries are united by a favorable economic environment and historical experience with migration. Together, these factors justify the high volumes of migration flows to these countries. In the case of Russia, immigration flows are largely linked to the former existence of the Soviet Union. It is the citizens of the former member countries of the Soviet Union who participate to the greatest extent in immigration to Russia. About 97% of all migrants in Russia come from the Commonwealth of Independent States.⁹ In the case of Saudi Arabia, high volumes of migration flows are mainly justified by economic factors. As an oil powerhouse, Saudi Arabia provides favorable wage conditions compared to other countries in Asia, which are the largest source of migrants for Saudi Arabia. India, Pakistan and Bangladesh have the

⁹ MIGRANTS REFUGEES (2022). Country profile Russia. [online]. In: Migrants refugees.

largest representation of migrants in Saudi Arabia.¹⁰ If we do not approach the number of migrants in absolute but relative terms, we find that the largest proportion of migrants to the domestic population is recorded in the United Arab Emirates, where foreigners make up 88.1% of the total population. Equally high percentages of migrants compared to the domestic population are recorded in other countries on the Arabian Peninsula, Qatar (77.3%), Kuwait (72.8%), Oman (46.5%), Saudi Arabia (38.6%) and Jordan (33.9%).¹¹ For comparison, in the USA, where the absolute number of migrants is the highest ever, they make up 15.3% of the total population.¹² The reasons for the high proportion of foreigners compared to the domestic population in the countries of the Arabian Peninsula can be found mainly in labor migration. The states of the Arabian Peninsula are dependent on importing labor. In combination with the unfavorable economic conditions of migrants in their countries of origin, the volumes of migration flows that are directed to the above-mentioned countries are continuously increasing. Conversely, the countries with the lowest number of migrants, with the exception of Nauru and Micronesia, belong to the group of least developed countries in the world. Among other things, these countries combine low wage levels and less favorable economic conditions, which substantially reduces the volume of migration flows to these countries. The absent historical experience with migration is equally important, and not only in the case of the countries listed in chart no. 3. The historical experience with migration largely justifies the differences in the absolute numbers of migrants that can be observed between the countries of Western and Eastern, respectively, Central Europe. The differences in migration trends between the countries of Western and Eastern Europe became apparent immediately after the end of the Second World War. While migration between individual countries prevailed in the countries of Eastern Europe, the countries of Western Europe faced waves of immigration, the results of which can be observed even today. The waves of immigration to the countries of Western Europe between 1945 and 1970 were influenced by the process of decolonization. The former colonies, located mainly in Africa, were mainly left by Europeans in the first waves, and in subsequent waves of immigration by the inhabitants of individual African countries themselves. Economic growth in the countries of Western Europe in the 1950s caused the import of labor from abroad, and the liberal policy of governments in relation to immigration significantly simplified the process of adaptation and integration of foreign workers in local labor markets. Immigration waves of foreign workers were restrictively limited only at the time of the outbreak of economic crises, for example after the outbreak of the first oil shock in 1973.¹³ Due to the long-term experience of the countries of Western Europe with immigration compared to the countries of Eastern Europe, significant differences can be observed in the integration and adaptation of foreigners and the very approach to immigration in the given groups of countries

Conclusion

Migration is without a doubt a phenomenon that has its irreplaceable place in history or in the current environment and is one of the visible signs of globalization and internationalization. As historical events have shown in the past, intensive waves of migration were the result of fundamental historical events, such as the invasion of the Huns on the territory of Europe in the 4th century, overseas discoveries in South and North America, or armed conflicts in the form of the two largest wars in the history of mankind, World War I and World War II wars.

¹⁰ MIGRANTS REFUGEES (2022). Country profile Saudi Arabia. [online]. In: Migrants refugees.

¹¹ INTERNATIONAL ORGANIZATION FOR MIGRATION (2022). World migration report. [online]. In: International organization for migration.

¹² INTERNATIONAL ORGANIZATION FOR MIGRATION (2022). World migration report. [online]. In: International organization for migration.

¹³ ŠTEFANČÍK, R. (2011): Migrácia v Európe v II. Polovici 20. storočia. In Migračná politika národných štátov. 2011, p. 6.

In the current international environment, migration is largely influenced and facilitated by significant technological progress, the liberal attitude of nation states towards migration, or the increase in international trade. The factor that causes migration waves even now are armed conflicts, mainly in the geopolitically unstable part of the international community. Inhabitants of these countries, as well as climate migrants mainly from the countries of Oceania and Australia, make up a large part of migrants on a global scale. For these groups of people, I emphasize that their decision to migrate is not voluntary and, in the case of favorable conditions in their countries of origin, they most likely would not have done so.

In the article above, I drew attention to the countries with the absolute largest and, conversely, the lowest number of migrants. At the same time, the given statistics created a prerequisite for the characteristics of these countries and the introduction of their common features. In the case of the countries with the absolute largest number of migrants per total population, it can be stated that they are predominantly economically developed countries of the international community, which have experience with migration in various forms. On the contrary, the countries that register the lowest number of migrants are mainly developing countries of the international community with a not favorable economic situation, and at the same time they lack historical experience with migration, which could accelerate and speed up the current migration waves. In conclusion, I would like to state and summarize that migration is a global phenomenon and the emphasis on profit maximization, whether for migrants themselves, home countries and destinations, will become key to economic development on an international scale.

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EUROPEAN UNION SANCTIONS REGIME AGAINST CYBER-ATTACKS

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Abstract: This paper deals with the European Union's autonomous sanctions regime against cyber-attacks within the context of the Common Foreign and Security Policy. It aims to present the concept of cybersecurity in the European Union, including an analysis of the legal regulation of the European Union's restrictive measures in this area. Considering the relatively short period of implementation of this legal framework, the paper concludes by highlighting a number of challenges that accompany this sanctions regime.

Keywords: European Union, cybersecurity, cyber-attack, restrictive measures

JEL: K24, K33

Introduction

Over the last three decades, the European Union (EU/ Union) has played a key role in a number of geographical sanctions regimes under the EU's Common Foreign and Security Policy (CFSP). These include broad economic sanctions or sectoral economic sanctions that affect the entire population of a country by stalling the development of certain sectors of its economy.¹ At the same time, the Union has gradually established legal frameworks for the adoption of horizontal or thematic sanctions in specific areas, namely measures against terrorism (since 2001),² the proliferation and use of chemical weapons (since 2018),³ cyber-attacks (since 2019)⁴ and human rights violations (since 2020).⁵ These horizontal sanctions are unilateral and smart in the sense that they adopt a targeted approach and are directed at the individuals and entities.⁶ This paper discusses the EU's autonomous sanctions regime against cyber-attacks and its restrictive measures that are considered as an appropriate foreign policy instrument in the context of "malicious cyber-activities and should encourage cooperation, facilitate mitigation of immediate and long-term threats, and influence the behaviour of potential aggressors in a long term."⁷ The research method used in this article is

¹ MIADZVETSKAYA, Y. – WESSEL, R. A. (2022): The Externalisation of the EU's Cybersecurity Regime: The Cyber Diplomacy Toolbox, p. 429.

² Council Common Position of 27 December 2001 on the application of specific measures to combat terrorism, (2001/931/CFSP).

³ Council Decision (CFSP) 2018/1544 of 15 October 2018 concerning restrictive measures against the proliferation and use of chemical weapons.

⁴ Council Decision (CFSP) 2019/797 of 17 May 2019 concerning restrictive measures against cyber-attacks threatening the Union or its Member States.

⁵ Council Decision (CFSP) 2020/1999 of 7 December 2020 concerning restrictive measures against serious human rights violations and abuses.

⁶ MIADZVETSKAYA, Y. – WESSEL, R. A. (2022): The Externalisation of the EU's Cybersecurity Regime: The Cyber Diplomacy Toolbox, p. 429.

⁷ Council Conclusions on a Framework for a Joint EU Diplomatic Response to Malicious Cyber Activities ("Cyber Diplomacy Toolbox"), 10474/17, 19 June 2017, Paragraph 5.

a qualitative method using primary data sources obtained directly from the official websites of EU institutions and secondary data in the form of a literature review.

1 Development of the European Union's cybersecurity regime

In recent years, the notion of EU security has been changing fundamentally, along with the nature of threats, due to the emergence of new technologies. Cybersecurity has thus become an integral part of the security of Europeans, with the EU and its Member States facing variety of cybersecurity challenges. The formal definition of cybersecurity in the EU law is found in the Cybersecurity Act, according to which “cybersecurity means the activities necessary to protect network and information systems, the users of such systems, and other persons affected by cyber threats”.⁸ Malicious activities in cyberspace have become a growing threat and according to the European Union Agency for Cybersecurity (ENISA) latest Threat Landscape report, during 2022 the prime threats include: ransomware, malware, social engineering threats, threats against data, threats against availability - denial of service, threats against availability - internet threats, disinformation – misinformation, supply-chain attacks.⁹

Despite the fact that the scale and effects of malicious activities in cyberspace are transborder in nature, international efforts to regulate the conduct of States and non-State actors in cyberspace have been unsuccessful. This legal gap has thus created the space for unilateral responses.¹⁰ In the area of cybersecurity, the Union initially lacked the necessary policies and frameworks to deal with cyber threats at the collective level of the EU, but gradually began to develop its cybersecurity strategy. Cybersecurity as an integral part of the modern concept of national security remains a legal competence of the Member States, nevertheless the EU's approach to cybersecurity is dispersed across policy areas that are affected by cyber threats and in which the Treaties confer competences upon the EU (primarily internal market; Area of Freedom, Security and Justice; CFSP including Common Security and Defence Policy (CSDP)).¹¹ Cybersecurity initiatives in the EU were originally developed as measures aimed at establishing and ensuring a well-functioning internal market (in particular the digital market).¹² Cybersecurity issues were tackled also under the Area of Freedom, Security and Justice (harmonisation of sanctions for particularly serious crimes with a cross-border dimension to the cyber domain, as well as for the admissibility of cross-border evidence).¹³ However, the increasing number of external threats called the EU to integrate cybersecurity into its foreign and security policy. Miadzvetskaya and Wessel explain this tendency as the “externalisation” of the EU cybersecurity. By externalisation they “understand an increase in institutionalised forms of joint representation or joint initiatives of the EU vis-à-vis external actors in the field of cybersecurity.”¹⁴ The phenomenon of externalisation of EU cybersecurity to deter and respond to cyber-attacks is in line with the objectives of the CFSP as set out in Article 21 Treaty on European Union (TEU).

⁸ Regulation (EU) 2019/881 of the European Parliament and of the Council of 17 April 2019 on ENISA (the European Union Agency for Cybersecurity) and on information and communications technology cybersecurity certification and repealing Regulation (EU) No 526/2013 (Cybersecurity Act), Article 2(1).

⁹ EUROPEAN UNION AGENCY FOR CYBERSECURITY. (2022): ENISA Threat Landscape 2022, p. 7-9.

¹⁰ BOGDANOVA, I. – VÁSQUEZ CALLO-MÜLLER, M. (2021): Unilateral Cyber Sanctions: Between Questioned Legality and Normative Value, p. 916.

¹¹ BENDIEK, A. – PANDER MAAT, E. (2019): The EU's Regulatory Approach to Cybersecurity, p. 3-4.

¹² MIADZVETSKAYA, Y. – WESSEL, R. A. (2022): The Externalisation of the EU's Cybersecurity Regime: The Cyber Diplomacy Toolbox, p. 418-421.

¹³ MIADZVETSKAYA, Y. – WESSEL, R. A. (2022): The Externalisation of the EU's Cybersecurity Regime: The Cyber Diplomacy Toolbox, p. 421-424.

¹⁴ MIADZVETSKAYA, Y. – WESSEL, R. A. (2022): The Externalisation of the EU's Cybersecurity Regime: The Cyber Diplomacy Toolbox, p. 415.

Since 2013, when the first Cybersecurity Strategy of the EU¹⁵ was adopted, the Union has been developing policy and regulatory measures to respond to malicious cyber operations against the EU from third countries. This strategy declared that “for cyberspace to remain open and free, the same norms, principles and values that the EU upholds offline, should also apply online.”¹⁶ At the same time, it set strategic priorities to address cyberthreats, including the development of cyberdefence policy and capabilities related to the CSDP (which is an integral part of the Union’s CFSP) and establishing a coherent international cyberspace policy for the EU and promote EU core values.¹⁷ This document announced the externalisation of EU cybersecurity and its mainstreaming into EU external relations, in particular the CFSP.

In June 2017, the Council decided to endorse the development of a framework for a joint EU diplomatic response to malicious cyber activities, the so-called Cyber Diplomacy Toolbox.¹⁸ This allows to develop signalling and reactive capacities at the EU and Member States level with the aim to prevent, discourage, deter and respond to external malicious cyber activities targeting the integrity and security of the EU, its Member States and their citizens. The EU has also confirmed that CFSP measures including, if necessary, restrictive measures, may be used for this purpose. It is emphasized in the document that “attribution to a State or a non-State actor remains a sovereign political decision based on all-source intelligence and should be established in accordance with international law of State responsibility.”¹⁹ In October 2017, implementing guidelines for the Cyber Diplomacy Toolbox were approved. This document sets out five possible categories of CFSP measures used in cyber diplomacy (preventive, cooperative, stability, restrictive, possible EU support to Member States’ lawful responses).²⁰ The measures presented are forms of diplomatic, political or economic actions. These responses are considered complementary to Member States’ lawful self-defence responses.²¹ It further explains the concept of malicious cyber activity, which also includes “activities that do not rise to the level of internationally wrongful acts but are considered as unfriendly acts”.²² With these documents Union has demonstrated common, coordinated diplomatic counterresponse to serious cyber incidents below the threshold of armed conflict.²³ Consequently, the EU was faced with the challenge of translating this framework into effective foreign policy instruments.

¹⁵ Joint Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Cybersecurity Strategy of the European Union: An Open, Safe and Secure Cyberspace, 7.2.2013, JOIN(2013).

¹⁶ Joint Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Cybersecurity Strategy of the European Union: An Open, Safe and Secure Cyberspace, 7.2.2013, JOIN(2013), Paragraph 1.1.

¹⁷ Joint Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Cybersecurity Strategy of the European Union: An Open, Safe and Secure Cyberspace, 7.2.2013, JOIN(2013), Paragraph 2.3; 2.5.

¹⁸ Council Conclusions on a Framework for a Joint EU Diplomatic Response to Malicious Cyber Activities (“Cyber Diplomacy Toolbox”), 10474/17, 19 June 2017.

¹⁹ Council Conclusions on a Framework for a Joint EU Diplomatic Response to Malicious Cyber Activities (“Cyber Diplomacy Toolbox”), 10474/17, 19 June 2017, Paragraph 4-5.

²⁰ COUNCIL OF THE EUROPEAN UNION (2017): Draft implementing guidelines for the Framework on a Joint EU Diplomatic Response to Malicious Cyber Activities, p. 5.

²¹ BENDIEK, A. – PANDER MAAT, E. (2019): The EU’s Regulatory Approach to Cybersecurity, p. 25.

²² COUNCIL OF THE EUROPEAN UNION (2017): Draft implementing guidelines for the Framework on a Joint EU Diplomatic Response to Malicious Cyber Activities, p. 5.

²³ BENDIEK, A. – SCHULZE, M. (2021): Attribution: A Major Challenge for EU Cyber Sanctions, An Analysis of WannaCry, NotPetya, Cloud Hopper, Bundestag Hack and the Attack on the OPCW, p. 8.

2 European Union legal framework for restrictive measures against cyber-attacks

The Union may impose restrictive measures against third countries, entities, or individuals on the basis of a Council decision adopted under Article 29 TEU coupled with a Council regulation setting out the necessary measures for its operation, adopted under Article 215 Treaty on the Functioning of the European Union (TFEU). On 17 May 2019, the Union used its competence and new EU cyber sanctions regime came into effect. This new CFSP tool consists of two legal acts: Council Decision 2019/797²⁴ and Council Regulation 2019/796²⁵ concerning restrictive measures against cyber-attacks threatening the Union or its Member States.

The Union makes a clear distinction between attribution and restrictive measures, stating that “targeted restrictive measures should be differentiated from the attribution of responsibility for cyber-attacks to a third State. The application of targeted restrictive measures does not amount to such attribution, which is a sovereign political decision taken on a case-by-case basis. Every Member State is free to make its own determination with respect to the attribution of cyber-attacks to a third State.”²⁶

For the purpose of imposing the sanctions, a cyber-attack means an action that includes: (a) access to information systems; (b) information system interference; (c) data interference; or (d) data interception.²⁷ The EU regime is therefore flexible, as sanctions can be adopted in response to cyber-attacks, which include different types of behaviour.

The Decision 2019/797 applies to cyber-attacks, including attempted cyber-attacks, in other words, sanctions can be imposed to respond not only to completed actions, but also to actions attempted.

To be subject to sanctions, a cyber-attack must fulfil two criteria: the attack has a significant effect; and the attack constitutes an external threat to the Union or its Member States.²⁸ The factors determining whether a cyber-attack has a significant effect include: (a) the scope, scale, impact or severity of disruption caused; (b) the number of natural or legal persons, entities or bodies affected; (c) the number of Member States concerned; (d) the amount of economic loss caused; (e) the economic benefit gained by the perpetrator, for himself or for others; (f) the amount or nature of data stolen or the scale of data breaches; and (g) the nature of commercially sensitive data accessed.²⁹ An external threat criterium is fulfilled when an attack: (a) originates, or is carried out, from outside the Union; (b) uses infrastructure outside the Union; (c) is carried out by any natural or legal person, entity or body established or operating outside the Union; or (d) is carried out with the support, at the direction or under the control of any natural or legal person, entity or body operating outside the Union.³⁰ Other entities, with an origin and operating in the Union, remain subject to national jurisdiction. In this aspect it is necessary to note the difference with, for example, the EU’s anti-terrorism sanctions which can also be imposed on EU citizens or entities (such as ETA, the IRA and their members).³¹

Cyber-attacks constituting a threat to the Union include those carried out against its institutions, bodies, offices and agencies, its delegations to third countries or to international organisations, its common security and defence policy operations and missions and its special

²⁴ Council Decision (CFSP) 2019/797 of 17 May 2019 concerning restrictive measures against cyber-attacks threatening the Union or its Member States.

²⁵ Council Regulation (EU) 2019/796 of 17 May 2019 concerning restrictive measures against cyber-attacks threatening the Union or its Member States.

²⁶ Council Decision 2019/797, Recital (9).

²⁷ Council Decision 2019/797, Article 1(3).

²⁸ Council Decision 2019/797, Article 1(1).

²⁹ Council Decision 2019/797, Article 3.

³⁰ Council Decision 2019/797, Article 1(2).

³¹ BOTEK, A. (2019): European Union establishes a sanction regime for cyber-attacks.

representatives.³² Cyber-attacks constituting a threat to Member States include those affecting information systems relating to, inter alia: its critical infrastructure, services necessary for the maintenance of essential social and/or economic activities, critical State functions, the storage or processing of classified information, and government emergency response teams.³³ Where it is necessary to achieve an EU common security and defence policy objective, sanctions can also be imposed as a response to cyber-attacks with a significant effect against third States or international organisations.³⁴

Sanctions may be imposed not only on the entities directly responsible for the cyber-attack, but also on all entities that provide financial, technical or material support or otherwise participate in the cyber-attack and all entities associated with them.³⁵ Under Article 263 TFEU, the persons targeted have the possibility of taking legal action against the imposition of sanctions before the Court of Justice of the European Union and according to EU case-law, the listing of targeted persons and entities must respect fundamental rights, especially due process and the right to an effective remedy.³⁶ These EU sanctions are targeted measures aimed at individuals, groups or companies and they do not lead to the attribution of responsibility to a State.³⁷ Currently, there is a lack of political will to establish common EU framework for the attribution of responsibility for cyber-attacks to third countries.³⁸

The EU can impose two types of sanctions: Member States shall take the measures necessary to prevent the entry of the sanctioned into, or transit through, their territories³⁹; and all funds and economic resources belonging to, owned, held or controlled by the sanctioned shall be frozen and no funds or economic resources shall be made available directly or indirectly to or for the benefit of the sanctioned.⁴⁰ They thus represent a personalised deterrence tool.⁴¹

3 Implementation of the European Union's restrictive measures against cyber-attacks

The use of sanctions by the EU has increased in recent years, and while it is, admittedly, that they are an imperfect tool, they remain an attractive option for policymakers “at a time when diplomacy has reached its limits and war remains an option of last resort”.⁴² The cyber-attacks restrictive measures currently apply to eight persons and four entities from China, Russia and North Korea. The EU cyber sanctions toolkit includes travel bans, asset freezes and prohibitions to make funds and economic resources available to those responsible for cyber-attacks. The present legal framework has been extended until 18 May 2025.⁴³

The EU imposed its first-ever sanctions in response to cyber-attacks in July 2020, targeting Chinese, North Korean and Russian hackers (six individuals and three entities) involved in major incidents in previous years. Sanctions targeted:

³² Council Decision 2019/797, Article 1(5).

³³ Council Decision 2019/797, Article 1(4).

³⁴ Council Decision 2019/797, Article 1(6).

³⁵ Council Decision 2019/797, Article 4(1).

³⁶ MOULIN, T. (2023): *Waking Sleeping Beauty? Exploring the Challenges of Cyber-Deterrence by Punishment*. p. 63.

³⁷ More on State responsibility see e.g. PYTELOVÁ, K. (2008): *Content and Forms of State Responsibility*, p. 633-639.

³⁸ MIADZVETSKAYA, Y. – WESSEL, R. A. (2022): *The Externalisation of the EU's Cybersecurity Regime: The Cyber Diplomacy Toolbox*, p. 434.

³⁹ Council Decision 2019/797, Article 4.

⁴⁰ Council Decision 2019/797, Article 5.

⁴¹ MIADZVETSKAYA, Y. – WESSEL, R. A. (2022): *The Externalisation of the EU's Cybersecurity Regime: The Cyber Diplomacy Toolbox*, p. 429.

⁴² MORET, E. – PAWLAK, P. (2017): *The EU Cyber Diplomacy Toolbox: towards a cyber sanctions regime?* p. 2.

⁴³ Council Decision (CFSP) 2022/754 of 16 May 2022 amending Decision (CFSP) 2019/797 concerning restrictive measures against cyber-attacks threatening the Union or its Member States.

- two Chinese citizens and the technological development company Huaying Haitai for their alleged involvement in an attack known as “Operation Cloud Hopper” of 2016 (it targeted information systems of multinational companies in six continents, including companies located in the Union, and gained unauthorised access to commercially sensitive data, resulting in significant economic loss);
- North Korean company Chosun Expo for the cyber-attacks of 2017 publicly known as “WannaCry” (it disrupted information systems around the world by targeting information systems with ransomware and blocking access to data; it affected information systems of companies in the Union, including information systems relating to services necessary for the maintenance of essential services and economic activities within Member States) and cyber-attacks against the Polish Financial Supervision Authority and Sony Pictures Entertainment, as well as cyber-theft from the Bangladesh Bank and attempted cyber-theft from the Vietnam Tien Phong Bank;
- four members of Russia’s military intelligence agency (GRU) for the hacking of the Wi-Fi system for Organisation for the Prohibition of Chemical Weapons in Hague in April 2018; and a unit (74455) of the GRU for the cyber-attacks publicly known as “NotPetya” or “EternalPetya” in June 2017 (they rendered data inaccessible in a number of companies in the Union, wider Europe and worldwide, by targeting computers with ransomware and blocking access to data, resulting amongst others in significant economic loss) and the cyber-attacks directed at an Ukrainian power grid in the winter of 2015 and 2016.⁴⁴

Then, in October 2020, for the second time the EU imposed sanctions on two Russian members of GRU and a unit (26165) of the GRU over their involvement in hacking the German federal parliament (Deutscher Bundestag) in April and May 2015. This cyber-attack targeted the parliament’s information system and affected its operation for several days. A significant amount of data was stolen and the email accounts of several MPs as well as of the then Chancellor Angela Merkel were affected.⁴⁵

State and non-State actors use cyberspace in order to achieve their goals. All these cyber-attacks seem to be part of a larger narrative and reflect the priorities of their actors: “political motivations for Russia, theft of intellectual property for China, and financial gains for North Korea.”⁴⁶ Sanctioning Chinese, North Korean and Russian entities and individuals for cyber-attacks is considered a bold move by the EU, which demonstrates that the Union and its Member States have embraced the need to be more proactive in the field of cybersecurity and cyberdefence.⁴⁷ A similar cyber sanctions programme was already adopted by the United States in 2015 and the Union has so far largely adapted to it.⁴⁸ At the same time, when the Union imposes sanctions, other countries tend to follow suit. An example is the United Kingdom, which, shortly after the adoption of the EU cyber sanctions regime, introduced legislation aimed at aligning with EU sanctions.⁴⁹ The EU’s new cyber sanctions regime could thus inspire other nations (for example, the European Free Trade Association members, the EU candidate

⁴⁴ Council Decision (CFSP) 2020/1127 of 30 July 2020 amending Decision (CFSP) 2019/797 concerning restrictive measures against cyber-attacks threatening the Union or its Member States.

⁴⁵ Council Decision (CFSP) 2020/1537 of 22 October 2020 amending Decision (CFSP) 2019/797 concerning restrictive measures against cyber-attacks threatening the Union or its Member States.

⁴⁶ MOULIN, T. (2023): *Waking Sleeping Beauty? Exploring the Challenges of Cyber-Deterrence by Punishment*. p. 49.

⁴⁷ KAPSOKOLI, E. (2021): *Sanctions and Cyberspace: The Case of the EU’s Cyber Sanctions Regime*, p. 496.

⁴⁸ MOULIN, T. (2023): *Waking Sleeping Beauty? Exploring the Challenges of Cyber-Deterrence by Punishment*. p. 46-47.

⁴⁹ BOGDANOVA, I. – VÁSQUEZ CALLO-MÜLLER, M. (2021): *Unilateral Cyber Sanctions: Between Questioned Legality and Normative Value*, p. 933.

countries and neighbouring countries) or advance the discussion on similar measures within the United Nations context.⁵⁰

A number of scholars shed light on the challenges and problems associated with the current EU cyber-attacks sanctions regime. Firstly, restrictive measures should be placed in the broader context of the Union's CFSP and must always be combined with other policy instruments.⁵¹ Therefore, the effectiveness of the new EU cyber sanctions regime also depends on its complementarity with other instruments in the Cyber Diplomacy Toolbox. Secondly, in the cyber context, certainty about attribution is among the conditions for the legality of any countermeasures under international law. If the EU wants to impose legitimate cyber sanctions, it needs to determine the attribution of cyber-attacks. Attribution is a central issue and poses a particular challenge for the Union cyber diplomacy and its cyber-attacks sanctions regime.⁵² "Attribution describes the process of assigning responsibility for a cyber-attack to an actor."⁵³ The Union acknowledges that attribution to a State remains a sovereign political decision of individual Member States. "The targeted nature of cyber sanctions allows the EU to avoid the sensitive question of attribution of responsibility for cyber-attacks to a third country within the currently still underspecified international legal framework governing this area" and the Union "has limited its actions to the expression of concerns and condemnations."⁵⁴ Most cyber-attacks with high impact are perceived to have been organised at the request and with the support of national governments. Individual listings under the EU cyber-sanctions framework could be compared to the indirect attribution of responsibility to States, as the sanctioned actors usually have a clear connection with a specific State.⁵⁵ The absence of attribution procedures at the EU level "hinders common action by the EU Member States and leaves this prerogative in the realm of national decision-makers".⁵⁶ In the above context, in the opinion of some scholars, common attribution is required.⁵⁷ Member States and EU institutions should develop common threat assessment and a shared culture of attribution of cyber-attacks.⁵⁸ Thirdly, these restrictive measures are difficult to be imposed because the collection of the necessary intelligence to attribute a cyber-attack is a challenging task.⁵⁹ Member States can ensure an effective EU response to malicious cyber activities by sharing relevant information, although it should be noted that there is no international legal obligation to reveal evidence.⁶⁰ Member States do not always have the political will to share information with other Member States.⁶¹ Member States through the procedure of public attribution, are

⁵⁰ MORET, E. – PAWLAK, P. (2017): The EU Cyber Diplomacy Toolbox: towards a cyber sanctions regime? p. 2.

⁵¹ MORET, E. – PAWLAK, P. (2017): The EU Cyber Diplomacy Toolbox: towards a cyber sanctions regime? p. 3.

⁵² BENDIEK, A. – SCHULZE, M. (2021): Attribution: A Major Challenge for EU Cyber Sanctions, An Analysis of WannaCry, NotPetya, Cloud Hopper, Bundestag Hack and the Attack on the OPCW, p. 8.

⁵³ BENDIEK, A. – SCHULZE, M. (2021): Attribution: A Major Challenge for EU Cyber Sanctions, An Analysis of WannaCry, NotPetya, Cloud Hopper, Bundestag Hack and the Attack on the OPCW, p. 10.

⁵⁴ MIADZVETSKAYA, Y. – WESSEL, R. A. (2022): The Externalisation of the EU's Cybersecurity Regime: The Cyber Diplomacy Toolbox, p. 435.

⁵⁵ MIADZVETSKAYA, Y. – WESSEL, R. A. (2022): The Externalisation of the EU's Cybersecurity Regime: The Cyber Diplomacy Toolbox, p. 435.

⁵⁶ MIADZVETSKAYA, Y. – WESSEL, R. A. (2022): The Externalisation of the EU's Cybersecurity Regime: The Cyber Diplomacy Toolbox, p. 438.

⁵⁷ MOULIN, T. (2023): Waking Sleeping Beauty? Exploring the Challenges of Cyber-Deterrence by Punishment. p. 74.

⁵⁸ IVAN, P. (2019): Responding to cyberattacks: Prospects for the EU Cyber Diplomacy Toolbox, p. 3.

⁵⁹ KAPSOKOLI, E. (2021): Sanctions and Cyberspace: The Case of the EU's Cyber Sanctions Regime, p. 493.

⁶⁰ COUNCIL OF THE EUROPEAN UNION (2017): Draft implementing guidelines for the Framework on a Joint EU Diplomatic Response to Malicious Cyber Activities, p. 14.

⁶¹ BENDIEK, A. – SCHULZE, M. (2021): Attribution: A Major Challenge for EU Cyber Sanctions, An Analysis of WannaCry, NotPetya, Cloud Hopper, Bundestag Hack and the Attack on the OPCW, p. 8.

taking the risk to expose important information and cyber capabilities and hackers can take advantage of these information for their activities to become more effective.⁶² Similarly not all Member States have the technical ability and necessary intelligence to attribute a cyber-attack.⁶³ Difficulties with reliable attribution represent a key problem in planning cyber sanctions, and sanctions based on wrong assessment of attribution or inaccurate evidence could in itself contravene international law. Therefore, improving attribution in the case of malicious cyber activities will be vital to strengthen the credibility of EU sanctions.⁶⁴ Fourthly, it is evident that the Union has imposed sanctions with a time lag. The delay is explained by the fact that determining the responsibility of cyberattacks is technically and legally challenging because it requires IT forensic and intelligence capabilities. In addition, sanctions have to be adopted unanimously by the Council, which also causes delays in the EU's response. So better coordination between EU institutions and Member States could help in this context.⁶⁵ In conclusion, we share the views that the imposition of sanctions for actions in a cyberspace, in which some definitions and international law are not yet well established requires careful consideration of various aspects.

Conclusion

The Union, as important actor in international relations, is committed to a global, open, stable, peaceful and secure cyberspace. In the area of cybersecurity, the EU has developed several policies, strategies and institutions to protect itself and its Member States in cyberspace, including the legislation that specifically tackles cyberspace-related threats and enables the Union to act when these occur. The increasing number of external threats has led the EU to integrate cybersecurity issues into its CFSP. The Union has also confirmed that CFSP measures including, if necessary, restrictive measures, may be used in response to malicious cyber activities. The Union's cyber sanctions regime has been in place since 2019 and the first sanctions were imposed in 2020. With this new sanction regime, the Union seeks to make EU cyberspace more secure, but its response to date (only eight persons and four entities have been sanctioned) can be considered cautious and limited. The imposition of EU cyber sanctions has been hampered in particular by the lack of coordinated intelligence collection efforts, a focus on voluntary intelligence sharing, problems with attribution which undermine the development of a common threat perception in EU cyberspace.

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⁶² KAPSOKOLI, E. (2021): Sanctions and Cyberspace: The Case of the EU's Cyber Sanctions Regime, p. 495.

⁶³ KAPSOKOLI, E. (2021): Sanctions and Cyberspace: The Case of the EU's Cyber Sanctions Regime, p. 495.

⁶⁴ MORET, E. – PAWLAK, P. (2017): The EU Cyber Diplomacy Toolbox: towards a cyber sanctions regime? p. 4.

⁶⁵ BENDIEK, A. – SCHULZE, M. (2021): Attribution: A Major Challenge for EU Cyber Sanctions, An Analysis of WannaCry, NotPetya, Cloud Hopper, Bundestag Hack and the Attack on the OPCW, p. 34.

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DIGITAL READINESS OF THE VISEGRAD GROUP COUNTRIES¹

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Abstract: Digital transformation has become a crucial topic for many countries, including those in the Visegrad Group. This paper focuses on assessing the digital readiness of these countries based on the Cisco Digital Readiness Index. Using the identified indicators evaluated in the index, we will compile a SWOT analysis for each country, allowing us to identify differences between them and uncover areas for improvement. The aim of this paper is to provide an overview of the digital readiness of the V4 countries need to improve in digital transformation to better compete in the global market and ensure prosperity for their citizens.

Keywords: digitization, V4, readiness

JEL: J21, O31

Introduction

Currently, the process of digitalization is the foundation for the development of the economy and society. The reason for this is that digital transformation brings new opportunities for economic growth and increases the competitiveness of countries. Within the European Union, there is a group of countries known as the Visegrad Group (V4), consisting of four countries: Slovakia, Poland, the Czech Republic, and Hungary. These countries are striving for continuous development in the field of digitalization in order to catch up with the most advanced countries in the EU.

This paper focuses on the digital readiness and digital transformation of the V4 countries, with the aim of providing an overview of their current digital situation and analyzing their placement in the Cisco Digital Readiness Index. Subsequently, we will compare the countries' positions and use SWOT analysis to identify the areas and factors that most significantly influence digital transformation in these countries.

In the first chapter of this paper, we will focus on the general definition and description of digitalization and digital transformation, which have an impact not only on Europe but also on the whole world. In the second chapter, we will compare the digital readiness of individual V4 countries based on the aforementioned Cisco Digital Readiness Index and analyze the differences between these countries. In the final chapter, we will focus on a SWOT analysis of factors influencing strengths and weaknesses that each country has, as well as opportunities and threats that come with the digitalization process.

Table 1: Contribution methodology

Research Object:	Visegrad Group countries (Slovakia, Poland, Czech Republic, Hungary)
Objective of the article:	to provide an overview of the digital readiness of the V4 countries and identify areas in which these countries need to

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	improve their digital infrastructure in order to better compete in the global market and ensure prosperity for their citizens
	Analysis of relevant data and statistics
Research Methods Used:	Analysis of the Cisco Digital Readiness Index
	SWOT analysis – analysis of strengths, weaknesses, opportunities, and threats

Source: own processing

1 Digitization as the basis of the fourth industrial revolution

The importance of the digitalization process is supported by several studies. One of them is a survey conducted by the McKinsey Global Institute, which states that within the next 20 years, approximately 50% of work operations worldwide could be automated. This period can be compared to the period between 1710 and 1871, when 50% of workers in the primary sector were also replaced due to the industrial revolution.²

The fourth industrial revolution is characterized by several features, with the foundation of each being the process of digitalization:³

- digitalization and vertical integration in the value chain,
- digitalization and horizontal integration of multiple value processes,
- digitalization of products and services,
- digital business models and customer access,
- advanced technological platform.

Majchrzak defines digitalization as the process of utilizing digital technologies that lead to significant changes not only in the industry but also in the entire society.⁴ Originally, digitalization was perceived as a simple method to be used for improving individual's private lives. However, at present, the process of digitalization has become the driving force for social development of the entire society, leading to increased efficiency of the economy and competitiveness of the country. The European Union defines the digital economy as a result of the transformative effects of new universal technologies in the field of information and communication.⁵ The result of the digital economy is the creation of a space for more effective exchange of information, transparent business, and this at the international level. Currently, we can observe an ever-increasing amount of available data that are used in information flows between countries, regions, and businesses. In this context, a survey was conducted by the McKinsey Global Institute, which states that cross-border data flows at the global level increased 45-fold between 2005 and 2014.⁶

The success of digital transformation depends on the development and innovativeness of individual economies across Europe. Before we analyze the level of digitalization in the V4 countries, it is necessary to understand the term "digital" correctly. Since the development in the field of ICT is relatively fast, countries, industries, and companies compete and create value in completely new ways.⁷ According to Schallmo and Williams, digitization represents a process aimed at creating value, relying on process optimization and focusing on capabilities

² KULADIN, V. – SUKHAREVSKIJ, A. – MEFFERT J. (2019): *Príručka pre podnikovú digitalizáciu*. Digital@Scale, Moskva, Rusko : Intelektuálna literatúra, pp. 293.

³ PWC (2020): *Priemysel 4.0: vytváranie digitálneho podniku* [online]. In PwC. 2020.

⁴ MAJCHRZAK, A. et al. (2016). *Designing for digital transformation: Lessons for information systems research from the study of ICT and societal challenges*, MIS Quarterly (40:2), pp. 267-277.

⁵ OECD (2015). *Výhľad digitálnej ekonomiky 2015* [online]. In *Organizácia pre hospodársku spoluprácu a rozvoj*. Paríž, Francúzsko, 2015.

⁶ MCKINSEY GLOBAL INSTITUTE (2016). *Digital globalization: The new era of global flows* [online]. In *McKinsey & Company*, USA, 2016.

⁷ HYVONEN, J. (2018): *Strategic leading of digital transformation in large established companies a multiple case-study*, In *PhD Thesis, Aalto University*. 2018.

that support the entrepreneurial idea.⁸ The term digital transformation was then defined as the result of the development of digital skills and resources.

1.1 Digital Economy

The term "digital economy" is closely related to digital transformation. This term can be defined as the gradual transformation of all sectors of the economy through the widespread adoption of information and communication technologies.⁹

The digital economy represents a new economic paradigm that arises as a result of the digitalization of all sectors of the economy. According to experts from the OECD, the definition of the digital economy is as follows: "The digital economy is an economic system that uses digital technologies as a platform for the exchange of values and related services. It encompasses new products and services, new sources of revenue, new ways of creating and producing goods and services, as well as new ways of delivering and consuming products and services."¹⁰

The digital economy differs from the traditional economy in several fundamental ways that enable new ways of creating value and effective use of information and communication technologies for various purposes in the economy. Some of the key characteristics of the digital economy include:

1. **Globalization** – the digital economy is global because digital technologies allow communication and trade across country and continental borders.¹¹
2. **Digitalization** – the digital economy is based on digital technologies that enable the exchange of information and data electronically.¹²
3. **Flexibility and Speed** – the digital economy enables faster and more flexible creation and distribution of products and services.¹³
4. **Personalization** – digital technologies enable personalized solutions for customers and increase their satisfaction.¹⁴
5. **High Level of Automation** – digital technologies allow for a high level of process automation and cost reduction.¹⁵

The outcome of the digital economy should be the maximum utilization of all ICT advantages, to create synergies at both the national and international levels. At the country level, the image of the real impact of technology is measured in terms of the Gross Domestic Product (GDP).¹⁶ The goal of ICT and the internet in the digital economy is to reduce production costs, strengthen the creation and dissemination of new ideas, promote knowledge sharing, and

⁸ SCHALLMO, D. R. - WILLIAMS, C. A. (2018): *History of Digital Transformation. Digital Transformation Now!* Springer, Cham. pp. 3-8.

⁹ JOHANSSON, B. et al. (2013): *Excellence with leadership: the crown indicator of scimago institutions rankings iber report*. El profesional de la información, Vol. 22, No. 5. pp. 474-480.

¹⁰ OECD (2015). *OECD Digital Economy Outlook 2015*. In *OECD Publishing*, Paris, 2015.

¹¹ ZHIQIANG, Z. et al. (2022): *The impact of the Digital Economy on Enterprise Sustainable Development and Its Spatial-Temporal Evolution: An Empirical Analysis Based on Urban Panel Data in China*. Sustainability 2022, 14, 11948, pp. 1-23.

¹² POPKOVA, E. G. – SEGRI, B. S. (2020): *Digital Economy: Complexity and Variety vs. Rationality*. Conference proceedings. Springer Nature Switzerland AG 2020. pp. 1055.

¹³ VASKA, S. et al. (2020): *The digital transformation and business model innovation: A Structured Literature Review*. Front. Psychol. 11.539363.

¹⁴ PREPLETENÝ, D. (2013): *The impact of Digital Technologies on Innovations in Retail Business Models*. International Marketing, Aalborg University. pp. 1-130.

¹⁵ KOLESNIKOV, A. V. et al. (2020): *Global trends of the digital economy development*. Opción: Revista de Ciencias Humanas y Sociales 26. pp. 523-540.

¹⁶ DEGEYSE, C. (2016): *Digitalisation of the economy and its impact on labour markets*. Working paper 2016.02, european trade union institute. ETUI aisbl, Brussels.

improve research and development processes.¹⁷ The aim is to ensure higher economic growth. To achieve significant economic growth of a country, it is necessary to focus on human capital and its education. The utilization of the internet, new technologies, and platforms improves the knowledge and skills of the population.¹⁸

2 Readiness of the V4 countries for digitization

The digitalization of the public sector is equally important as the digitalization of individual business entities. It is important to recognize the difference between the process of digitalizing a country and digitalizing a business. In the public sector, the process of digitalization is defined as a "holistic" mindset approach.¹⁹ In this case, the emphasis is not only on the introduction of new information and communication technologies, but also on the introduction of new political decisions, the orientation of which is focused on the transformation of organizational procedures in the public sector.²⁰

The readiness and level of digitalization of individual countries can be determined and evaluated by various methods. In this article, we have decided to rely on the results achieved by the V4 countries in the Digital Readiness Index compiled by Cisco for 2021. Subsequently, we compared the values achieved in individual indicators and identified the strengths and weaknesses of each country through a SWOT analysis, as well as opportunities and threats brought about by the process of digitalization.

The Cisco Digital Readiness Index was constructed with the aim of holistically measuring the level of digital readiness of a particular country. Thanks to this index, we can identify areas that countries should improve to support their digital economy. Overall, this index examines 146 countries around the world and uses 7 components to evaluate digital readiness. In the research of this index, a relationship was identified between GDP per capita and a country's digital readiness, which increases the importance of studying the issue of digitalization of a country.

The aforementioned index consists of the following seven components:

1. Basic needs (this indicator includes life expectancy, mortality, access to electricity, access to drinking water),
2. Business and government investment (this indicator includes investments in renewable energy, research and development expenditures, investment freedom),
3. Ease of doing business (ease of doing business index, laws, ease of tax payment, access to electricity),
4. Human capital (literacy rate, education index, workforce),
5. Startup environment (venture capital investments, patents and trademarks, density of new businesses),
6. Technology adoption (use of the internet, public cloud services, IT expenditures),
7. Technological infrastructure (mobile broadband connections, fixed broadband connections, household internet access, secure internet servers).

The calculation of the final score was based on Z-scores, with each value representing the distance from the global average. This means that if a country has a score of "1.0," it is one

¹⁷ MEIJERS, H. (2014): *Does the internet generate economic growth, international trade, or both?*, International Economics and Economic Policy, Vol. 11, No. 1-2, pp. 137-163.

¹⁸ CZERNICH, N. et al. (2011): *Broadband infrastructure and economic growth*. The Economic Journal, Vol. 121, No. 552, pp. 505-532.

¹⁹ EJERSBO, N. – GREVE, C (2017): *Digital era governance reform and accountability: The case of Denmark*. Christensen, T. and Laegreid, P. (eds). The Routledge Handbook to Accountability and Welfare state reforms in Europe, Routledge, 267-279.

²⁰ PLESNER, U. et al. (2018): *The Transformation of Work in Digitized Public Sector Organizations*. Journal of Organizational Change Management, 31(5), 1176-1190.

standard deviation above the mean, while a country with a score of "-1.0" is one standard deviation below the mean.²¹

Out of the total of 146 analyzed countries, the Visegrad Group countries ranked in the following positions with the overall scores listed in Table 2.

Table 2: Digital Readiness Index Cisco 2021 for V4

Country	Place	Total score
Slovakia	36 th	+0,61
Czech republic	29 th	+0,83
Poland	33 rd	+0,73
Hungary	49 th	+0,36

Source: own processing

Based on the overall results of this index, the best prepared country for digitization among the V4 countries is the Czech Republic with an overall score of +0.83. Poland follows in 33rd place. Slovakia ranked three places lower, and Hungary currently achieved the lowest score. The positive aspect is that all four countries have a positive overall score, meaning they are above the average of all analyzed countries in this index. In the following parts of the article, we focused on individual indicators of this index to identify the positives and negatives of each country. Table 3 shows the achieved scores in individual indicators of the Cisco Digital Readiness Index for the V4 countries.

Table 3: Individual indicators of the Digital Readiness Index Cisco 2021 for V4

	Country	Place	Total score
Basic needs	Slovakia	37 th	+0,70
	Czech republic	29 th	+079
	Poland	34 th	+0,75
	Hungary	39 th	+0,70
	Japan	1st	+0,97
Business & govt investment	Slovakia	40 th	+0,16
	Czech republic	32 nd	+0,41
	Poland	30 th	+0,53
	Hungary	33 rd	+0,40
	Iceland	1st	+4,44
Easy of doing business	Slovakia	39 th	+0,68
	Czech republic	26 th	+1,00
	Poland	52 nd	+0,46
	Hungary	100 th	-0,52
	Denmark	1st	+1,84
Human capital	Slovakia	35 th	+0,82
	Czech republic	23 rd	+1,12
	Poland	25 th	+1,07
	Hungary	36 th	+0,78
	Singapore	1st	+1,67
Start-up environment	Slovakia	47 th	-0,10
	Czech republic	44 th	-0,07
	Poland	76 th	-0,40

²¹ CISCO (2021): *Index digitálnej pripravenosti*. [online]. In Cisco.

	Hungary	56 th	-0,26
	Luxemburg	1st	+5,78
Technology adoption	Slovakia	33 rd	+0,72
	Czech republic	37 th	+0,63
	Poland	35 th	+0,68
	Hungary	53 rd	+0,35
	United States	1st	+3,01
Technology infrastructure	Slovakia	36 th	+0,71
	Czech republic	20 th	+1,15
	Poland	13 th	+1,34
	Hungary	34 th	+0,73
	Denmark	1st	+3,44

Source: own processing

Based on the analysis of individual parameters, it can be seen that in some areas the analyzed countries are similar, while in others they are completely different. Regarding the first indicator - human needs, the individual countries achieve a comparable level. The V4 countries are sufficiently developed in this respect, lagging behind the leader by only about 0.20 points. In the other indicators, individual countries deviate more significantly from the leaders. The situation among the V4 countries is relatively balanced in the indicator of technology adoption, where only Hungary lags significantly behind. However, they deviate from the leader by more than 2 points. In the indicator of business and government investments, Slovakia significantly lags behind. Also, in this indicator, the difference between the V4 countries and the leader is very significant (about 4 points). According to this index, the ease of doing business in individual countries is very different. The best situation is in the Czech Republic, where the value reaches the upper quartile. On the other hand, doing business in Hungary is the most complicated. In terms of digitalization of human capital, the Czech Republic and Poland have the best human capital, and it is positive that Slovakia also achieves values in the upper quartile. On the other hand, the parameter for the start-up environment is negative in all four countries, with Poland being at the level of the lower middle quartile. On the contrary, Poland achieves relatively good values in the parameter of technological infrastructure. Poland has the largest differences between individual indicators among the four mentioned countries.

3 SWOT analysis of digital readiness in V4 countries

Based on the conducted research among conducted studies, surveys, analyses, and last but not least, on the results of the Cisco Digital Readiness Index, we have compiled a SWOT analysis of individual V4 countries regarding the process of digitization of the public sector.

3.1 SWOT analysis of Slovakia

The following scheme presents a SWOT analysis - strengths, weaknesses, opportunities, and threats - for Slovakia in relation to the digitalization of the environment and the use of digital technologies.

Table 4: SWOT analysis of Slovakia due to the digitization of country's environment

Strengths	Weaknesses
connectivity	regional disparities
internet usage by residents	technological infrastructure
government programs and initiatives	government investments
	digital literacy of the population

Opportunities	Threats
reduction of bureaucracy	shortage of skilled workforce
electronic public administration	outdated education system
integration of digital technologies	lack of financial resources for businesses
attraction of foreign investors	
innovative young companies	

Source: own processing^{22 23 24}

Based on the above SWOT analysis, it is evident that Slovakia, as a country, has several strengths due to its digitizing environment that can be utilized to capitalize on emerging opportunities in the future. On the other hand, there are areas in Slovakia that are not sufficiently developed, which subsequently poses threats to the future. On the one hand, there are enough companies in Slovakia that have room for digitalization, but on the other hand, financing such transformation, especially in small and medium-sized enterprises, is problematic. A positive aspect is that the government is gradually becoming more involved in expanding digitization in the country through various initiatives and government programs. However, government investments are often insufficient. The problem is that the country has enough quality IT-focused university majors, but there is a lack of linkage between the education system and the needs of employers. The technological infrastructure also has several shortcomings, and a positive aspect is that internet availability is 87% in households in large cities in Slovakia, while rural areas are the worst off (78% of households). This is also related to regional disparities.

3.2 SWOT analysis of Czech republic

The second country analyzed in terms of digitalization level is the Czech Republic. Based on the examined index, it appears that among the V4 countries, the level of digitalization of the environment in the Czech Republic is at the highest level. We present the strengths and weaknesses, as well as opportunities and threats for the country in the future within the SWOT analysis compiled by us.

Table 5: SWOT analysis of Czech republic due to the digitization of country's environment

Strengths	Weaknesses
connectivity	regional differences
internet usage by the population	government investments
technological infrastructure	digital literacy of the population
government programs and initiatives	
electronic public administration	
Opportunities	Threats
reduction of bureaucracy	shortage of skilled workforce
integration of digital technologies	outdated education system
attracting foreign investors	lack of financial resources for businesses
innovative entrepreneurship	

Source: own processing^{25 26 27 28}

²² CISCO (2021): *Index digitálnej pripravenosti*. [online]. In Cisco.

²³ MINISTERSTVO ŠKOLSTVA, VEDY, VÝSKUMU A ŠPORTU SR (2016): *Duálny systém odborného vzdelávania je výhodný pre automobilový priemysel*. [online]. In MŠVVaŠ, 2016.

²⁴ BUDINSKÝ, G. (2017): *Keď sa nezmení prístup vlády vo vzdelávaní IT špecialistov, Slovensko sa z technologickkej krajiny prepadne na montážnu dielňu*. [online]. In IT Asociácia Slovenska, 2017.

²⁵ CISCO (2021): *Index digitálnej pripravenosti*. [online]. In Cisco.

²⁶ ZELENÝ, M. et al. (2016): *Průlomové technologie, automatizace a digitalizace*. [online]. In milanzeny.com.

²⁷ MPO. (2014): *Initiative Industry 4.0*. [online]. In mpo.cz.

²⁸ KRULIŠ, K. et al. (2018): *Digital New Deal: Researching V4's Strategies for Society 4.0*. [online]. In amo.cz,

Based on the SWOT analysis, we can conclude that digital transformation is more positive than negative for the Czech Republic. If the country focuses on addressing its weaknesses, it will eliminate a large part of the emerging threats. This process will ensure overall economic development of the country and its subsequent competitiveness in foreign markets. In terms of internet availability, the Czech Republic is better off than Slovakia, with 87% of households having access to the internet. Similar to Slovakia, regional differences exist between major cities and rural areas in the Czech Republic. According to statistics, 81% of the population in the Czech Republic uses the internet, with 92% of children growing up in households with a computer or tablet. Like Slovakia, the education system in the Czech Republic is problematic and does not always align with the needs of employers, but the situation is slightly better than in Slovakia.

3.3 SWOT analysis of Poland

Based on the values obtained in the Cisco Digital Readiness Index, it is evident that Poland as a country has more significant deficiencies in the digital transformation compared to other V4 countries. Within the SWOT analysis, we define Poland's strengths and weaknesses in the digitalization process, as well as opportunities and threats that arise in the country.

Table 6: SWOT analysis of Poland due to the digitization of country's environment

Strengths	Weaknesses
connectivity	regional disparities
internet usage by citizens	e-government
technological infrastructure	digital literacy of population
government programs and initiatives	
government investments	
Opportunities	Threats
streamlining administration	shortage of skilled workforce
integration of digital technologies	outdated education system
attracting foreign investors	lack of financial resources for businesses
innovative entrepreneurship	

Source: own processing^{29 30 31}

Poland as a country is still in the early stages of digitalization, as evidenced by the value of the Cisco Digital Readiness Index. On the other hand, when we look at the development of the Digital Economy and Society Index, it is clear that in certain areas, Poland is progressing at a very slow pace and still does not come close to the European Union average. The SWOT analysis only confirms that Poland currently needs to improve the expertise of its workforce and create better environments and conditions for budding startups. Weaknesses predict the replacement of human resources with technology (robots and artificial intelligence) as a result of a shortage of qualified labor. Insufficient digital development in the country may also result in more difficulty penetrating foreign markets. A strong point of Poland is the government's efforts to develop public administration through investment. However, it is still not at the level of developed European countries.

²⁹ CISCO (2021): *Index digitálnej pripravenosti*. [online]. In Cisco.

³⁰ BIEDRZYCKI, K. (2016): *Deforma edukacji. Nowa podstawa programowa do polskiego cofnie szkoli do polowy XX wieku*. [online]. In *Oko.press*, 2016.

³¹ MINISTERSTVO DIGITALIZÁCIE. (2017): *Polska Agenda Cyfrowa. Sprawozdanie z działalności Ministerstwa Cyfryzacji w latach 2015-2017*. [online]. In *Ministerstwo digitalizácie*. 2017.

3.3 SWOT analysis of Hungary

Based on the results of the Cisco Digital Readiness Index, Hungary is also not among the leaders in digital transformation among the V4 countries. However, there are areas in which Hungary excels within the V4. In the SWOT analysis, we will summarize the strengths and weaknesses of Hungary in the process of digitalization, as well as the opportunities and threats that digitalization brings.

Table 7: SWOT analysis of Hungary due to the digitization of country's environment

Strengths	Weaknesses
connectivity	regional disparities
internet usage by citizens	digital literacy of the population
government programs and initiatives	technological infrastructure
	government investments
	integration of digital technologies
Opportunities	Threats
reducing bureaucracy	lack of workforce
electronic public administration	outdated education system
attracting foreign investors	lack of financial resources for businesses
innovative entrepreneurship	

Source: own processing^{32 33 34}

The prerequisites for Hungary's digital transformation are relatively high, as broadband connectivity is available throughout the country. On the other hand, the most problematic area appears to be human resources, whether it is their expertise or interest in digital technologies. Other characteristics are comparable to the previous three analyzed countries, although Hungary lags behind the EU average more significantly.

Conclusion

Based on the results of the Cisco Digital Readiness Index and the SWOT analysis conducted, the following findings can be outlined:

- the V4 countries are at a comparable level in terms of the digitalization process,
- each country has its own specific areas where it achieves a higher level than other analyzed countries,
- the biggest problem in all four countries appears to be the human capital-related issues concerning digitalization,
- the digitalization process for these countries is also challenging due to financing issues,
- a positive aspect is that the availability of internet connection is expanding annually in all countries,
- a strong point for all countries are government programs and initiatives aimed at supporting the country's digitalization process,
- however, the approach of individual countries to government investments in digitalization elements differs,
- Czech Republic is the most developed country in terms of analyzed parameters in the digitalization process.

³² CISCO (2021): *Index digitálnej pripravenosti*. [online]. In Cisco.

³³ MAĐARSKÁ NÁRODNÁ BANKA. *Innováció és Stabilitás*. [online] In mnb.hu.

³⁴ KRULIŠ, K. et al. (2018): *Digital New Deal: Researching V4's Strategies for Society 4.0*. [online]. In amo.cz.

From the perspective of the aforementioned findings, we would recommend the following areas of focus for each country:

- 1. Education and educational system** – The main problem within all four countries is the outdated educational system that does not correspond with the demands of employers. As a result, there is a lack of qualified workforce capable of working with new digital technologies in the market. Countries should focus on transforming the curriculum and placing greater emphasis on the creation of dual education. In addition to the curriculum, there is a shortage of teachers, particularly in Slovakia and Poland, due to their low financial compensation. This point is also related to the digital literacy of the population.
- 2. Even development of the country** – The second weakness of V4 countries is the emerging regional disparities. This includes not only access to internet connectivity but also technical and social infrastructure. This subsequently causes different investors' interests in specific regions. Countries should focus on gradual development of the entire country, not just a particular area.

As for Slovakia, in addition to the aforementioned two areas, it should focus on increasing government investments in the digitalization process because we believe it will result in attracting foreign investors. In addition, Slovakia should focus on developing e-government, which is currently being gradually introduced into public administration. The problem for Slovakia is the lack of interest from both authorities and subsequently entrepreneurs to use online services.

In the Czech Republic, the process of digitalization is at a relatively good level. They should focus on the aforementioned areas: the education system and the development of digital literacy of the population, and subsequently reducing regional disparities.

In Poland, the situation with the digitalization of the environment is challenging mainly due to low interest from the population. It is necessary for the government to focus on promoting the positive aspects of this process and subsequently establish a system of lifelong learning

for its citizens in the field of digitalization.

Hungary as a country may be at a lower level of digitalization, but in terms of internet access availability, it is at the highest level among the V4 countries. However, they should focus primarily on technological infrastructure and e-government. The problem in this area, however, is the level of digital literacy of the population. The solution to this situation is not only government investment in public administration but also providing ICT education courses for all age groups.

The most significant deficiency of the V4 countries in terms of digital transformation is the human capital and its qualifications. Artificial intelligence is becoming prominent, especially in the IT services sector and the financial sector, but it is gradually gaining its place in smaller businesses and in the public sector. Therefore, it is essential for young people to pursue creativity and ideas, creating a mutual relationship between artificial intelligence and humans, which will lead to new possibilities. Hence, it is necessary for countries to focus on modifying the existing education system and the educators working in it, as part of the digital transformation.

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EXPORT OF THE IRANIAN ISLAMIC REVOLUTION IN THE CONTEXT OF THE YEMENI CRISIS¹

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Abstract: Iranian current foreign policy orientation is influenced by the religious principles brought to Iranian society by the Great Islamic Revolution of 1979. The ideology of its export beyond the borders of Iran is also based on its principles. This concept attempts to implement the use of various tools from soft power to direct military support of rebel groups in the region. According to the results of the work, it is possible that these are matters related to several long-term measures, that Iran will interfere in Yemen for a long time, which has been in an armed conflict and on the verge of a humanitarian crisis since 2014. At the same time, this Iranian support of the Houthi movement can be understood as an example of the export of the Iranian Islamic revolution, serving to establish Iran's leadership position in the Muslim world.

Key words: Islamic Republic of Iran, Exporting of the Islamic Revolution, Yemeni Crisis
JEL: F50, F51

Introduction

The political-economic position makes the Islamic Republic of Iran one of the most important actors in the wider Middle East region. Despite the multiple sanctions regimes that have been imposed on the country over the past more than 40 years by Western countries led by the United States of America, Iran has long been spending a lot of money to support its foreign activities. In order to strengthen its sphere of influence, it uses several tools, including soft power, but also military aid in the framework of several armed conflicts. The main targets of Iranian foreign activity can be identified as state actors, but also non-state actors in the form of several insurgent groups and anti-government organizations. Behind this involvement of Iran, not only in the Middle Eastern region, it is possible to detect the ideology of exporting the Iranian Islamic revolution to more or less distant Muslim countries. This concept, which began to be applied immediately after the revolutionary events in 1979, is also present in the current setting of the country's foreign policy priorities and constantly influences Iran's position in the international community. After the events of 1979, the importance of proxy wars became an important feature of the formation of Iranian foreign policy. Direct or indirect support of rebel groups has become a tool in the hands of the Iranian government apparatus, thanks to which the country strives to gain regional dominance in the Middle East region. In these terms, it is also possible to perceive Iran's involvement in Yemen, which has been mired in a military conflict and humanitarian crisis for several years. At the same time, the Arabian Peninsula can be described as the exclusive sphere of influence of Iran's key rival - Saudi Arabia. It also has its interests in the Yemeni civil war, as evidenced by the large-scale military intervention that Saudi Arabia launched in Yemen in 2015. At the same time, the article is not devoted to the characteristics of the complicated relations between the Islamic Republic of Iran and Saudi Arabia. However, from the point of view of the complexity of the given issue, it is impossible

¹ The paper was written within the project VEGA 1/0115/23: Application of Cooperative Models of Game Theory in Economy and International Relations.

to abstract from the description of the differences in the attitudes of these key countries of the entire Middle Eastern region.

1 Objectives and methodology

The main objective of this paper is to approach the concept of exporting the Islamic revolution beyond the borders of the Islamic Republic of Iran. It is possible to designate specific cases in which the Iranian state power tried to a extent to support Muslim communities in individual world regions as partial goals. In this sense, one of the chapters of the article is devoted to cases of Iran's concrete military and economic intervention in the conflict in Yemen and Iran's questionable aid to Yemeni rebel forces fighting in the Yemeni Civil War. The main reason for choosing Yemen is the fact, that we include the southern region of the Arabian Peninsula in the immediate sphere of influence of Saudi Arabia, characterized by complicated relations with the Islamic Republic of Iran. At the same time, the issue of Iranian aid to Yemeni rebel forces can be described as controversial, as the Iranian government officially denies any indications of providing such military aid to the warring parties of the conflict. To achieve individual partial goals and the main goal of the work, it is possible to set several research questions to which the work tries to find an answer: What is the essence of the ideology of the export of the Iranian Islamic Revolution? What tools are used by Iran to promote this ideology? What position does Iran take on the situation in Yemen and what are Iran's priority interests in this region? For the purpose of an objective comparison, the contribution works with relevant sources primarily from foreign authors whose research and publication activities are mainly focused on issues of Middle Eastern and Iranian realities. In order to maintain greater objectivity in this complex topic, we try to argue the positions of both sides. At the same time, we rely on the statements of widely recognized institutions such as the United Nations, specifically one of its bodies - the Security Council. Quantitative methods typical for research in the field of international relations are used in the work. The work mainly uses the method of content analysis of texts and description.

2 The policy of exporting the Islamic Revolution

One of the possible ways of transition from the original political environment to a new socio-political arrangement is a revolution. The revolutionary events were the drivers of the most important political changes in Europe during the last three hundred years. Often, however, the ideas of changing the political setting did not remain only in the conditions of the country in which they took place, but over time began to penetrate into the surrounding countries as well. An example is the great French Revolution of 1789, or the revolutionary events in Tsarist Russia at the end of the First World War in 1917. At the end of the 1970s, the inhabitants of Iran also tried to change the political structure in the country. Led by spiritual leaders operating primarily in the Iranian city of Qom, headed by *Ayatollah Ruollah Khomeini*, they managed to end the millennia-long monarchy and establish the Islamic Republic of Iran. However, the idea of the Islamic revolution was not to end with this change of regime, and based on the Iranian example, other countries in the Middle East as well as in the more distant region should have been transformed into territories in which Muslim law and the teachings of the *Prophet Muhammad* have priority. In his publication focused on the results of the Iranian Islamic Revolution, *Afshon P. Ostovar* succinctly states one of the main reasons for the application of the concept of the spread of revolutionary ideas, which became part of Iran's foreign policy priorities for the next few decades. According to him, this motive is primarily based on the anti-Western attitude and sentiments that the revolution brought with it. Based on this, Iran's spiritual leaders chose the idea of a resistance approach to the issue

of internationalism within the framework of post-revolutionary foreign policy.² The growing apathy towards the Western powers has led to the gradual formation of the belief that the Iranian nation is being oppressed by the Western countries led by the United States of America. A concept was created on the basis of which the support of pan-Islamism and the spread of ideas of common Muslim unity was one of the main ways in which the Iranian government regime tried to fight against the Western imperialist forces, which, according to Iranian officials, sought to subjugate Muslim countries.

An important tool for strengthening the Iranian sphere of influence is the approach of the so-called soft power manifested in various areas of social life. As *Mohammad Hassan Al-Qadhi* explains in his publication, political *Shi'ism* and the media promotion of Iranian values in neighbouring countries can be included among the basic ways of using soft power by Iranian officials.³ In this sense, it is the field of culture that Iranian officials use for the purpose of strengthening awareness and the Iranian revolution and cooperation across the entire Muslim world that is significant. One of the main institutions serving to promote these goals is the Islamic Culture and Relations Organization, which was established in 1995. The activity of this organization, which is connected to the Ministry of Culture and Islamic Guidance, focuses on Muslim cultural awareness at the level of bilateral relations, primarily with countries of the Middle East region. Its agenda includes, for example, the teaching of the Persian language abroad, as well as the organization of cultural and religious events and exhibitions aimed at the Iranian and *Shia* population living outside the borders of Iran.⁴

Military support for groups and communities fighting for *Shia* values in neighbouring states became the main tool for exporting revolutionary ideas beyond the borders of Iran. This is carried out primarily through financial and material aid in the form of arms deliveries or the provision of military training to foreign armed groups. *Trevor Johnston et al.* describe in their report document three specific phases of acquiring new proxies by the Islamic Republic of Iran. The initial phase is the analysis of a new potential market, which may represent an advantageous location for the support of non-state actors. In this meaning, the size of the *Shia* community living in the given country is evaluated, as well as the benefits of investing in the activities of potential organizations. In the second phase, Iranian forces focus on finding concrete political or military groups with which it would be possible to establish an alliance. The third phase can be called the stage of development of mutual cooperation and constant reassessment of the benefits and risks arising from it.⁵ In Iran's post-revolutionary foreign policy priorities, it is possible to see three states on whose support the theocratic regime strongly concentrates - these are neighbouring Iraq, Lebanon, especially the support of the Hizballah movement, and Afghanistan, where there is a significant *Shia* community of Hazaras.⁶ In 1979, the formation of a military organization known as the Islamic Revolutionary Guard Corps (IRGC) was announced. One of the priorities of the Revolutionary Guards is the spreading of the ideas of the revolution to the surrounding countries.⁷ As an example, it is possible to specify the clear connection between the radical Hezbollah movement operating in Lebanon and the IRGC, which in the past cooperated primarily in the field of military training.⁸

² OSTOVAR, A. P. (2009): Guardians of the Islamic revolution ideology, politics, and the development of military power in Iran (1979–2009), pp. 78-80.

³ AL-QADHI, M. H. (2017): The Iranian role in Yemen and its implications on the regional security, p. 38.

⁴ Islamic Culture and Communication Organization (2022): About Us.

⁵ JOHNSTON, T. et al. (2020): Could the Houthis Be the Next Hizballah Iranian Proxy Development in Yemen and the Future of the Houthi Movement, pp. 17-18.

⁶ HALLIDAY, F. (1999): Revolution and World Politics: The Rise and Fall of the Sixth Great Power, pp. 97-98.

⁷ SELIKTAR, O. – REZAEI, F. (2020): Iran, Revolution, and Proxy Wars, pp. 6-7.

⁸ CORDESMAN, A. H. (2006): Iran's Support of the Hezbollah in Lebanon, p. 2.

3 The case of Iranian intervention in Yemen

The unstable situation in Yemen, in which the country has been since the outbreak of the civil war in 2014, is often described as the scene of a proxy war between Sunni Saudi Arabia and the Shiite Islamic Republic of Iran. Yemen is one of the countries most affected by the Arab Spring protest wave that affected almost the entire Middle East region in 2011. Dissatisfaction with the government regime led to the resignation of President *Ali Abdullah Saleh*, who was replaced in the leadership of the country by his deputy *Abdrabbuh Mansur Hadi*. The situation escalated in the country after anti-government rebels operating within the Houthi movement came into open confrontation with the government regime.⁹ The war conflict that followed resulted in the outbreak of one of the biggest humanitarian crises ever to hit the Middle Eastern region. President *Abdrabbuh Mansur Hadi* subsequently left the country and found his refuge in a stable ally of Yemen's legally elected government - Saudi Arabia.¹⁰

Iran's position on the situation in Yemen can be considered diametrically opposed to that held by the representatives of Saudi Arabia. Saudi Arabia's long-standing support for the regime of President *Ali Abdullah Saleh* and the internationally recognized government based in Sana'a is primarily conditional on ensuring long-term stability in Yemen, which is in the interest of Saudi political leaders. In general, it is possible to detect the geographical proximity of both countries, which is a prerequisite for mutual trade and maintaining favourable relations in the field of politics, security and cooperation with tribal groups operating in this region.¹¹

Iran's involvement in Yemen is primarily focused on supporting the activities of the Houthi movement, which openly opposes the legitimately elected government. In the history of mutual relations between Iran and Yemen, it is impossible to find indications of large-scale mutual interference in national affairs. The beginnings of the mutual relationship between Iran and the Houthi movement can be dated to the period after the Iranian Revolution of 1979, when several adherents of *Zaydism* came to study the teachings of *Shia* Islam in the holy city of Qom.¹² The provision of education for Yemeni students can be considered by Iran as the beginnings of the use of soft power tools, the aim to raise awareness of the *Shia* doctrine and the Iranian revolution in Yemen.¹³ It should be noted that it is the members of the Houthi movement who are inclined to the doctrine of *Zaydism*, considered one of the sects of *Shia* Islam. The support of such radical groups also plays an important role in the implementation of the ideology of exporting the Iranian revolution.¹⁴ In the development of mutual relations between Iran and the Houthi movement, the period after 2015, when mutual ties between the two camps intensified, is important. This was mainly due to the large-scale military intervention by Saudi Arabia and its allies in support of the government regime based in the capital city of Sana'a.¹⁵

While Saudi intervention in Yemen can be seen as more than obvious, opinions on Iran's support for the Yemeni rebels are divided among the academic and journalistic community. There are opinions that the key is above all the rhetorical support that Iranian officials direct to the Yemeni rebels. It can be assumed that the extensive financial, material and military support

⁹ JUNEAU, T. (2016): Iran's policy towards the Houthis in Yemen: a limited return on a modest investment, p. 647.

¹⁰ CARAPICO, S. (2017): Arabia Infelix, p. 361.

¹¹ HILL, G. – NONNEMAN, G. (2011): Yemen, Saudi Arabia and the Gulf states: Elite politics, street protests and regional diplomacy. p. 8.

¹² JUNEAU, T. (2016): Iran's policy towards the Houthis in Yemen: a limited return on a modest investment, p. 655.

¹³ AL-QADHI, M. H. (2017): The Iranian role in Yemen and its implications on the regional security, p. 38.

¹⁴ ANWER, M. – MOORTHY, R. (2019): Saudi-Iran Rivalry in The Middle East: Implication to National Security, p. 9.

¹⁵ TREVOR, J. et al. (2020): Could the Houthis Be the Next Hizballah Iranian Proxy Development in Yemen and the Future of the Houthi Movement, pp. 7-8.

of this insurgent group is one of the other export tools of the Iranian revolution, with which the country tries to undermine the dominant position of Saudi Arabia on the Arabian Peninsula. The key factor for creating working relations between Iran and the *Shiite* Houthi movement is precisely the mutual antipathy towards Saudi Arabia.¹⁶ Rhetorical support is, however, the first step to creating a permanent scheme of organized aid, whether at the financial or material-military level.

Since the beginning of the conflict, Saudi Arabia has stressed that Iran interferes in the national affairs of Yemen precisely by supporting rebel groups.¹⁷ Several claims by foreign intelligence agencies assume that Iran has long been supplying the Houthi movement with weapons, including missiles, drones and navigation systems used to target enemy positions. This cooperation is also enhanced by the fact that representatives of the Houthi movement maintain long-term relations not only with Iran itself, but also with representatives of Iranian satellite organizations in the region, such as the Lebanese Hezbollah movement, or the Iranian-supported organization *Asa'ib Ahl al Haq* operating in Iraq.¹⁸ In 2015, the United Nations imposed an embargo on the supply of weapons to the rebel Houthi movement.¹⁹ The UN Security Council, on the basis of resolution S/RES/2216 (2015), thus calls on all member states to desist from any activities providing an advantage to rebel groups operating in the territory of Yemen, including the supply of weapons, financial aid, the provision of military training or armed mercenaries.²⁰ From this point of view, Iran's support for anti-government forces has long been criticized by the international community. These assumptions are also confirmed by the findings of the UN panel dealing with the Iranian intervention in the Yemeni conflict. The UN report clearly points out that the weapons with which the Yemeni rebel forces attacked probably came from abroad. The panel also points to the fact that this technology resembles weapons produced by the Islamic Republic of Iran.²¹ In terms of military aid for the Houthi movement, another important ally of Iran in the Middle Eastern region - the Lebanese Hezbollah movement - also played a significant role. His task consisted in the military training of the insurgents, which was also to be carried out with the help of the Iranian Revolutionary Guards (IRGC).²² These military trainings were to take place both in Yemen and Iran itself, as well as on the territory of third countries, including Syria and Eritrea.²³ It is thus possible to see the sophistication of the export system of the Iranian revolution on the example of the interconnectedness and cooperation of individual components. The connection of the Iranian government to several non-state organizations in the region creates a prerequisite for a network of interconnected non-state entities that know how to respond promptly and to a greater or lesser extent influence the situation in other countries of the Middle East region.

The contradiction of opinion on Iran's involvement in the Yemeni armed conflict is intensified by the fact that Iran has long refused to admit its involvement in the Yemeni Civil War. In the positions of its representatives, a dismissive attitude to the accusations regarding the supply of weapons to the Yemeni rebels is visible.²⁴ The caution in the statements of Iranian officials, but also of representatives of the Houthi movement regarding Iran's involvement in the Yemeni conflict, is the result of the UN arms embargo and the risk associated with the

¹⁶ TREVOR, J. et al. (2020): Could the Houthis Be the Next Hezbollah Iranian Proxy Development in Yemen and the Future of the Houthi Movement, p. 70,

¹⁷ CARAPICO, S. (2017): Arabia Infelix, p. 361.

¹⁸ ZIMMERMAN, K. (2019): Taking the Lead Back in Yemen, p. 6.

¹⁹ MALETTA, G. (2021): Seeking a Responsible Arms Trade to Reduce Human Suffering in Yemen, p. 80.

²⁰ Security Council (2015): Resolution 2216 (2015), 14 April 2015, S/RES/2216.

²¹ Agence France-Presse. (2018): UN Panel Finds Further Evidence of Iran Link to Yemen Missiles.

²² LEVITT, M. (2021): Hezbollah's regional activities in support of Iran's proxy networks, pp. 13-14

²³ ZIMMERMAN, K. (2022): Yemen's Houthis and the Expansion of Iran's Axis of Resistance, p. 22.

²⁴ TAHRAT RAVANACHI, M. (2019): Permanent Representative of the Islamic Republic of Iran to the United Nations addressed to the Secretary-General and the President of the Security Council.

imposition of another series of sanctions on the Iranian regime by the international community. Despite long-standing denials of cooperation with Yemeni rebels, some military and religious officials in Iran admit to the possibility that their country is interfering in the situation in Yemen. An example are statements from 2017 by the then commander of the IRGC, *Maj. Gen. Mohammad Ali Jafari*, who admitted that Iran provided military aid to the Houthi movement at the request of the Yemeni rebels.²⁵ A prominent Iranian spiritual representative, cooperating with the supreme spiritual leader of Iran, expressed himself in a similar way. His claims show that the IRGC, in cooperation with the Iranian Navy, supplies the Yemeni rebels with weapons, including missiles.²⁶

Conclusion

The ideology of exporting Iran's Islamic revolution is manifested in the activities of Iran's foreign policy even in the conditions of the 21st century. An example is the ongoing conflict in Yemen, which reflects the strategic interests of the region's political and economic leaders, such as Saudi Arabia and Iran. Iran's support of non-state actors at the level of military or rebel groups in the Middle East region has a long tradition. By expanding their sphere of influence in countries such as Syria, Lebanon, Iraq or Yemen, Iranian political and military officials minimize the risk of endangering their own country at the expense of instability in neighbouring states. We can thus see behind the support of the Yemeni rebels not only the issue of belonging with the *Shiite* minorities, but also the creation of an unstable political environment in the country that shares common borders with Saudi Arabia. It can be concluded that even if Yemen itself is not of strategic importance for Iran, it represents an opportunity to continue to oppose Saudi Arabian activities in the region and thus weaken their regional dominance. At the same time, it follows from the results that Iranian activity in this region arouses serious concerns of the international community and strengthens the distrustful attitude towards the Iranian theocratic regime. The policy of exporting the Iranian revolution, combined with interference in the national affairs of the countries of the Middle East, thus undermines Iran's efforts to gain credibility not only from other Muslim countries, but especially from the important world geopolitical leaders.

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²⁵ Tasnim News Agency, (2017): Iran Providing Yemen with Advisory Assistance: IRGC Commander.

²⁶ MAJIDYAR, A. (2017): Iranian Cleric Admits I.R.G.C. Provides Weapons to Houthis in Yemen.

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ISLAMIC RELIGIOUS ORGANIZATIONS IN THE RUSSIAN FEDERATION

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Abstract: The purpose of this article is to briefly describe and analyze the Islamic religious organizations as representatives of the second most widespread religion in Russia in the legal, political and social context of the country. The method used in writing this article is a method of descriptive analysis using data from scientific papers, official documents and legal regulations. The article characterizes religious organizations in the country along with their rights and obligations and describes classification and selected specifics of the Islamic religious organizations.

Keywords: Islam, Russia, religious organization

JEL: Z12

Introduction

Today, Islam is the fastest growing religion in the world, with its representatives making up the majority of the population in nearly 50 countries. The modern Muslim community has nearly 2 billion believers, representing a quarter of the world's population. In 2050, this share is projected to increase to a third.¹ After Christianity, Islam is the second largest religion both in the world and in the Russian Federation. Today, the Russian Federation has the largest Muslim minority of any country in Europe. Russian Muslim officials predict that approximately 30% of the Russian population will practice Islam within the next 15 years. Demography will thus potentially place Islam on the trajectory of the majority religion of the Russian Federation by 2050.² The purpose of this article is to briefly describe and analyze the Islamic religious organizations as representatives of the second most widespread religion in Russia in the legal, political and social context of the country. The method used in writing this article is a method of descriptive analysis using data from scientific papers, official documents and legal regulations.

1 Islamic Religious Organizations in the Legal and Political Context

The constitution of the current Russian Federation states that Russia is a secular state and that no religion can be established as official or compulsory. At the same time, religious associations are separate from the state and are equal before the law.³ After significant changes in the constitution in 2020, the word "God" penetrates into its wording, among other things.⁴ Furthermore, the Constitution guarantees "freedom of conscience and religious belief, including the right to freely or collectively profess any religion or to profess no religion, and to freely

¹ PEW RESEARCH CENTER (2022): Religious Composition by Country, 2010-2050.

² THE MOSCOW TIMES (2019): Russia Will Be One-Third Muslim in 15 Years, Chief Mufti Predicts.

³ Konstitutsiya Rossiyskoy Federatsii (prinyata vsenarodnym golosovaniyem 12.12.1993 s izmeneniyami, odobrennymi v khode obshcherossiyskogo golosovaniya 01.07.2020), čl. 17.

⁴ Konstitutsiya Rossiyskoy Federatsii (prinyata vsenarodnym golosovaniyem 12.12.1993 s izmeneniyami, odobrennymi v khode obshcherossiyskogo golosovaniya 01.07.2020), čl. 67.

choose, possess and spread religious and other beliefs and to act in accordance with them."⁵ The Constitution of the Russian Federation also "prohibits all forms of restrictions of human rights on social, racial, national, linguistic or religious grounds."⁶ In 1997, the Federal Law On Freedom of Conscience and Religious Associations was adopted, which recognizes the special role of the Orthodox Church in the history of Russia, as well as in the formation and development of spirituality and culture in the country. The preamble of the law identifies "Christianity, Islam, Buddhism, Judaism and other religions as an integral part of the historical heritage of the Russian people."⁷ This characteristic is the basis for the division of religions in the country, and thus also their religious organizations, into "traditional" and other ("non-traditional"). In addition, current Russian authorities and political leaders repeatedly confirm that Islam is part of Russian society.

The so-called "division" of Islam took place at the end of the last century by Russian politicians, the academic community and the media sphere. 'Traditional', 'official', 'moderate' or 'domestic' Islam was set against 'non-traditional', 'unofficial', 'radical' and 'foreign'. Although this division of Islam is largely fictitious, it was during this period that their confrontation was typical. The Russian authorities considered the new Islamic trends to be hostile, and they were also presented as the ideological basis for extremism and terrorism. It should be noted that this was primarily a political view of the events in the Muslim regions of the Russian Federation at the end of the 20th century. After the collapse of the USSR, Muslim regions experienced trends that can be described as the politicization and radicalization of Islam, or rather as the expansion of its non-traditional interpretations, which are often referred to as Wahhabism, Salafism, fundamentalism, or Islamism. However, efforts to make any generalization face methodological problems. These represent ambiguity in terms and controversies in definitions.

The religious renaissance in the Russian Federation was accompanied by the liberalization of religious legislation, which, in conjunction with transnational trends, led to deterritorialization and deconfessionalization; that is, the weakening of the link between territory and confessional affiliation. This creates the problem of traditional and non-traditional religious ideas and movements in a certain territory. So religions that claim this territory as their own, begin to see transnational influences as a threat to their survival and privileged status. This increases the demand for stricter religious legislation and tighter border security against non-traditional religious trends. Traditional religious organizations are beginning to protect their own canonical territories - spiritual sovereignty. However, they can only do this with the assistance of secular authorities. The state is also concerned about globalization processes, which, among other things, undermine state sovereignty. Moreover, the growing social role of religion makes control over this sphere a key part of state policy. This process is called the securitization of religion, which means turning it into an aspect of national security. As a result, the state comes halfway to meeting the needs of traditional religious organizations by tightening legislation on non-traditional faiths and limiting outside religious influences. Basically, it means partial reterritorialization and reconfessionalization of the religious sphere. The state, in turn, receives support from the religions it sponsors, while these religions use their symbolic capital to sacralize the incumbent system of government. The mix of reterritorialization and securitization of religion creates the well-known reality of the struggle for traditional moral values, spiritual security, and the preservation of cultural identity.⁸

⁵ Konstitutsiya Rossiyskoy Federatsii (prinyata vsenarodnym golosovaniyem 12.12.1993 s izmeneniyami, odobrennymi v khode obshcherossiyskogo golosovaniya 01.07.2020), čl. 28.

⁶ Konstitutsiya Rossiyskoy Federatsii (prinyata vsenarodnym golosovaniyem 12.12.1993 s izmeneniyami, odobrennymi v khode obshcherossiyskogo golosovaniya 01.07.2020), čl. 19.

⁷ Federal'nyy zakon "O svobode sovesti i o religioznykh ob"yedineniyakh" ot 26.09.1997 N 125-FZ (red. ot 29.12.2022), Preambula.

⁸ UZLANER, D. (2021): Religion and Politics: An Unbreakable Symbiosis?

According to the theory of the economy of religion, the state tries to support only those confessions whose cooperation it considers most advantageous, i.e. it follows the principle of confessional pragmatism that guided the authorities of the Russian Empire and then the USSR. Regardless of the political regime and form of government, the state tries to control the religious market to some extent and give some religions more protection than others. Russia is no exception.⁹ The state actively participates in the regulation of the religious market in modern Russia and otherwise actively intervenes in religious matters. The regulatory framework is far from an ideal state in which no market participants are discriminated against and have equal opportunities. On the contrary, *de jure* and *de facto* it ensures discrimination of some religious organizations and privileged status for others. The concept of "traditional religions" allows organizations with a long history of existence in Russia to enjoy certain privileges and a wider range of rights than "non-traditional religions".¹⁰

In the context of the Islamic religion, the government's goal is to promote religious teachings that serve state interests, but discourage Muslims from foreign influences that might pose a threat to the state through separatism, radicalism, or terrorism. Russian authorities (national and regional) as well as the Islamic religious organizations argue that the various restrictions on Islam and its expression are fundamentally justified by concerns about national security. The co-opting of mosques and religious knowledge is indeed justified as a necessary measure to enable the development and preservation of a peaceful and prosperous society. Meanwhile, Muslims who deviate from the religious framework and requirements approved by Islamic religious organizations are portrayed as a threat to the overall security and development of society. For this reason, Islam in Russia is becoming more and more securitized. "Extremists" include not only terrorists or separatists, but also political opposition and others whose religious views differ theologically from existing Islamic religious organizations.¹¹

A religious association in the Russian Federation is "a voluntary association of citizens of the Russian Federation, other persons with permanent and legal residence in the territory of the Russian Federation, which was created for the purpose of common confession and spreading of faith and has the following characteristics corresponding to this purpose: the presence of a religion; performing religious services and other religious ceremonies; teaching religion and the religious education of its followers."¹² Religious associations can exist in two forms: in the form of a religious group and in the form of a religious organization. The main difference between organizations and groups is the legal capacity of a religious organization. Religious groups act as associations of individuals, that is, they do not have common property and cannot act as collective plaintiffs and defendants. Believers who are members of religious organizations and religious groups have the same rights. According to the Law on Freedom of Conscience and Religious Associations, a religious organization in the Russian Federation is "a voluntary association of citizens of the Russian Federation, other persons with permanent and legal residence in the territory of the Russian Federation, created for the purpose of common confession and spreading of faith and registered as a legal entity in accordance with the procedure established by law."¹³ The name of the religious organization itself must contain information about its religion. All religious organizations in Russia, including Islamic ones, are further divided into two types: centralized and local. "A local religious organization is a religious organization composed of at least ten members who have reached the age of eighteen

⁹ BEKKIN, R. (2020): People of Reliable Loyalty?: Muftiates and the State in Modern Russia, p. 242.

¹⁰ BEKKIN, R. (2020): People of Reliable Loyalty?: Muftiates and the State in Modern Russia, p. 65.

¹¹ FRADKIN, R. (2020): The Co-optation of Islam in Russia.

¹² Federal'nyy zakon "O svobode sovesti i o religioznykh ob'yedineniyakh" ot 26.09.1997 N 125-FZ (red. ot 29.12.2022), čl. 6.

¹³ Federal'nyy zakon "O svobode sovesti i o religioznykh ob'yedineniyakh" ot 26.09.1997 N 125-FZ (red. ot 29.12.2022), čl. 8.

and have permanent residence in the same locality or in the same urban or rural residence. A centralized religious organization is a religious organization that, in accordance with its statutes, consists of at least three local religious organizations."¹⁴ Religious organizations, however, have other opportunities, on the one hand resulting from the very status of a legal entity, on the other hand specially enshrined in the law. The law establishes exclusive rights for a religious organization: to establish organizations that publish liturgical literature and produce religious objects; carry out pilgrimage activities directly or by creating organizations whose main purpose is to carry out pilgrimage activities; to create spiritual educational organizations for the training of ministers and religious workers of religious organizations (in the latest version of the law, only centralized religious organizations have this right); invite foreign citizens to carry out professional religious activities, including missionary activities, on the basis of a labor or civil law contract with these organizations. Religious organizations, unlike religious groups, go through a registration procedure. The law stipulates that religious organizations have the right to carry out charitable activities, either directly or through the establishment of charitable organizations, and they also have the right to create cultural and educational organizations, educational and other organizations, as well as to establish mass media to achieve their statutory goals and objectives. At the same time, the state provides assistance and support to the charitable activities of religious organizations, as well as to the implementation of their socially significant cultural and educational programs and events. Religious organizations have the right to establish and maintain international relations and contacts, including for the purpose of pilgrimages, participation in meetings and other events, obtaining religious education, and also to invite foreigners for these purposes.¹⁵

The law also defines the term foreign religious organization. It is an organization established outside the Russian Federation in accordance with the legal regulations of a foreign state, while such organizations may be granted the right to open a representative office on the territory of the Russian Federation. However, the representative office of a foreign religious organization may not engage in religious activities, may not carry out missionary activities on its behalf, and is not subject to the status of a religious association established by federal law. Foreigners or stateless persons may carry out missionary activity only in the name of a specific religious organization, based on the invitation of which they entered the territory of the Russian Federation, and may carry out missionary activity only in the region in which this organization is registered.¹⁶

Limiting foreign influence in religious matters has become an important issue for the Russian Federation and regional elites in order to reduce the autonomy of the Islamic religious organizations. The 2015 amendment to the Law "On Freedom of Conscience and Religious Associations" requires all religious organizations to declare any sources of foreign funding to the Ministry of Justice, to make these reports publicly available and to describe the activities of the religious organizations, identify their leaders and explain how they will be used given foreign funding. The amendment also granted the Ministry of Justice and the General Prosecutor's Office the right to control the financial and business activities of religious organizations in case of any suspicion that they have come under the influence of extremism.¹⁷ These measures actually discouraged the Islamic religious organizations from accepting foreign financial support. In 2016, a set of legislative changes was adopted, the so-called The Jarovoj

¹⁴ Federal'nyy zakon "O svobode sovesti i o religioznykh ob'yedineniyakh" ot 26.09.1997 N 125-FZ (red. ot 29.12.2022), čl. 8.

¹⁵ Federal'nyy zakon "O svobode sovesti i o religioznykh ob'yedineniyakh" ot 26.09.1997 N 125-FZ (red. ot 29.12.2022), čl. 16-20.

¹⁶ Federal'nyy zakon "O svobode sovesti i o religioznykh ob'yedineniyakh" ot 26.09.1997 N 125-FZ (red. ot 29.12.2022), čl. 13.

¹⁷ SIBIREVA, O. (2016): Freedom of Conscience in Russia: Restrictions and Challenges in 2015.

Act, which imposed further restrictions on missionary activities.¹⁸ This stage is characterized by the strengthening of state control over religious associations and the further restriction of the freedoms of the so-called "non-traditional" religions and communities that are not controlled by registered religious associations. Tightening control over the religious sphere became a natural step in increasing authority over civil institutions in general. Overall, national religious legislation has benefited the regimes of the Muslim republics by helping each of them consolidate religious power through their respective Muslim spiritual associations. It has done so by making it more difficult for independent mosques and religious organizations to register, while increasing the influence of republican regimes over religious organizations by limiting support from foreign sources.¹⁹

2 Classification and selected aspects of Islamic Religious Organizations

The voice of Russian Muslims is mainly represented by the so-called *ulama*²⁰ comprising muftiates. A muftiate as a religious organization can be characterized as a collegial body acting as the official representative of Muslims in their relations with other faiths and the state and performing certain administrative functions (eg managing Muslim communities under their jurisdiction).²¹ A characteristic feature of the post-Soviet period was the administrative and institutional fragmentation of Muslim institutions. The collapse of the Soviet Union not only severed the ties between these authorities but also led to further splitting and mutual disputes within them. Today's successor of the Orenburg Mohammedan Spiritual Assembly is the Central Muslim Spiritual Board of Russia (*Tsentr'al'noye dukhovnoye upravleniye musul'man Rossii*). Since 1992, it has been going through a period of disintegration, as a result of which a group of muftiats independent of Ufa was formed. In 1996, some of the regional muftiats who broke away from the the Central Muslim Spiritual Board of Russia founded the Russia Mufties Council (*Sovet Muftiyev Rossii*) based in Moscow. The decentralization of the Muslim religious establishment in Russia, also reflecting the ethnic, cultural and geographical diversity of Russian Muslims, was partly a logical outcome of its wider democratization but also the growing rivalry of Muslim religious leaders for spiritual and political influence. In 1998, another federal muftiate, the Coordination Center of Muslims of the North Caucasus (*Koordinatsionnij Tsentr Musul'man Severnogo Kavkaza*), was established, covering Muslim communities in the North Caucasus. Since then, there has been a tripolar system of federal muftiats in Russia: under the jurisdiction of the the Central Muslim Spiritual Board of Russia and Russia Mufties Council were the Muslim communities in the European part of Russia and Siberia, while the communities in the republics of the North Caucasus belonged to the the Coordination Center of Muslims of the North Caucasus.²²

The situation changed again in 2009. In a short time, a new muftiate was created and registered, which claimed the all-Russian level - the Russian Association of Islamic Consensus (*Rossiyskaya assotsiatsiya islamskogo soglasiya*). However, the muftiate ended its activity by 2013. In 2016, a muftiate appeared according to a similar scenario - the Spiritual Assembly of Muslims of Russia (*Dukhovnoe Sobranie Musul'man Rossii*). Such muftiats act as another force to which the spiritual administrations that, for various reasons, emanate from the jurisdiction of the Central Muslim Spiritual Board of Russia, Russia Mufties Council or the Coordination Center of Muslims of the North Caucasus are leaning. Regardless of what the real intention was behind the creation of the "parallel" muftiats, it cannot be ruled out that at some point in the future they may gain the necessary legitimacy and authority and become one of the federal

¹⁸ SIBIREVA, O. (2017): Freedom of Conscience in Russia: Restrictions and Challenges in 2016.

¹⁹ FRADKIN, R. (2020): The Co-optation of Islam in Russia.

²⁰ Ulama is the collective name for interpreters of Islamic religious wisdom and laws.

²¹ BEKKIN, R. (2020): People of Reliable Loyalty?: Muftiates and the State in Modern Russia, p. 19.

²² HUNTER, S. (2004): Islam In Russia: The Politics Of Identity And Security, pp. 102-103.

muftiates.²³ The Coordination Center of Muslims of the North Caucasus itself lost its federal influence after the departure of the Spiritual Administration of Muslims of the Chechen Republic in 2012 and the the Spiritual Administration of Muslims of the Republic of Dagestan in 2017.²⁴

Based on the classification of R. Bekkin²⁵ it is currently possible to identify several types of Islamic religious organizations in Russia federation. (1) Federal muftiates - these are so-called umbrella muftiates that control communities in different regions of the country and have been operating since the 1990s. This category includes the Central Muslim Spiritual Board of Russia and the Russia Mufties Council. (2) Regional muftiates - this group includes, on the one hand, independent muftiates that control communities located within one territorial unit of the Russian Federation and which are not part of any federal spiritual administration (Spiritual Administration of Muslims of the Republic of Tatarstan, Spiritual Administration of Muslims of the Republic of Dagestan and Spiritual Administration of Muslims of the Chechen Republic) and, on the other hand, individual muftiates within the structure of federal muftiates. (3) Parallel muftiates - spiritual administrations that were created as an alternative to federal muftiates. Two muftiat can be included in this category - the Russian Association of Islamic Consensus, which existed from 2010 to 2013, and the Spiritual Assembly of Muslims of Russia, which was created in 2016.

Studying the current affairs of the Islamic religious organizations involves certain difficulties. Tensions persist between organizations on various issues and at various levels related to the struggle for influence. Data on the number of communities within the structure of federal (as well as regional) muftiates are contradictory and subject to speculation. Moreover, in one region, different organizations under the jurisdiction of different muftiat may exist side by side. There are also differences in the approach to the Russian Orthodox Church among the competing Islamic religious organizations. At the same time, the idea of merging federal muftias was also discussed several times, but none of the initiatives were implemented.

The efforts of Russian Muslims to reclaim their share in shaping Russian civilization are not limited to scholarly debate. On the contrary, the country's Islamic institutions are very active in many areas. The arguments of many Islamic leaders and the activities of their institutions are becoming increasingly visible in post-Soviet Russia, even outside Muslim circles. In addition, the central government is also trying to (re)define what should be the proper place of religion in post-Soviet Russian society. The traditional balance of power between the Orthodox Church and Islamic organizations, in which the former undoubtedly prevailed over the latter in the past, is changing. The reasons are different. In a country experiencing overall population decline, Russia's Muslim communities continue to grow due to high birth rates and significant immigration from former Soviet republics. Russian leaders and politicians repeatedly emphasize the importance of Islam as an integral part of the political structure of statehood, both historically and in the present. President V. Putin can also be placed in line with other increasingly autocratic leaders who resort to a conservative, traditionalist and religious agenda to legitimize their anti-liberal, anti-Western regimes. In this situation, we must be attentive to the Islamic religious organizations, which can have a special contribution in this agenda. Moreover, the political struggle within the Russian *umma* for the influence and loyalty of the federal center, thus enabling political leaders to control and exploit them, may further suit them in this scenario.

²³ BEKKIN, R. (2019): "Parallel" Muftiates as the "Third Force" among Spiritual Administrations of Muslims in Russia, pp. 265-285.

²⁴ BEKKIN, R. (2020): People of Reliable Loyalty?: Muftiates and the State in Modern Russia, p. 247.

²⁵ BEKKIN, R. (2019): "Parallel" Muftiates as the "Third Force" among Spiritual Administrations of Muslims in Russia, pp. 265-285.

Conclusion

The purpose of this article was to briefly describe and analyze Islamic religious organizations in Russia in the legal, political and social context of the country. The article characterizes the position of religion through the Constitution of the Russian Federation and other federal laws, points out the division into traditional and non-traditional religions in the country and their possibilities and limits in this regard. In this context, we point to the principle of confessional pragmatism of the Russian Federation and the participation of political leadership in the regulation of the religious market. The article further defines religious associations, religious groups and religious organizations, including foreign ones, along with their rights and obligations based on the federal laws. Finally, we describe the Islamic religious organizations themselves. We roughly characterize the post-Soviet period of the formation of both original and emerging Islamic religious organizations, classifying them into federal, regional and local, and draw attention to selected specifics of the study of these organizations today.

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INDIA'S FOREIGN TRADE IN THE 21ST CENTURY

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Abstract: India has made significant economic progress in terms of GDP during the second half of the 20th century and especially in the early 21st century. By 2035, India will be growing faster than the six largest countries in the European Union. Currently, India is the sixth largest economy by nominal GDP. The objective of this paper is to highlight the changes in India's foreign trade in the 21st century, particularly in its territorial and commodity structure as well as to identify India's comparative advantages. In this paper, we employ the method of analysis and synthesis as well as the method of comparison in comparing the changes in the dynamics of India's foreign trade in the early 21st century and in the pre-pandemic year 2019.

Keywords: India, comparative advantages, foreign trade

JEL: F10

Introduction

India has made significant economic progress in terms of GDP during the second half of the 20th century and especially in the early 21st century. While in 1960 it ranked 13th with USD 136.13 bill. in terms of total GDP¹, in 2019 (the pre-pandemic year) it was already ranked 6th with a total GDP of USD 2.5 trill. Over the course of the 21st century, India witnessed significant GDP gains, which was reflected by the size of the total GDP, which India managed to double from the level of USD 1.014 trill. in 2004 to USD 2.1 trill. in 2015. At present, India's share of the world's total GDP stands at 3.2%. In terms of economic growth, the Indian economy has achieved higher average annual GDP growth than the world GDP growth over the last few decades (from 1960 to 2019). While the world GDP grew at an average of 3.5% over the period, India's GDP growth was as high as 5.2%. If we consider developments in the 21st century, from 2000 to 2019, India's average annual growth rate was even higher at 6.5%, while the average annual growth rate of world GDP was 3.1%.

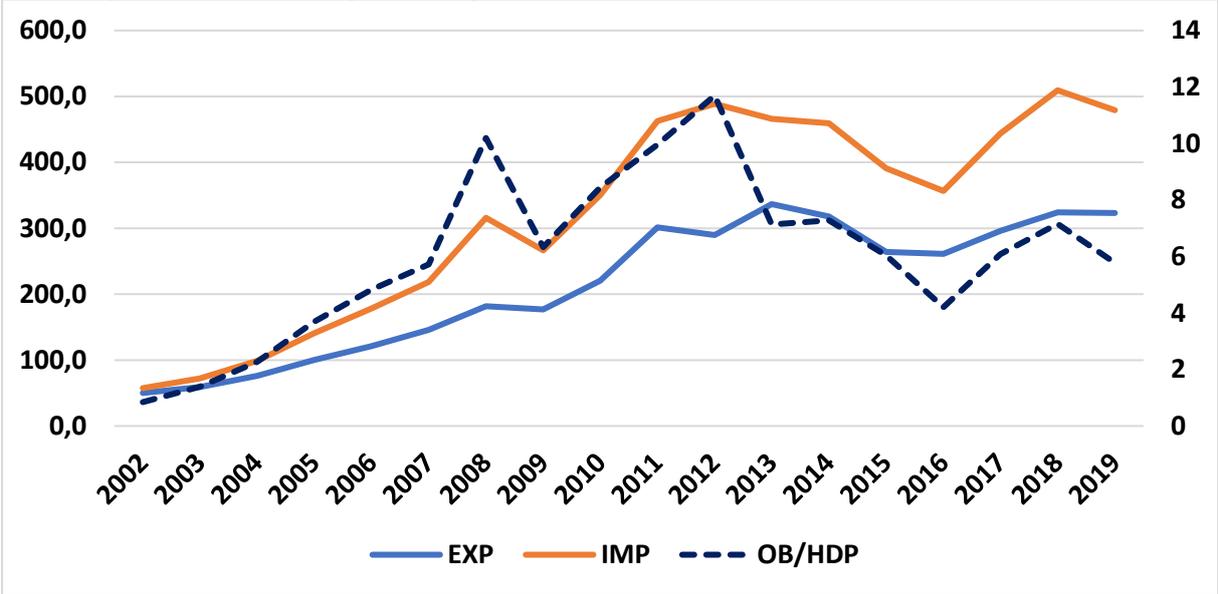
With India's involvement in international trade, we can observe that despite the improvement in basic macroeconomic indicators (GDP and GDP per capita), and India's position in the world, India's share in world trade is not that significant. According to available data (TRADEMAP, 2023), India ranked as high as 18th in total merchandise exports in 2019, with a share of 1.73% in total world exports and a value of USD 323.25 bill. However, we must point out that India's share in total world exports has increased over the course of the 21st century from 0.78% in 2002 when India ranked 30th with an export value of USD 50.1 bill. However, the situation is different for imports of goods into India. In 2019, with a share of 2.51% in total world imports, India closed the top ten countries with the highest imports with an import value of USD 478.9 bill. In 2002, it was as high as 23rd with an import value of USD 57.45 bill and a share in total world imports 0.87%.

Figure 1. shows the evolution of India's exports and imports in the 21st century up to the pre-pandemic year 2019 as well as the evolution of the trade balance as a share of GDP, which has been negative throughout the period under review. However, while the trade balance

¹ Data in this section are from WDI (2023) unless otherwise stated.

was relatively low (up to 5%) at the beginning of the 21st century until 2007, due to the evolution of India’s total exports and imports, it reached 10.2% in 2008 with a peak in 2012 at 11.7%. During the second decade of the 21st century, it declined again to the current 5.8%. The evolution of exports and imports during the 21st century is also interesting. The figure clearly shows the same evolution of both indicators, as evidenced by the high correlation between exports and imports at 0.986.

Figure 1: India’s exports, imports and trade balance, 2002-2019, USD bill., %



Note: Trade balance – right axis, %.
 Source: author, TRADEMAP (2023), WDI (2023).

At present, the primary objective of India’s foreign trade policy is mainly to promote trade by reducing transaction costs and time. The current foreign trade policy therefore aims at consolidating several export promotion programs into two programs: 1. Export of Goods from India Scheme and 2. Export of Services from India Scheme. One of the schemes under the current foreign trade policy is the Capital Goods Export Promotion Scheme aimed at promoting the import of capital goods for the production of high-quality goods and services with a view to enhancing the competitiveness of Indian manufacturers. In addition, it also aims at increasing India’s share in existing markets and products as well as exploring new products and new markets. India also plans to focus on promoting exports of high value-added goods for which India has a strong domestic manufacturing base such as engineering products, electronics, pharmaceuticals, textiles and agriculture.

In 2018, the Ministry of Commerce and Industry unveiled a strategy to double India’s exports by 2025. This plan included developing a specific commodity strategy for key sectors such as gems and jewelry, leather, textiles and apparel, engineering, electronics, chemicals and petrochemicals, pharmaceuticals, agriculture and marine products. In addition to the commodity strategy, a territorial strategy is also part of the plan, with India’s priority to be given to the regions of North America, Europe, ASEAN, Latin America, Africa, Australia and the CIS.

Gupta (2019) analyses the main changes in the volume and in the territorial and commodity structure of India’s foreign trade, pointing out that India’s trade policy in recent years has focused on favoring consumers rather than supporting producers. Ramathan and Paul (2015) analyze the trade performance of India’s industrial sector to assess the importance of this sector for India’s foreign trade. Pathania (2013) traces the correlation between India’s

export structure and economic growth during the first decade of the 21st century. He points out that exports from various sectors of the Indian economy have a positive and statistically significant impact on India's economic growth, with exports of finished goods being particularly important. Gajakosh (2012) directly discusses the textile industry in India and the impact of India's foreign trade policy on its performance during 2009-2014, as this sector contributes significantly to India's total industrial output, total exports as well as total employment. Pillania (2008) states that in the early 21st century, India's foreign trade was on a growth trajectory with a dominant share of finished goods and services in India's total exports which implies further growth potential of India's foreign trade in the future. Page (2015) highlights the key drivers of India's foreign trade policy, which are the focus on promoting exports of finished goods, services and providing incentives for special economic zones. Galistcheva (2017) analyses India's position in the global economy and its involvement in international trade and global supply chains. She examines the structure of India's exports and imports noting India's growing importance in intermediate goods trade.

The aim of this paper is to highlight the changes in the evolution of India's foreign trade in the 21st century, particularly in its territorial and commodity structure as well as to identify India's comparative advantages. In this paper, we use the method of analysis and synthesis as well as the method of comparison to compare the changes in India's foreign trade dynamics in the early 21st century and in the pre-pandemic year 2019. We have used the WDI (2023) and TRADEMAP (2023) databases to find the underlying data.

1 Territorial and commodity structure of foreign trade

The following tables represent India's major trading partners in exports and imports. Table 1 represents India's top ten export partners in the 21st century. From Tables 1 and 2, it is clear that India mainly trades with the strongest economies of the world today, which are the US and China. However, during the first two decades of the 21st century, there have been some changes in the territorial structure of India's foreign trade. While in exports, the US was India's most important trading partner both at the beginning of the 21st century and towards the end of the second decade of the 21st century (with a share of 19.15% in 2001 and 16.79% in 2019, with the exception of 2009-2011 when the UAE was the most important trading partner in India's exports, which was probably due to the global crisis and the decline in US demand), there has been a fairly significant change in other trading partners. At the beginning of the 21st century, China, despite being adjacent to India, was not one of India's major partners, accounting for 2.1% of India's total exports. However, during the first two decades of the 21st century, it has grown in importance and is now India's third most important export partner with a share of 5.35%.

Table 1: India's main export trading partners

2001				2019			
Rank	Country	USD bill.	Share %	Rank	Country	USD bill.	Share %
–	<i>World</i>	43.88	100	–	<i>World</i>	323.25	100
1	USA	8.40	19.15	1	USA	54.29	16.79
2	UAE	2.57	5.86	2	UAE	29.54	9.14
3	Hong Kong	2.42	5.51	3	China	17.28	5.35
4	United Kingdom	2.20	5.01	4	Hong Kong	11.48	3.55
5	Germany	1.78	4.07	5	Singapore	10.74	3.32
6	Japan	1.55	3.54	6	Netherlands	8.91	2.76
7	Belgium	1.40	3.19	7	United Kingdom	8.80	2.72
8	Italy	1.27	2.89	8	Germany	8.57	2.65
9	Bangladesh	1.06	2.42	9	Bangladesh	8.24	2.55
10	France	0.99	2.25	10	Nepal	7.11	2.20
	Total share:		53.88		Total share:		51.03

Source: author, TRADEMAP (2023).

Table 2: India's main import trading partners

2001				2019			
Rank	Country	USD bill.	Share %	Rank	Country	USD bill.	Share %
–	<i>World</i>	50.67		–	<i>World</i>	478.88	
1	Switzerland	3.42	6.75	1	China	68.40	14.28
2	USA	3.23	6.37	2	USA	34.92	7.29
3	United Kingdom	2.76	5.44	3	UAE	30.31	6.33
4	Belgium	2.49	4.91	4	Saudi Arabia	27.00	5.64
5	Germany	1.91	3.76	5	Iraq	22.09	4.61
6	China	1.83	3.61	6	Switzerland	17.72	3.70
7	Japan	1.79	3.53	7	Hong Kong	17.39	3.63
8	South Africa	1.40	2.77	8	South Korea	16.11	3.36
9	Singapore	1.35	2.67	9	Indonesia	15.56	3.25
10	Australia	1.24	2.45	10	Singapore	14.89	3.11
	Total share:		42.27		Total share:		55.21

Source: author, TRADEMAP (2023).

Looking at the territorial structure of India's foreign trade towards the end of the second decade of the 21st century, it can be concluded that it is consistent with the theory of the gravity model, where India trades predominantly with major world economies like the US and China, but also with economies that are located in its proximity.

In terms of the commodity structure of exports, the Indian government categorized export products in the early 21st century into 4 main groups: 1. goods with stable growth rates (marine products, spices, rice, pulses, sesame, sugar and molasses, electronics, equipment, chemicals and transport equipment), 2. goods with high growth rates and valuable goods (jewelry and precious stones, metal processing, medicines, chemicals and textiles), 3. new goods with high growth rates (musk, fruits and fruit juices, meat and meat products), 4. goods

with fast growth rates, less valuable (inorganic chemicals, handicrafts including hand-woven carpets).

Table 3: Main export commodities of India

2001				2019			
Rank	Commodity	USD bill.	Share %	Rank	Commodity	USD bill.	Share %
–	<i>All products</i>	43.88	100	–	<i>All products</i>	323.25	100
1	Diamonds	5.64	12.84	1	Petroleum oils	42.56	13.17
2	Petroleum oils	2.06	4.70	2	Diamonds	21.85	6.76
3	Articles of jewelry and parts thereof	1.11	2.53	3	Medicaments consisting of mixed or unmixed products for therapeutic or prophylactic uses	14.64	4.53
4	Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts	0.99	2.25	4	Articles of jewelry and parts thereof	13.56	4.19
5	Crustaceans	0.84	1.92	5	Motor cars and other motor vehicles principally designed for the transport of persons	7.00	2.17
6	Cotton yarn other than sewing thread	0.79	1.80	6	Rice	6.80	2.10
7	Medicaments consisting of mixed or unmixed products for therapeutic or prophylactic uses	0.76	1.74	7	Parts and accessories for tractors, motor vehicles for the transport of ten or more persons	5.02	1.55
8	Men's or boys' shirts	0.68	1.56	8	Crustaceans	4.68	1.45
9	Women's or girls' blouses, shirts and shirt-blouses	0.64	1.45	9	Telephone sets	4.29	1.33
10	Rice	0.61	1.39	10	Light-vessels, fire-floats, dredgers, floating cranes	4.13	1.28
	Total share:		32.18		Total share:		38.52

Source: author, TRADEMAP (2023).

Table 4: Main import commodities of India

2001				2019			
Rank	Commodity	USD bill.	Share %	Rank	Commodity	USD bill.	Share %
–	<i>All products</i>	50.67	100	–	<i>All products</i>	478.88	100
1	Petroleum oils raw	12.87	25.39	1	Petroleum oils raw	101.95	21.29
2	Gold	4.79	9.46	2	Gold	31.18	6.51
3	Diamonds	4.17	8.23	3	Coal	22.60	4.72
4	Petroleum oils refined	1.08	2.14	4	Diamonds	22.07	4.61
5	Coal	0.95	1.88	5	Petroleum gas	17.25	3.60
6	Palm oil	0.78	1.55	6	Telephone sets	13.52	2.82
7	Parts and accessories for office use	0.68	1.35	7	Electronic integrated circuits	10.17	2.12
8	Phosphoric acid	0.64	1.26	8	Automatic data-processing machines	6.77	1.41
9	Automatic data-processing machines	0.62	1.22	9	Petroleum oils refined	6.68	1.40
10	Dried leguminous vegetables	0.56	1.10	10	Palm oil	5.41	1.13
	Total share:		53.56		Total share:		49.62

Source: author, TRADEMAP (2023).

Looking at Table 3, it can be observed that the commodity structure of Indian exports largely reflects the above categorization, especially products from the first and second categories. During the first two decades of the 21st century, India's most important export commodities included diamonds and petroleum oils and oils derived from bituminous minerals as well as jewelry and parts and components thereof made of precious metals or of metals clad with precious metals. In addition, however, during the 21st century, there has been a significant shift in the commodity composition of India's exports from low value-added products (textiles) towards higher value-added products (motor vehicles, ships, telephone sets). Rice and crustaceans are also important export commodities. In terms of the share of the top ten export commodities in India's total exports, we can observe a fairly diversified structure of India's exports, as this share is only 38.52% in 2019.

For Indian imports, there have been no significant changes during the first two decades of the 21st century (Table 4). Thus, the Indian economy imports mostly commodities from groups such as mineral oils, precious metals, electronic equipment. On the other hand, however, we can see a lower diversification of imports, with the top ten commodities imported into India accounting for nearly 50% of India's total imports in 2019 (53.56% in 2001), a much higher share than that of India's exports.

2 Comparative advantages of the Indian economy

In this section, we identify the commodity groups in whose exports India has seen comparative advantages. The analysis is based on commodity groups at the fourth level of the Harmonized System of Tariff Classification (HS4). India's foreign trade data used to calculate comparative advantages are from the Trademap database (TRADEMAP, 2023). Consistent with the existing empirical literature, we apply the Lafay Index (LI) of international specialization to calculate comparative advantage. Using LI, Zaghini (2003) investigated the evolution of comparative advantages in foreign trade of ten candidate countries that joined the EU in 2004. LI is a useful indicator of the specialization of a given economy because it considers not only exports but also imports. In line with Zaghini (2003), the Lafay index of international specialization for country i and commodity j can be calculated according to the following equation:

$$LFI_j^i = 100 \left(\frac{x_j^i - m_j^i}{x_j^i + m_j^i} - \frac{\sum_{j=1}^N (x_j^i - m_j^i)}{\sum_{j=1}^N (x_j^i + m_j^i)} \right) \frac{x_j^i + m_j^i}{\sum_{j=1}^N (x_j^i + m_j^i)}$$

where x_j^i is the export of commodity j from country i to the rest of the world, m_j^i is the import of commodity j into country i from abroad, and N refers to the total number of commodities traded. Positive values of LI represent the existence of a comparative advantage of a given country for a given commodity, with a higher value of LI indicating a higher degree of specialization of the country. On the other hand, negative LI values indicate that a country does not specialize in a given commodity and does not have a comparative advantage in exporting it. Positive LI values were recorded for 630 commodity groups at the fourth level of the Harmonized System of Tariff Classification for 2019. For 561 commodity groups, LI values ranged from 0-0.08, representing a very low level of comparative advantage for the commodity classes. For 69 commodity groups at the fourth level of the Harmonized System of Tariff Classification, the LI values exceed the level of 0.08. Within the list of these commodities, we identify a wide range of commodities belonging to different tariff classes. In the category of commodities with the greatest export potential, we have included commodity groups of goods with LI exceeding 0.3 on the basis of the LI calculation performed. This is a total of 19 commodity groups at the fourth level of the Harmonized System of Tariff Classification. Of these, only 9 commodity groups are not among the most exported items in India's foreign trade at present. Table 5 shows the LI values for all 19 commodity groups. The highest LI values are for items that are among the most exported items in India's foreign trade, except for light vessels and tractor parts, where LI values are above 0.3, but below the values of some other items such as textiles, agricultural supplies and beef. In addition, one of the most exported items is telephone sets, including telephones for mobile networks or for other wireless networks, while the LI value for this item is negative at -0.72, implying that this item does not represent a comparative advantage for Indian exports. On the contrary, textile items, beef, unwrought aluminum and chemicals have relatively high values, but are not a substantial part of India's exports, despite the fact that the Indian economy has a comparative advantage for these items. These items individually accounted for less than 1% of India's total exports in 2019.

Table 5: LI for selected items

<i>Item</i>	<i>LI</i>
<i>Petroleum oils and oils obtained from bituminous minerals (excluding crude)</i>	5.663678805
<i>Medicaments consisting of mixed or unmixed products for therapeutic or prophylactic uses</i>	2.049673879
<i>Articles of jewelry and parts thereof, of precious metal or of metal clad with precious metal</i>	1.956253039
<i>Diamonds, whether or not worked, but not mounted or set</i>	1.034896532
<i>Motor cars and other motor vehicles principally designed for the transport of persons</i>	1.020165068
<i>Rice</i>	1.011190229
<i>Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine</i>	0.692619971
<i>Unwrought aluminum</i>	0.506658345
<i>Meat of bovine animals, frozen</i>	0.455885
<i>Cotton yarn other than sewing thread, containing \geq 85% cotton by weight</i>	0.423372749
<i>T-shirts, singlets and other vests, knitted or crocheted</i>	0.380577816
<i>Insecticides, rodenticides, fungicides, herbicides, anti-sprouting products</i>	0.378816109
<i>Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers</i>	0.376242743
<i>Synthetic organic coloring matter, whether or not chemically defined</i>	0.369602677
<i>Light-vessels, fire-floats, dredgers, floating cranes</i>	0.35739204
<i>Iron ores and concentrates, incl. roasted iron pyrites</i>	0.331981639
<i>Parts and accessories for tractors, motor vehicles for the transport of ten or more persons</i>	0.326538439
<i>Cyclic hydrocarbons</i>	0.318801631
<i>Motorcycles, incl. mopeds, and cycles fitted with an auxiliary motor, with or without side-car</i>	0.307252896

Note: Items in bold from the top 10 most exported items in 2019.

Source: author, TRADEMAP (2023).

Discussion and conclusion

Several economic experts as well as various studies being conducted globally consider India and China as the countries that will dominate the 21st century. For more than a century, the world economy has been dominated by the United States of America, but the changes that have taken place in recent years have caused a shift of attention from the US and other rich countries of Europe to these two Asian giants – India and China.

In the last decades of the last century, the ASEAN countries, particularly South Korea in the 1980s, along with China and India, contributed significantly to increasing Asia's share of world GDP. According to PWC (2017), by 2050, there will be a decline in the share of the US and the EU in world GDP and a rise in the share of India and other BRICS economies in world GDP. This will make India one of the most important economic blocs after China and the US. The transformation to the three major blocs is expected to be complete by 2035, when the Indian economy will almost reach the level of the US economy, being at a higher level than the economies of the EU member countries. By 2035, India will be growing faster than the six largest countries of the EU. Currently, India is the sixth largest economy by nominal GDP. By 2050, India is expected to overtake the US and EU economies to become the second largest economy after China.

India's foreign trade should diversify in terms of both territorial and commodity structure. In terms of territorial structure, India should focus on diversifying its export markets, for example by increasing the volume of exports to other EU countries (such as France, Spain and Poland). In terms of imports, Canada is also one of the world's largest importers and could therefore become one of India's large potential future trading partners. In addition to these countries, India should try to increase its exports to countries from which it imports oil (UAE, Saudi Arabia, Iraq) as well as animal and vegetable oils and fats (Indonesia, Argentina,

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CONTINENTAL SHELVES IN THE ARCTIC - CURRENT STATUS OF THE SUBMISSIONS TO THE COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF

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Abstract: The legal term of the continental shelf provides the coastal states with exclusivity in the use of living and non-living resources of the shelf, which significantly expands the economic potential of the country in view of the estimated reserves of oil and gas in the Arctic. The boundaries between the overlapping claims to the extension of the shelf will have to be negotiated between the states or resolved by some other peaceful means of settlement of international disputes. The current situation in the Arctic already shows the overlapping claims of the Russian Federation, Canada, and Denmark. The paper defines current status of the submissions of the Arctic States for the extension of the continental shelf beyond the 200 NM limit and the recommendations of the Commission on the Limits of the Continental Shelf issued to them.

Key words: continental shelf, Arctic, Commission on the Limits of the Continental Shelf
JEL: K33

Introduction

The continental shelf located in the Arctic Ocean is vast. All the Eurasian marginal seas are located on this shelf, which extends up to 900 km from the coast of Siberia. In comparison, on the coast of North America, the shelf extends only 50-100 km offshore.¹

The legal term of the continental shelf provides coastal states with the exclusivity of using living and non-living resources of the shelf, which, considering the estimated reserves of oil and gas in the Arctic, significantly expands the country's economic potential.

A large number of resources are also located within the 200-mile exclusive economic zone or continental shelf (these 2 maritime zones are the same in width but do not absorb each other), but states have the possibility to extend the outer limit of the continental shelf beyond this distance, which is compensated by diversion payments or contributions in extracted raw materials according to the provisions of Article 82 of the Convention on the Law of the Sea (UNCLOS, 1982). The Commission on the Limits of the Continental Shelf does not have the authority to delimit the boundaries between adjacent shelves, these boundaries, as well as the outer limit of the shelf, are defined by the coastal state.

The paper provides an overview of the current status of the submissions of the Arctic states to extend the continental shelf beyond 200 NM and the recommendations of the Commission on the Limits of the Continental Shelf issued to them.

When drafting the paper, we used the information provided by the Commission for the Limits of the Continental Shelf, the submissions of the states themselves, diplomatic notes and, if they were issued, also the recommendations issued by the Commission. The Commission assesses the submissions in the order in which they were received. To illustrate the complexity of assessing the submissions of States and the speed of the Commission's work, we prepared a table with an overview of the submissions and the stages of assessment they are in.

¹ ARCTIC POLLUTION ISSUES (2015): A State of the Arctic Environment Report

1 Russian Federation

On 20th December 2001, the Russian Federation became the first Arctic state (and the first state ever) to submit its proposal to the Commission on the Limits of the Continental Shelf to extend the limits of the shelf beyond the limits established by the Convention on the Law of the Sea. The Russian submission covered four areas: the Barents Sea, the Bering Sea, the Sea of Okhotsk, and the central Arctic Ocean. The Convention entered into force for the Russian Federation on 11th April 1997.

As this was the first ever submission of a claim to extend the continental shelf beyond the 200 NM limit, the Commission on the 10th session decided that the procedure for establishing a subcommission to assess the Russian submission should serve as a model, *mutatis mutandis*, for the establishment of subsequent subcommissions.

However, in 2002 the commission neither accepted nor rejected the proposal, but stated that further research was needed to grant the claim.² In the case of the Barents and Bering Seas, the Commission recommended to the Russian Federation that, after the entry into force of the agreements on the delimitation of maritime boundaries with Norway in the Barents Sea and with the United States of America in the Bering Sea, to send the Commission maps and coordinates of the delimitation lines, as they would represent the outer limits of the continental shelf of the Russian Federation exceeding 200 NM in the Barents Sea and the Bering Sea. Regarding the Sea of Okhotsk, the Commission recommended the Russian Federation to submit a well-documented partial submission for its extended continental shelf in the northern part of this sea. The Commission stated that this partial submission would not affect questions relating to the delimitation of boundaries between States in the South, for which a submission could subsequently be made, notwithstanding the provisions relating to the 10-year time limit set out in Article 4 of Annex II to the Convention. In order to make this partial submission possible, the Commission also advised the Russian Federation to use its best efforts to reach an agreement with Japan in accordance with paragraph 4 of Annex I to the Commission's Rules of Procedure. Regarding the Central Arctic Ocean, the Commission recommended that the Russian Federation submit a revised proposal regarding its extended continental shelf in this area based on the findings contained in the recommendations.³

On 28th February 2013, the Russian Federation submitted to the Commission, with reference to its submission of 20th December 2001, information on the boundaries of the continental shelf with respect to the Sea of Okhotsk. Recommendations for this submission were adopted on 11th March 2014. Since it is not part of the Arctic, we will not deal with it in more detail.

On 3rd August 2015 the Russian Federation submitted pursuant to Art. 8 Annex II UNCLOS substantially revised submission in respect of the Arctic Ocean to which Denmark, Canada, and the United States reacted (2015 and 2021). It claims 1,191,347 km² in the Arctic Ocean, including the North Pole, about 100,000 km² more than in the 2001 claim.⁴ It is estimated that the area includes 594 oil fields and 159 natural gas fields, as well as two major nickel fields and more than 350 gold deposits. Initial renewable fuel resources are estimated at

² STAALESEN, A. (2015): The Russian continental shelf stretches beyond the North Pole, the Russian government asserts. The country this week submitted its renewed claims for the Arctic shelf to the UN Continental Shelf Commission. In: *Barents Observer*, 4.8.2015.

³ UNITED NATIONS GENERAL ASSEMBLY (2002): *Oceans and the law of the sea*. Report of the Secretary-General.

⁴ HOSSAIN, K. (2021): *Russia's Proposed Extended Continental Shelf in the Arctic Ocean: Science Setting the Stage for Law*. In: *The Polar Connection* (3.6.2021).

258 billion tons of fuel equivalent, representing 60 % of the total hydrocarbon resources of the Russian Federation.⁵

The revised submission of the Russian Federation regarding the delimitation of the outer limit of the continental shelf is based on the scientific assumption that the central Arctic submarine ridges, among them Lomonosov Ridge, Mendeleev-Alpha Rise and Chukchi Plateau, as well as Podvodnikov and Chukchi Basins separating them, have a continental character. The Russian claim is based on the argument that Lomonosov Ridge and Alpha-Mendeleev Rise are not oceanic ridges or submarine ridges, but only submarine elevations. Since based on the provisions of Article 76, par. 6 UNCLOS does not apply a limit of 350 NM in the case of elevations as in the case of submarine ridges, it would be possible to define the outer limit of the shelf based on distance 100 NM from the 2,500 m isobath, thus significantly expanding it.

On 31st March 2021, the Russian Federation submitted to the Commission two amendments to the partially revised 2015 submission on the limits of the continental shelf in respect of the Arctic Ocean. The first amendment applies to Gakkel Ridge, Nansen and Amundsen Basins, and the second Lomonosov Ridge, Mendeleev-Alpha Rise, Amundsen and Makarov Basins, and Canada Basin.⁶ Russia's claim now includes 70 % of the seabed in the central parts of the Arctic Ocean outside the exclusive economic zone of the Arctic coastal states, and the addenda present a further extension of the continental shelf by some 705,000 km².⁷

The Commission issued recommendations on the partially revised submission from 2015 on 6th February 2023, recommendations for amendments have not yet been adopted. At the 50th meeting of the Commission in 2019, there was a breakthrough in relation to the Russian claim to the shelf extension - the Commission agreed to the claim that Lomonosov Ridge, Mendeleev-Alpha Rise, as well as Podvodnikov Basin are submarine elevations that are natural components of the margin in accordance with article 76, paragraph 6 UNCLOS and are geologically similar to the Russian continent, but this does not automatically mean confirmation of the Russian claim.⁸ Due to insufficient data and information provided for the outer edge of the continental margin, the outer limits of the continental shelf in the southern part of Amundsen Basin have not been defined. The Commission recommended that the Russian Federation makes a partial revised submission in respect of its continental shelf in that area.⁹

2 The Kingdom of Norway

The Kingdom of Norway submitted its submission to the Commission on 27th November 2006 (UNCLOS entered into force for Norway on 24th July 1996). In it, Norway wanted to extend its claim to the seabed beyond the 200 NM limit in three areas of the northeastern Atlantic and the Arctic: the so-called *Loophole* in the Barents Sea, in the western Nansen Basin in the Arctic Ocean and the so-called *Banana Hole* in the Norwegian and Greenland Seas. In

⁵ STAALESEN, A. (2015): The Russian continental shelf stretches beyond the North Pole, the Russian government asserts. The country this week submitted its renewed claims for the Arctic shelf to the UN Continental Shelf Commission. In: Barents Observer, 4.8.2015.

⁶ UNITED NATIONS (2021): Receipt of two addenda to the executive summary of the partial revised Submission made by the Russian Federation to the Commission on the Limits of the Continental Shelf in respect of the Arctic Ocean.

⁷ BREUM, M. (2021): Russia extends its claim to the Arctic Ocean seabed. In: Arctic Today (4.4.2021)

⁸ STAALESEN, A. (2019): Russia is winning support for its claims on Arctic shelf, says chief negotiator. In: Barents Observer (28.11.2019).

⁹ COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF (2023): Recommendations of the Commission on the Limits of the Continental Shelf in regard to the partial revised submission made by the Russian Federation in respect of the Arctic Ocean on 3 august 2015 with addenda submitted on 31 March 2021.

particular, the claim regarding the western Nansen basin is based on the assumption that Norway could claim the continental shelf around Svalbard (Spitzbergen).

While the latter two named areas were not disputed, in respect of the *Loophole*, the Russian Federation stated that the Barents Sea region is the subject of a dispute that has not yet been settled, but agreed to consider the submission with respect to the Barents Sea disputed area and reserved the right to present additional comments to the submission. Denmark and Iceland also commented on Norway's claim in diplomatic notes. Spain also raised a comment regarding its right to use resources on the continental shelf around Spitzbergen based on the Spitsbergen Treaty of 1920 (the Russian Federation also refers to the provisions of the Spitzbergen Treaty and its regime in a diplomatic note), but this reservation did not directly concern assessment of the submission.

The submission was decided at a Commission session held in New York from 5th March to 13th April 2007. The Commission adopted recommendations on 27th March 2009 where it recognized that, in relation to the *Loophole*, the Norwegian proposal met the submission requirements for the extension of the continental shelf beyond 200 NM from the baseline in accordance with Article 76, paragraph 8 and Article 4 of Annex II to the UNCLOS and recommending that Norway proceed to delimit the continental shelf beyond 200 NM in the *Loophole* in agreement with the Russian Federation, with the assurance that both coastal states share a claim to the seabed and subsoil beyond 200 NM in this part of the Barents Sea as natural extensions of their land territories.¹⁰ Since 1974, Norway and Russia had disputed an area in the Barents Sea of 175,000 km². Both states settled the disputed situation by concluding the Treaty on Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean in 2010.¹¹

In the area of the Western Nansen Basin, the Commission agreed to determine the fixed points as proposed by Norway. In the so-called *Banana Hole*, the Commission agreed to define fixed points delineating the continental margin. At the same time, it stated that the determination of the final outer limits of Norway's continental shelf in this area may depend on delineation between states.¹²

Norway has become the first Arctic country to delineate its continental shelf based on the Commission's recommendations. The total area of the continental shelf of Norway is about 235,000 km², which is about ¾ of the land area of Norway. The original proposal submitted to the Commission dealt with an area of 250,000 km².¹³

Bearing in mind the overlapping claims of the states in connection with the North Pole, it is certainly possible to say that Norway is not affected by possible overlapping claims for geographical reasons. The shelf boundary is between 84° and 85°N latitude, approximately halfway between the northern edge of Svalbard (Spitsbergen) and the North Pole. This is also confirmed by the words of the Minister of Foreign Affairs of Norway, Jonas Gahr Støre: "In the discussion about who owns the North Pole - it is definitely not us."¹⁴

¹⁰ COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF (2006): Summary of the Recommendations of the Commission on the Limits of the Continental Shelf in regard to the Submission Made by Norway in Respect of Areas in the Arctic Ocean, the Barents Sea and the Norwegian Sea on 27 November 2006

¹¹ Treaty between the Kingdom of Norway and the Russian Federation concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean

¹² COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF (2006): Summary of the Recommendations of the Commission on the Limits of the Continental Shelf in regard to the Submission Made by Norway in Respect of Areas in the Arctic Ocean, the Barents Sea and the Norwegian Sea on 27 November 2006

¹³ NILSEN, T. (2009): Limits of Norway's Arctic seabed agreed. In: Barents Observer (16.4.2009).

¹⁴ DOYLE, A. (2009): Oslo sets limit on Arctic seabed, short of North Pole. In: Reuters (15.4.2009).

On 4th May 2009, the Kingdom of Norway made a submission to the Commission on the Limits of the Continental Shelf in respect of Bouvetøya and Dronning Maud Land.¹⁵ The Commission adopted recommendations on it on February 8, 2019, but since it does not belong to the Arctic region, we will not analyze it in more detail in this section.¹⁶

3 The Kingdom of Denmark

The Kingdom of Denmark has made 5 partial submissions to the Commission on the Limits of the Continental Shelf - for the area north of the Faroe Islands (2009), Faroe-Rockall Plateau Region (2010) both submitted together with the Government of the Faroe Islands; submission in relation to the southern continental shelf of Greenland (2012), later a claim for the northeastern continental shelf of Greenland (2013) and as a final claim for the northern continental shelf of Greenland in 2014.¹⁷

Partial submission by the Danish and Faroese governments concerning the area north of the Faroe Islands was made on 29th April 2009 and received comments from Iceland and Norway - neither state objected. There were some outstanding issues regarding the delimitation of the continental shelf in the area of more than 200 NM from the baselines of the Faroe Islands, mainland Norway, Iceland, Jan Mayen Island, Greenland and Svalbard (Spitsbergen), so-called *Banana Hole*. On 20th September 2006, Denmark, Iceland and Norway agreed on a procedure for determining the delimitation line in the southern part of *Banana Hole*. A procedure was agreed upon (which is similar in several cases) that when any of these States submits its documentation relating to the outer limits of the continental shelf, the other States shall notify the Secretary-General of the United Nations that they have no objection to the Commission considering and issuing the documentation on that basis recommendations. Furthermore, the Commission's recommendations do not affect the submission of documentation to these states at a later stage or the issue of bilateral delimitations of the continental shelf between these states.¹⁸

The Commission adopted recommendations on this submission on 12th March 2014. It is the only Danish submission on which the Commission has already issued its recommendations.¹⁹ In the recommendations, the Commission agreed to determine the fixed points listed as the outer limits of the continental shelf of Denmark north of the Faroe Islands. The Commission recommends that the delimitation of the outer limits of the continental shelf of Denmark north of the Faroe Islands be carried out in accordance with Article 76 par. 8 according to latitude and longitude coordinates and recommends that Denmark proceed with the determination of the outer limits of the continental shelf on the basis of these recommendations.²⁰

¹⁵ COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF (2019): Outer limits of the continental shelf beyond 200 nautical miles from the baselines. Submission by the Kingdom of Norway.

¹⁶ COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF (2019): Summary Of Recommendations of the Commission on the Limits of the Continental Shelf in regard to the Submission made by Norway in respect of Bouvetøya and Dronning Maud Land On 4 May 2009.

¹⁷ DIVISION FOR OCEAN AFFAIRS AND THE LAW OF THE SEA (2022): Submissions, through the Secretary-General of the United Nations, to the Commission on the Limits of the Continental Shelf

¹⁸ COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF (2009): Statement by the Chairman of the Commission on the Limits of the Continental Shelf on the progress of work in the Commission.

¹⁹ COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF (2014): Outer limits of the continental shelf beyond 200 nautical miles from the baselines: Submissions to the Commission: Submission by the Kingdom of Denmark.

²⁰ COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF (2014): Recommendations of the Commission on the Limits of the Continental Shelf in regard to the partial submission made by the government of the Kingdom Of Denmark together with the government of the Faroes in respect of the continental shelf North of the Faroe Islands On 29 April 2009.

Iceland commented to the partial submission of 2nd December 2010²¹ (presented on 31st March 2011) in respect of the Faroe-Rockall Plateau Region. As there is part of the Icelandic continental shelf in the Hatton-Rockall area, which is part of the claim, but which is subject to overlapping claims by Denmark, Ireland, and the United Kingdom. Thus, the Government of Iceland did not consent to the assessment of the claim by the Commission. Iceland therefore did not include this area in its claim submitted to the Commission on 30th April 2009 and stated that it would make a separate submission in respect of this area at a later date.²²

On 14th June 2012, the Kingdom of Denmark submitted to the Commission for the Limits of the Continental Shelf in accordance with Article 76 par. 8 of the UNCLOS information on the limits of the continental shelf at more than 200 NM with respect to the southern continental shelf of Greenland. In 2012, it was a partial submission by the government of the Kingdom of Denmark together and states that it intends to submit separate information on the maritime areas north and northeast of Greenland. Canada (2012) and Iceland (2013) commented on the proposal. Neither state objected to the consideration of the submitted proposal, with Canada noting the possible overlap of Denmark's claim with its own claim filed later.²³

In an exchange of notes dated 15th March 2012, the Government of the Kingdom of Denmark and the Government of Canada agreed that when one State makes a submission to the Commission regarding the outer limits of the continental shelf in the Labrador Sea, the other State shall immediately send a diplomatic note to the Secretary-General of the United Nations informing him, that he has no objection to the consideration of the submission by the Commission, and states that the Commission's recommendations regarding the submission do not affect the Commission's consideration of its own proposals and matters relating to the delimitation of the borders between the two states.

Iceland's outer limits proposed in its submission from 29th April 2009 overlap with the eastern part of Greenland's southern continental shelf. The matter is subject to consultation between the parties.²⁴ The Commission has not yet issued recommendations on this proposal by Denmark.

On 26th November 2013, Denmark jointly submitted a partial submission with the Government of Greenland in respect of the area north-east of Greenland. Denmark also presented this submission on 17th August 2016 as a previous one. This is also a partial submission stating that Denmark intends to submit separate information on sea areas north of Greenland. Norway commented on the proposal, which, although it did not object to the consideration of the submission by the Commission, described the subject area between Greenland and Svalbard (Spitsbergen) as "disputed".²⁵

The northeastern continental margin of Greenland is a passive continental margin extending approximately 1,300 km from 70° in the south to 82° N in the north. The width of the

²¹ THE KINGDOM OF DENMARK (2010): Partial Submission of the Government of the Kingdom of Denmark together with the Government of the Faroes to the Commission on the Limits of the Continental Shelf The Southern Continental Shelf of the Faroe Islands.

²² PERMANENT MISSION OF ICELAND (2011): Communications received with regard to the submission made by Denmark to the Commission on the Limits of the Continental Shelf.

²³ COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF (2013): Outer limits of the continental shelf beyond 200 nautical miles from the baselines: Submissions to the Commission: Submission by the Kingdom of Denmark.

²⁴ THE KINGDOM OF DENMARK (2012): Partial Submission of the Government of the Kingdom of Denmark together with the Government of Greenland to the Commission on the Limits of the Continental Shelf The Southern Continental Shelf of Greenland.

²⁵ PERMANENT MISSION OF NORWAY TO THE UNITED NATIONS (2014): Communications received with regard to the submission made by Denmark to the Commission on the Limits of the Continental Shelf.

continental shelf varies from about 60 km in the southern and northern parts of the margin to more than 300 km in the central part.²⁶

One question regarding the delineation of the northeast continental shelf of Greenland remains unresolved. Its outer limits overlap with the outer limits of the continental shelf of the Kingdom of Norway. On 27th November 2006, the Kingdom of Norway submitted its proposal for three separate areas in the Barents Sea, the Arctic Ocean and the Norwegian Sea, and the Commission adopted recommendations on this proposal on 27th March 2009. On 20th February 2006, the Kingdom of Denmark together with the Government of Greenland and the Kingdom of Norway signed an agreement on the delimitation of the continental shelf and fishing areas in the area between Greenland and Svalbard. The agreement entered into force on 2nd June 2006. In the preamble to the agreement, the contracting parties expressed their intention to return to the definition of the continental shelf above 200 NM in connection with the determination of its outer limits. In accordance with the abovementioned, the Kingdom of Denmark has requested that the Commission consider the data and other material in this partial submission regarding the northeast continental shelf of Greenland and make recommendations regarding this partial submission without prejudice to the delimitation of the continental shelves between Denmark/Greenland and Norway. Both states agreed to this request.

Another submission to the Commission was made by the Kingdom of Denmark on 15th December 2014, this time in relation to the northern continental shelf of Greenland. This is a partial submission by the Government of the Kingdom of Denmark together with the Government of Greenland.

This submission is particularly interesting because by submitting it, Denmark became the first country to claim sovereign rights over the North Pole. The Danish claim is based on the claim that the continental shelf of Greenland is connected to the Lomonosov Ridge located at the bottom of the Arctic Ocean and is a natural extension of the Greenlandic mainland. The Danish and Greenlandic governments jointly claim a shelf of approximately 900,000 km². The submission was preceded by 12 years of collecting the necessary scientific data. Denmark has invested around 44.3 billion € in data collection and processing to support its claim.²⁷

Norway, Canada, the Russian Federation and the USA commented on the submitted claim.²⁸ Norway agreed to discuss the proposal with respect to the "disputed area", Canada did not object, the Russian Federation raised a possible overlapping claim but did not object to the Commission's assessment, stating that any Commission recommendations regarding the Danish proposal did not affect the rights of the Russian Federation during the assessment of the Russian proposal for the delimitation of the continental shelf between the Russian Federation and Denmark.²⁹ The 3 abovementioned points were essentially the content of the agreement concluded on 7th March 2014 by the Kingdom of Denmark together with the Government of Greenland and the Russian Federation through an exchange of notes.³⁰

²⁶ THE KINGDOM OF DENMARK (2013): Partial Submission of the Government of the Kingdom of Denmark together with the Government of Greenland to the Commission on the Limits of the Continental Shelf The North-Eastern Continental Shelf of Greenland.

²⁷PETTERSEN, T. (2014): Denmark claims North Pole. In: Barents Observer (15.12.2014)

²⁸ COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF (2015): Outer limits of the continental shelf beyond 200 nautical miles from the baselines: Submissions to the Commission: Submission by the Kingdom of Denmark.

²⁹ PERMANENT MISSION OF THE RUSSIAN FEDERATION TO THE UN (2015): Communications received with regard to the submission made by the Kingdom of Denmark to the Commission on the Limits of the Continental Shelf.

³⁰ KINGDOM OF DENMARK (2014): Partial Submission of the Government of the Kingdom of Denmark together with the Government of Greenland to the Commission on the Limits of the Continental Shelf The Northern Continental Shelf of Greenland. Executive Summary.

The United States stated that its claim to the continental shelf may overlap with that of Greenland but did not object to the negotiations with a similar amendment as the Russian Federation - that the Commission's decision would not affect the delimitation of the US continental shelf or the mutual delimitation between the US and Denmark.

During the preparation of this partial submission, the Kingdom of Denmark held regular consultations with Canada. It emerged from these consultations that the outer limits of the Canadian continental shelf would overlap with the outer limits of the northern continental shelf of Greenland in a later proposal. Canada made its submission in 2013.

4 Canada

Canada submitted its first proposal to the Commission on 6th December 2013, but it was in respect of the continental shelf in the Atlantic Ocean, not the Arctic (but in the north the Canadian shelf borders the adjacent shelf of Greenland). The Convention entered into force for Canada on December 7, 2003. In this proposal, Canada states that this is a partial submission and intends to submit information on the limits of the continental shelf beyond 200 nautical miles in the Arctic Ocean later. Denmark, the USA, and France (because of Saint Pierre and Miquelon – the Government of Canada completely rejected any claims of France to any maritime area) commented on the proposal.³¹

Canada submitted the Arctic claim to the Commission on 23rd May 2019. The USA, Denmark and the Russian Federation commented on the proposal. None of the states objected, but they considered potential overlapping claims.³²

Preparatory work in relation to shelf delimitation began in the mid-1990s, but the preparation of a partial submission began after Canada became a party to the Convention in 2003. Several Canadian programs have involved international cooperation, notably with the USA, the Kingdom of Denmark, the Kingdom of Sweden and the Federal Republic of Germany. Data collection began in 2006 and ended in 2016.

In this submission, Canada asserts that Canada's continental margin in the Arctic Ocean is part of a morphologically continuous continental margin that includes several extensive seafloor highs. These include the Central Arctic Plateau (Lomonosov Ridge, Alpha Ridge and Mendeleev Rise), which forms a submerged extension of the Canadian mainland. Geological and geophysical evidence further demonstrates that the Central Arctic Plateau is continuous with the Canadian mainland and as such is a natural part of its continental margin.³³

In the submission, Canada states that there have been regular consultations with both Denmark and the Russian Federation and basically similar procedures, that the states will not object to each other's submissions to the Commission and that the assessment of the proposal will not affect the proposal of the other state or the mutual boundaries between their shelves. Potentially overlapping claims were also revealed in mutual consultations with the US during the preparation of the submission.³⁴ The Commission has not yet issued recommendations for submission, and a subcommission has not yet been established.

³¹ COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF (2014): Outer limits of the continental shelf beyond 200 nautical miles from the baselines: Submissions to the Commission: Partial Submission by Canada.

³² COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF (2019): Outer limits of the continental shelf beyond 200 nautical miles from the baselines: Submissions to the Commission: Partial Submission by Canada.

³³ GOVERNMENT OF CANADA (2019): Partial Submission of Canada to the Commission on the Limits of the Continental Shelf Executive Summary.

³⁴ GOVERNMENT OF CANADA (2019): Partial Submission of Canada to the Commission on the Limits of the Continental Shelf Executive Summary.

5 Iceland

Iceland made a submission to the Commission on 29th April 2009 in the area of the Ægir basin in the north-east and in the west and south of the Reykjanes ridge to the south of Iceland. The Convention entered into force for Iceland on 16th November 1994.

According to Iceland, this is a partial submission that does not include Iceland's continental shelf in the Hatton-Rockall area, which is the subject of overlapping claims by other states, or in the eastern part of the Reykjanes Ridge, which potentially overlaps the Hatton-Rockall area. In order to be without prejudice to issues relating to the delineation of boundaries in the Hatton-Rockall area, submissions for both areas will be made at a later date. Denmark and Norway (2009) commented on the submission in relation to the so-called *Banana Hole* and Denmark commented again in 2013 (in relation to the Irminger Sea) but had no objections. The Commission issued recommendations on this submission on 10th March 2016.³⁵

Based on the assessment of the scientific and technical documentation contained in Iceland's submission, the Commission concluded that, in the Ægir basin, the foot of the slope points mentioned in the submission meet the requirements of Article 76 and Chapter 5 of the Guidelines. In the Ægir Basin, the outer edge of the continental margin is based solely on fixed points within 60 NM of the foot of the slope.

The Commission recommended that the outer limits of the continental shelf of Iceland in the western part of the Reykjanes Ridge be established based on fixed points located within 350 NM of the baselines. These fixed points are connected by straight lines, the length of which does not exceed 60 NM. One fixed point is located on the 200 NM line of Greenland's exclusive economic zone.³⁶

On 31st March 2021, Iceland made a revised submission to the Commission regarding the western, southern and southeastern parts of the Reykjanes Ridge. The revised submission provides new data and analysis from surveys of the Reykjanes Ridge as published in recent scientific publications. As before, it covers the continental shelf in the western and southern parts of the Reykjanes Ridge and in addition includes the southeastern part of the ridge to give a better overview of the overall area. The submission does not cover the Hatton-Rockall area, which is the subject of the dispute, nor the north-eastern part of the Reykjanes Ridge, which potentially overlaps with the Hatton-Rockall area.³⁷

In a previous submission, the subcommission concluded that the Reykjanes Ridge is a submarine ridge that is a natural part of the continental margin, but the Commission found the data and information provided to be unconvincing to support the claim that the western and southern parts of the Reykjanes Ridge can be considered a natural part of the continental margin Iceland. The Commission therefore could not conclude that a line 100 NM from the isobath could be applied and decided to recommend only fixed points up to a distance of 350 NM. Accordingly, Iceland submitted in this submission additional information supporting the argument that the Reykjanes ridge is a natural part of Iceland's continental margin due to its geological connection to its mainland territory. The Commission has not yet issued recommendations on this submission.

³⁵ COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF (2016): Summary of Recommendations of the Commission on the Limits of the Continental Shelf in regard to the Submission made by Iceland in the Ægir Basin Area and in the Western and Southern Parts of Reykjanes Ridge on 29 April 2009

³⁶ ICELAND (2009): Partial Submission to the Commission on the Limits of the Continental Shelf pursuant to article 76, paragraph 8 of the United Nations Convention on the Law of the Sea in respect of the Ægir Basin area and Reykjanes Ridge. Part I. Executive Summary.

³⁷ ICELAND (2021): Revised Partial Submission to the Commission on the Limits of the Continental Shelf pursuant to article 76, paragraph 8, of the United Nations Convention on the Law of the Sea in respect of Reykjanes Ridge. Part I. Executive Summary.

6 Finland, Sweden, and the USA

For geographical reasons, Finland and Sweden cannot claim an extension of the continental shelf beyond 200 NM, as the Baltic Sea has a maximum width of 193 km (which is approximately 104 NM).

The US has not yet ratified the UN Convention on the Law of the Sea, but the provisions of UNCLOS (except Part XI) apply to it as customary law. For this reason, they do not even have a set time limit for submitting a claim to the Commission for the Limits of the Continental Shelf. In practice the Commission has not yet had to deal with a submission from a non-contracting state of UNCLOS, therefore opinions on whether such a submission would be admissible differ.

Conclusion

The Commission on the Limits of the Continental Shelf has so far issued recommendations on only seven submissions made by Arctic states. It may take decades to assess all the states' claims submitted due to the Commission's procedural procedures. A total of 93 proposals, 9 partially revised proposals, were submitted to the Commission, and in total it has decided on only 38 of them, which is a relatively small number. This is due to the fact that in order to assess the claim, it is necessary to examine all the documents and maps submitted by the states, and the composition of the Commission is small in terms of personnel. That is why submissions are considered for so long and the Commission considers them in the order in which they were received.

All submissions for shelf extension beyond 200 NM submitted by Denmark, Russian Federation and Canada overlap. In case that the Commission confirms the states' claims submitted to it, the states will determine the borders between themselves on the basis of bilateral negotiations and agreements on the delimitation of borders. The Commission is only a scientific body and is not authorized to resolve territorial disputes between states. The process set out in Article 76 and Annex II of UNCLOS was successfully applied when Russia and Norway reached an agreement in 2010 on the boundaries of the Barents Sea. We can observe a consensus among all Arctic coastal states regarding the procedure for overlapping claims - states consistently confirm that they have no objection to the Commission hearing such submissions, for example by issuing recommendations for joint submissions.

Annex 1: Table. Submissions of the Arctic States to the CLCS

Submission by [State]	Date of submission	Presentation to the CLCS*	Subcommission established	Recommendations adopted on	Deposit by the Secretary-General art 76 (9) UNCLOS
1. Russian Federation	20 December 2001	10th session March-12 April 2002	10th session March -12 April 2002	11th session 27 June 2002	7 September 2016
1a. Russian Federation - partial revised Submission in respect of the Okhotsk Sea	28 February 2013	32nd session 16 August 2013	32nd session 15 July-30 August 2013	34th session 11 March 2014	1st April and 25th May 2016
1b. Russian Federation - partial revised Submission in respect of the Arctic Ocean	3 August 2015	40th session 9 February 2016	40th session 1 February-18 March 2016	57th session 6 February 2023	-
1c. Russian Federation - partial revised Submission in respect of the southeastern part of the Eurasian Basin in the Arctic Ocean	14 February 2023	-	-	-	-
7. Norway - in the North East Atlantic and the Arctic	27 November 2006	19th session 2 April 2007	19th session 5 March-13 April 2007	23rd session 27 March 2009	-
30. Norway - in respect of Bounevoja and Drønning Mand Land □	4 May 2009	25th session 9 April 2010	32nd session 15 July-30 August 2013	49th session 8 February 2019	-
27. Iceland - in the Fjör Basin area and in the western and south-eastern parts of Reykjanes Ridge	29 April 2009	31st session 31 January 2013	30th session 30 July-24 August 2012	40th session 10th March 2016	-
27a. eastern parts of the Reykjanes Ridge	31 March 2021	-	-	-	-
28. Denmark - in the area north of the Faroe Islands	29 April 2009	24th session 27 August 2009 and 31st session 31 January 2013	30th session 30 July-24 August 2012	34th session 11 March 2014	-
54. Denmark - Faroe-Rockall Plateau Region	2 December 2010	27th session 31 March 2011	-	-	-
61. Denmark - in respect of the Southern Continental Shelf of Greenland	14 June 2012	41th session 17 August 2016	-	-	-
68. Denmark - in respect of the North-Eastern Continental Shelf of Greenland	26 November 2013	41th session 17 August 2016	-	-	-
76. Denmark - in respect of the Northern Continental Shelf of Greenland	15 December 2014	41th session 18 August 2016	-	-	-
70. Canada - in respect of the Atlantic Ocean	6 December 2013	46th session 6 February 2018	-	-	-
84. Canada - in respect of the Arctic Ocean	23 May 2019	-	-	-	-

Source: Commission on the Limits of the Continental Shelf

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CORNELI v ECB CASE ANALYSIS LIMITS OF IMPLEMENTATION OF NATIONAL LAW BY EU INSTITUTIONS¹

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Abstract: The article provides an analysis of the CJEU Corneli v ECB case (T-502/19), evaluates implementation process of EU law directive into the national legal system with a emphasis on the unstable situation in the systemically important bank of the SSM.

Key words: SII, SSM, BRRD, banking

JEL: K23, K41

Introduction

In the analysed case, General Court imposed on the European Central Bank (ECB) a strict adherence to national law, even in cases in which national law may be in breach of the Directive it is bound to transpose. Analysed case creates some questions as to the viability and problems that this model of interaction between European Union (EU) and national legal systems raises. However, the analysed case is most important for banking regulation conflict that stems from Single supervisory mechanism as is, national and European law hierarchy. The dispute in Corneli v ECB stems from the harsh financial situation and stress of Banca Carige, a significant credit institution subject to ECB supervision. Concerning few failed recapitalisation efforts, several board members of the bank resigned. Deprived from this predicament, bank was left in an unsustainable situation that paved the way to a temporary administration measure issued by the ECB, as prudential supervisor. Through its decision to take over the administration of the bank, the ECB appointed three administrators for a period of three months that was extended on consecutive occasions until the situation of the bank was stabilised. It is against this decision imposing a measure of temporary administration on Banca Carige that a shareholder, Ms Corneli, brought an action against the ECB before the General Court that led to annulment in the case subject.²

The text is prepared from ECB supervisory board of Single Supervisory Mechanism (SB SSM)³ material, on which the author collaborated and produced a report for National bank of Slovakia internal processes.⁴

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² SARMIENTO, D.: *Op-Ed: "Setting the limits of implementation of national law by EU Institutions: the Corneli v ECB case (T-502/19)"*: <https://eulawlive.com/op-ed-setting-the-limits-of-implementation-of-national-law-by-eu-institutions-the-corneli-v-ecb-case-t-502-19-by-daniel-sarmiento/>

³ SBX0206 - Judgment of the General Court in case T-502/19 (Francesca Corneli v ECB / Banca Carige Temporary Administration decision - ECB-CONFIDENTIAL

⁴ JUDGMENT OF THE GENERAL COURT (Fourth Chamber, Extended Composition) 12 October 2022 (Economic and monetary union – Banking union – Recovery and resolution of credit institutions – Early intervention measures – Decision of the ECB to place Banca Carige under temporary administration – Action for

1 Summary of the judgment

Used case concerned an action for annulment brought by Ms Corneli, a minority shareholder of Banca Carige, against the ECB decisions removing the management bodies of the bank and appointing temporary administrators. Its implications directly stipulated some interpretation rules regarding direct effect of EU regulation in banking sector within the Single supervisory mechanism. In annulling the decisions, the General Court ruled on the admissibility of the action and on the merits of the claim, which required interpreting Italian national law while in contrary, the national court is required to interpret its national law in the light of the wording and the purpose of the directive in order to achieve the legal certainty result.

In the first step, the General Court ruled that the action was admissible, since the applicant was both directly and individually concerned and had interest in challenging the decision as minority shareholder. Regarding the admissibility, in very concise terms, the Court found the applicant to be directly and individually concerned by the contested decisions, since they had affected a number of administrative rights attaching to the shares applicant held in the bank; by this same reason, the Court found the applicant to have her own interest in seeking annulment of the contested decisions, differing from the interest of the bank.

Next, the General Court made a ruling on the merits, concluding that the decision of the ECB lacked legal basis. According to the Court, the ECB erred in interpreting the legal basis used to adopt the contested decisions. Article 70 of the Italian Consolidated Banking Act (TUB), which transposes the Bank Recovery and Resolution Directive (BRRD), does not provide the significant deterioration of the situation of the bank as one of the cases where the supervisory authority is allowed to appoint temporary administrators. The Italian legislator did not include such case in Article 70, while the same is instead foreseen in Article 69-octiesdecies(1)(b) TUB as a ground for the less intrusive measure of the removal of the management or supervisory bodies.

The Court also found that, by relying on the principle of consistent interpretation, the ECB went beyond the wording of national law. The General Court acknowledged that Article 29 BRRD, which has been transposed into Article 70 TUB, does include the possibility to place the bank under temporary administration in an event of a significant deterioration of the situation of the bank. However, national law does not include such case and the ECB should have applied national law only. The principle of consistent interpretation cannot serve as a basis for an interpretation counter to the wording used in the national law.

Finally, the Court concluded that the mistake committed by the ECB in applying Article 70 TUB cannot be remedied by a free interpretation of the texts, which would allow the conditions for the application of provisions conceived separately in the BRRD and national law to be reconstructed. As per Article 4(3) Single Supervisory Mechanism Regulation (SSM Regulation), the ECB is obliged to apply all relevant Union law, and where this Union law is composed of directives, the national legislation transposing those directives. This provision cannot be interpreted as allowing the ECB to apply two distinct legislative sources (namely EU law in its entirety, including directives, to which the national law transposing them should be added), as this would run counter to Article 288 TFEU. Furthermore, according to settled case-law, a directive cannot of itself impose obligations on individuals.

1.1 Single Supervisory Mechanism

For the purposes of the paper, we acknowledge to define some central concepts regarding the issue. The Single Supervisory Mechanism (SSM) was set up as the first pillar of the European banking union, alongside the Single Resolution Mechanism (SRM) and the

annulment – Action brought by a shareholder – Standing to bring proceedings – Interest separate from that of the bank – Admissibility – Error of law in the determination of the legal basis – Interpretation of national law by the EU Courts in conformity with EU law – Limit – Prohibition on interpreting national law contra legem)

European Deposit Insurance Scheme (EDIS – in discussions). The three pillars rest on the foundation of the single rulebook, which applies to all EU countries, commonly addressed to as Banking Union. Within this concept, European banking supervision aims to contribute to the safety and soundness of credit institutions and the stability of the financial system by ensuring that banking supervision across the euro area is of a high standard and is consistently applied to all banks⁵. Main goal as derived from Basel III regulation, is uniform legal certainty and financial stability. While retaining ultimate responsibility, the ECB carries out its supervisory tasks within the SSM, comprising the ECB and national competent authorities (NCAs)⁶. This structure provides for strong and consistent supervision of all supervised entities across the euro area, while making the use of the specific know-how of national supervisors.⁷ The said is important with reference to financial stability. The stability of credit institutions is in many instances still closely linked to the Member State in which they are established. Doubts about the sustainability of public debt, economic growth prospects, and the viability of credit institutions have been creating negative, mutually reinforcing market trends. This may lead to risks to the viability of some credit institutions and to the stability of the financial system in the euro area and the Union as a whole, and may impose a heavy burden for already strained public finances of the Member States concerned.⁸

Within the SSM, composed of the ECB and NCAs, the ECB carries out its supervisory tasks. The ECB is responsible for the effective and consistent functioning of the SSM, with a view to carrying out intrusive and effective banking supervision, contributing to the safety and soundness of the banking system and the stability of the financial system. SSM is competent to conduct its relations with European and national authorities in full accordance with the relevant law and with due regard to the principle of independence – while this principle is challenged by the analysed decision. SSM implements the EU policies on the prudential supervision of banks in a coherent and effective manner, based on a best practice framework for independent, forward-looking and risk-based supervision. The principle of proportionality, the unity and integrity of the internal market and the public interest are respected.

2 Assessment of the judgment and ECB appeal

Following the presented case, the ECB filed an appeal with the Court of Justice, challenging the judgment both with respect to the admissibility and the merits of the case.

ECB arguments contra the Court ruling, as it erred in law when concluding that the ECB decisions were unlawful due to lack of legal basis. In particular the General Court erred in law when limiting its interpretation of the applicable Italian law to a strict textual interpretation. In adopting the temporary administration decision, the ECB relied on the application of Article 70 of the Italian Consolidated Law on Banking, read in conjunction with Article 69-octiesdecies. The historical, systematic and teleological interpretation of Article 69 and Article 70 of the Italian Consolidated Law on Banking shows that a temporary administration measure can be adopted also in order to address cases of ‘significant deterioration’ of an entity. This interpretation is supported by the case law of Italian national courts, the legislative preparatory works and by reading this provision in the broader system of early intervention measures, including the text of Article 29 BRRD by way of a consistent interpretation. However, we conclude that as Italian legislation provides within the scope of above mentioned, it’s a at least

⁵ EUROPEAN CENTRAL BANK (2018): SSM Supervisory Manual, s. 4.

⁶ REGULATION (EU) No 468/2014 of the European Central Bank of 16 April 2014 establishing the framework for cooperation within the Single Supervisory Mechanism between the European Central Bank and national competent authorities and with national designated authorities (SSM Framework Regulation) (ECB/2014/17)

⁷ Same as above

⁸ Article 6 of COUNCIL REGULATION (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions

questionable legislative design that undermines the aims of a temporary administration measure, which is usually a subsidiary measure to be taken when the previous measures prove inefficient and the bank is suffering growing problems.

ECB follows that the Court erred in its arguments when assuming that the Italian legislator made a conscious decision to exclude ‘significant deterioration’ when not explicitly mentioning this case in the transposition of the BRRD. If such assumption were to be correct, it would entail that the Italian legislator willingly decided to breach its Treaty obligations in not transposing part of a directive, as well as to breach relevant Constitutional norms. On the contrary, the intention of the Italian legislator to implement BRRD in full is clear from the preparatory works of the transposition of the directive.

Finally, ECB concludes that the Court erred in law when it stated that the consistent interpretation of Article 70 of the Italian Consolidated Law on Banking in light of Article 29 BRRD in the sense supported by the ECB would entail a *contra legem* interpretation of law. In particular, consistent interpretation is a key instrument to foster consistent application of law. Where the national legislation allows an interpretation giving full effect to a directive, that interpretation must necessarily be favoured. The General Court’s interpretation would deprive consistent interpretation of any reasonable scope, depriving that principle of its purpose.

3 Commission appeal against the judgment

The European Commission – intervener in case T-502/19 in support of the position of the ECB - filed an independent appeal with the Court of Justice aimed at the annulment of the judgment. As much as the ECB, the Commission is challenging the judgment both with respect to the admissibility and the merits of the case, arguing – *inter alia* – that the Court breached Article 263 TFEU and distorted the facts of the case by wrongly considering that Corneli was directly and individually concerned by the ECB decisions and had an interest in bringing an action for annulment. Commission does not see Ms Corneli as subject with active rights within the case, based on her minority shareholding rights within the bank. In connection, the Court infringed Article 288(3) TFEU by wrongly considering that the first paragraph of Article 70 TUB could not be interpreted in conformity with Article 29 BRRD. In particular, the Commission argues that the Court failed to fulfil its duty to make all efforts to interpret national law with a view to ensuring that the directive in question is fully effective and achieving an outcome consistent with the objective pursued by it.

Next, the Commission argues that the Court breached Article 4(3) SSM Regulation and Article 288(2) and (3) TFEU by requiring that the ECB should apply national implementing legislation even when contrary to those directives instead of basing its action directly on article 29 BRRD. In particular, the Commission develops at length on the possibility for the ECB to directly rely on EU directives, as this develops more legal certainty.

Nonetheless, we assume that the issue of applicability of directives against incorrect transposition into national law is of institutional relevance for the ECB. For this reason, ECB should analyse and present at least some observations on the issue, highlighting the complexity of ensuring level-playing field in the institutional structure of the SSM. For the next analysis, we consider that the novel challenge represented by the obligation for an EU institution to apply national law as the substantive legal basis for its administrative decisions should be thoroughly put under legal scrutiny. ECB in its non-public analysis concludes that the direct applicability of directives has never been analysed by the Court of Justice with respect to cases in which an EU institution is mandated to apply national law (where established case law deals with the relationship between the Member State and private parties). Laid down issue can bring fruitful analysis challenges for peer authors.

Conclusion

The judgment of the General Court raises several important issues, with its focus on the interaction between EU and national law. The Court ruled that Ms Corneli satisfied the condition of ‘direct and individual concern’, because the ECB’s decision required no further implementing acts and Ms Corneli was part of a defined group of affected individuals, drawing an analogy from State aid case-law. The Court is mainly arguing that a shareholder is in a similar position to an undertaking affected by a State aid decision of a general nature – alas focusing on the business side of the case (principle of expertise of legal persons) this is not very convincing.

The substantive issue of the case centres around national law interpretation performed by ECB. As the paper shows, Italian common banking code transposed the BRRD in a very questionable way. According to Article 28 of the BRRD, in case of a ‘significant deterioration in the financial situation of an institution or where there are serious infringements of law, of regulations or of the statutes of the institution, or serious administrative irregularities’, the competent authorities can remove senior management or management body of the bank. However, if this measure is not sufficient to remedy the ills of the bank, under Article 29 the Member States ‘shall ensure’ that competent authorities may appoint one or more temporary administrators to the institution. The problem is, as already discussed, used legislation transposing provisions of BRRD is not fully in line with it. Instead of providing for a step-by-step system of incremental intervention tools, TUB provides for two alternative and isolated intervention tools, with different requirements for their implementation.

The first criticism that the judgment acquires is its strict and formalistic approach towards the duty of conform interpretation. Since Article 70 of the Italian Law does not provide for a temporary administration measure on the grounds of a ‘significant deterioration’ of the situation of the bank, in the case there was only one possible outcome: no temporary administration measure. The General Court is aware of the stakes involved and it highlights the fact that a temporary administration measure is restrictive of rights, but it ignores that such a measure is also enacted with the aim of protecting the interests of other third parties, namely the shareholders, the depositors and the financial system more generally – which should be protected at utmost urgency, being the systematically important bank be of a case.

A second critique focuses on the limitations of Directives in deploying direct effect in the Corneli v ECB case. EU Institution under a duty to enforce Union law (a Directive) is not in the same position as a private party invoking a Directive vis-à-vis another private party. It should be stated that the ECB as an EU Institution is under a specific duty to, above all, uphold Union law.

The entire system of limited direct effect of Directives is based on the default option of individual applicants having a right to bring damages actions against the Member State for breach of EU law. The case-law has been prone to limit the direct effect of Directives because, eventually, an individual can always rely on a damages action against the failing Member State. However, there is no such default option when the applicant that invokes the Directive is an EU Institution.

The General Court faced the dilemma of either sticking with the traditional orthodoxy as applied to situations of ordinary enforcement of EU law, or to try to accommodate the complex intricacies of the supervisory model into the pre-existing case-law. Unfortunately, the General Court sided with the former, creating a considerable enforcement gap in the Single Supervisory Mechanism and weakening the overall effectiveness of the framework. For now, we must wait and see if the Court of Justice will side with the latter.

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DEMOCRATIC AND SECURITY TRANSITION IN CONFLICT AND POST-CONFLICT STATES FROM THE PERSPECTIVE OF THE INTERNATIONAL COMMUNITY¹

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Abstract: The article focuses on the theoretical clarification of the framework of legal terms and institutes applicable to the period between the end of an armed conflict and the building of a peace. The aim of the paper is to highlight the international legal aspects associated with the democratic and security transition (especially through the definitions of two main terms – jus post bellum and transitional justice), precisely through the perspective of the international community (narrowed to the most important international organizations and main approaches) based on the lens of international public law.

Keywords: democratic transition, security transition, ius post bellum, transitional justice, international community, international law

JEL: K33, F51, F53

Introduction

The international community has a long history of engagement in conflict and post-conflict states. Conflict and post-conflict states are often characterized by instability, a lack of security, governance, basic services, and weak economies and limited infrastructure. Democratic transition involves a complex process of moving away from authoritarianism towards democracy, while security transition seeks to constructively transform institutions and processes in order to reduce the threat posed to social and political order by armed groups, often those that have been involved in armed conflict, civil war or other forms of violence.

The article focuses on the international legal theoretical clarification of the framework of legal terms and institutes applicable to the period between the end of an armed conflict and the building of a ("sustainable") peace, namely in states that have passed, or are currently (maybe repeatedly) in armed conflict (regardless of classification of armed conflict from an international legal perspective/ i.e. according to the law of armed conflicts). The peace process, as well as the implementation process of the peace agreement, should be considered extremely complex and for that reason (not only) it is sometimes without an effective and realistic (peace) result. „Despite the rising influence of international law in peace processes and peace agreements, there is no specific legal regime regulating transition from armed conflict to peace, and different branches of law can apply.“²

The aim of the paper is to highlight the international legal aspects associated with the democratic and security transition (especially through the definitions of two main terms – jus post bellum and transitional justice), precisely through the perspective of the international community (narrowed to the most important international organizations and main approaches) based on the lens of international public law. Due to the effective achievement of the aim,

¹ The paper was developed as a result of research carried out through the VEGA project No. 1/0842/21/ „Development of Cooperative Security and Position of the Slovak Republic“.

² ROJAS- OROZCO, C. (2021): International Law and Transition to Peace in Colombia. Assessing Jus Post Bellum in Practice, p. 6.

relevant research procedures and methods were chosen, i.e. basic research methods, especially logical methods (analysis, synthesis, abstraction, induction, deduction), and descriptive-causal methods.

1 Ius post bellum vs. Transitional Justice

Ius post bellum and Transitional Justice are two concepts that are often used interchangeably, but they are distinct from one another. Both concepts are discussed „with reference to the same phenomena, without realizing the overlap and potential confusion“³.

Ius post bellum is a set of legal norms applicable to a situation of transition from armed conflict to peace. „The concept of jus post bellum appeared as a space to hold the debate around the interaction between law and transition to peace, and to offer a normative framework for peacemaking and peacebuilding practice.“⁴ In this context, it should be emphasized that ius post bellum is still more of a theoretical than a normative concept. „There is no agreement on its content and scope as a legal concept.“⁵ One of the first concepts leading to the institutionalization of the "post" phase of the conflict was created by The International Commission on Intervention and State Sovereignty, but which eventually resulted in the "responsibility to protect" and thus was primarily related to the ius ad bellum question and the issue of humanitarian interventions. But in principle, it can be considered as a kind of newly emerging normative paradigm, especially considering the fact that international law is still largely referred as a bipolar system aimed at a strict distinction between a state of war and a state of peace. To some extent, it is arguable that the traditional dichotomy between the law applicable in war and the law applicable in peacetime is losing significance.⁶

In relation to the temporal scope of ius post bellum, there is a presumption of application after the end of an armed conflict, or after the termination of application of the law of armed conflicts (ius in bello). Determining the time frame or border point between these two applicable sets of legal norms is extremely difficult, and it is related both to the chaotic course of the armed conflict itself, as well as to the processes of peace negotiations through attempts to conclude a peace treaty, as well as to the consequent implementation process, which is usually marked by various transitional periods. „The reconstruction of states or territories emerging from conflict should be distinguished clearly from the nature and legality of the armed conflict.“⁷

Legal approaches to transitional justice are generally based on the obligations imposed on states through international human rights law and international humanitarian law, and thus, in particular, the obligation to cease, investigate, punish and remedy serious violations of human rights and also prevent these violations in the future.⁸ Within the UN, the issue of transitional justice is connected to processes leading to strengthening the rule of law.⁹ In its approach to transitional justice, the UN states that the situation in state to be replaced by a new system may be generally characterized by the „presence of widespread violations of fundamental rights, the breakdown of state institutions, the depletion of resources, greatly reduced security, and a

³ IVERSON, J. (2013): *Transitional Justice, Jus Post Bellum and International Criminal Law: Differentiating the Usages, History and Dynamics*, p. 3.

⁴ ROJAS- OROZCO, C. (2021): *International Law and Transition to Peace in Colombia. Assessing Jus Post Bellum in Practice*, p. 7.

⁵ ROJAS-OROZCO, C. (2021): *Jus Post Bellum: A Normative Framework for the Transition from Armed Conflict to Peace*, p. 23.

⁶ BRABANDERE, E.D. (2010): *The Responsibility for Post-Conflict Reform*, p. 121.

⁷ *Ibid*, p. 133.

⁸ CASSESE, A. (ed. 2009): *The Oxford Companion to International Criminal Justice*, p. 539.

⁹ See e.g. UN Doc. S/2004/616, or UN Doc. S/2011/634, *The Rule of law and transitional justice in conflict and post-conflict societies*, Report of the Secretary – General, 12 October 2011.

divided and deprived society."¹⁰ For the UN, transitional justice represents the full range of judicial and extrajudicial processes and mechanisms associated with society's efforts to deal with the legacy of widespread violations of fundamental rights in order to ensure accountability, justice and reconciliation. The UN document entitled *United Nations Approach to Transitional Justice*¹¹ from 2010 lists 10 key principles¹² that should be respected in UN activities related to transitional processes.

While *ius post bellum* and transitional justice share some similarities, such as the importance of the rule of law and the promotion of human rights, they have distinct differences in their approach and focus. *Ius post bellum* is primarily concerned with the legal framework for the transition from armed conflict to peace, while transitional justice focuses on the measures that are necessary for societies transitioning from conflict or repression to democracy.

2 Democratic Transition from the perspective of International Community and International Law

Democratic transition is a process of democratization where a state undergoes regime change away from a particular type of authoritarianism.¹³ In this context, it should be emphasized that the democratization of the state, and thus the transition from an authoritarian regime to democracy, is usually marked by a situation of armed conflict, or at least by a certain degree of escalation of tension in the state.

In relation to the definitions, democracy can be understood as „a political system where public decision making is subject to popular control and where all citizens have an equal right to participate in this process“¹⁴. In any case, the term democracy is not used in principle in international law, due to the fact accepted by the majority of international legal doctrine, i.e. that "international law generally does not deal with national constitutional issues, such as the way of government creation", and is primarily based on the principles of state sovereignty and the prohibition of interfering in the internal affairs of the state (the so-called prohibition of intervention). However, on the other hand, international instruments in the field of human rights such as The International Covenant on Civil and Political Rights has for a relatively long time enshrined the right of citizens to govern public affairs, and active and passive suffrage. Elections, as a procedural embodiment of the "sovereignty of the people", are particularly emphasized in the international community, despite the fact that the UN Commission on Human Rights included elections as only one criterion in a long list of "rights to democratic governance"¹⁵.

¹⁰ UN, Guidance Note of the Secretary – General, *United Nations Approach to Transitional Justice*, p. 3.

¹¹ *Ibid*, p. 2.

¹² These are the following principles: 1. Support and actively encourage compliance with international norms and standards when designing and implementing transitional justice processes and mechanisms 2. Take account of the political context when designing and implementing transitional justice processes and mechanisms 3. Base assistance for transitional justice on the unique country context and strengthen national capacity to carry out community-wide transitional justice processes 4. Strive to ensure women's rights 5. Support a child-sensitive approach 6. Ensure the centrality of victims in the design and implementation of transitional justice processes and mechanisms 7. Coordinate transitional justice programmes with the broader rule of law initiatives 8. Encourage a comprehensive approach integrating an appropriate combination of transitional justice processes and mechanisms 9. Strive to ensure transitional justice processes and mechanisms take account of the root causes of conflict and repressive rule, and address violations of all rights 10. Engage in effective coordination and partnerships/ UN, Guidance Note of the Secretary – General, *United Nations Approach to Transitional Justice*, p. 1.

¹³ ARUGAY, A.A. (2021): *Democratic Transitions*, p. 1.

¹⁴ See e.g. A report (2009) of the International Institute for Democracy and Electoral Assistance (International IDEA): *Democracy in Development: Global consultations on the EU's role in democracy building*, p. 17.

¹⁵ In this non-exhaustive list are, for example, included: (a) the rights to freedom of opinion and expression, of thought, conscience and religion, and of peaceful association and assembly; (b) the right to freedom to seek, receive and impart information and ideas through any media; (c) the rule of law; (d) the right of universal and equal

From the point of view of development in the international community, since 1945, "democratization" activity was noticeable not only, but mainly on the part of international organizations. Democratization is not only shaped by diffusion processes, but also promoted by international actors through external leverage.¹⁶ After the Cold War, international organizations were largely involved in activities leading to democratic elections (Nicaragua, El Salvador, Cambodia, Sierra Leone or Angola can be cited as examples). Not once did the international community suggest that the new post-conflict government should be chosen in a different (than democratic and democratizing) way¹⁷. This fact was also confirmed by the activity of e.g. the World Bank, as well as the European Union. „Democracy is one of the fundamental objectives of EU external action and the EU supports democracy building primarily through electoral assistance and human rights promotion.“¹⁸ One of the EU's most recent instruments in this area is the global human rights sanctions regime.¹⁹

And although the link between peace and democracy remains controversial, the direction of the UN through the setup built by Boutros Boutros-Ghali in his "Agenda for Democratisation"²⁰ remains preserved. For example, one of the aims of the mission in Haiti in 2004 (MINUSTAH) was to support the "constitutional and political process and to promote democratic governance and institutional development"²¹. In the situation that a mission with democratization tasks is established on the basis of Chapter VII of the UN Charter, and therefore is created by the UN Security Council for the primary purpose of maintaining peace and security - in that case, the consent of the sovereign state is not even necessary.

3 Security Transition from the perspective of International Community and International Law

The security transition usually includes the restoration of state sovereignty, a ceasefire, demilitarization and demobilization, and the restoration of the police and army's capacity for action. In the event of an armed conflict, the security transition generally precedes the democratic transition, or is carried out concurrently. The concept of security is linked to development. As Law mentions "security and development are interdependent – the concept that without security, development cannot not be secured; and that without development, neither can social peace, democratisation and justice."²²

The perception of security changed in the 1990s. The key moment was „1994 UNDP Human Development Report, which promoted an individual or human-centred understanding of security and defined this as freedom from fear“.²³ Considering the context of international relations and international public law - the state is the one that provides security to citizens,

suffrage, as well as free voting procedures and periodic and free elections; (e) the right to political participation; (f) transparent and accountable government institutions; (g) the right of citizens to choose their government system through constitutional or other democratic means; and (h) equal access to public service/ UN Commission on Human Rights (1999): Promotion of the Right to Democracy, Comm. HR Res. 1999/57.

¹⁶LIMPACH, S. – MICHAELOWA, K. (2010): The Impact of World Bank and IMF Programs on Democratization in Developing Countries, p. 6.

¹⁷ See e.g. QUASHIGAH, E.K. (1999): Legitimate Governance in Africa: The Responsibility of the International Community or REYCHLER, L. (1998): Democratic Peacebuilding and Conflict Prevention.

¹⁸ International IDEA (2009): Democracy in Development: Global consultations on the EU's role in democracy building, p. 12.

¹⁹ See BOCKOVÁ, L. (2021): European Union Global Human Rights Sanctions Regime, p. 95-101.

²⁰ Famous quotation: „a culture of democracy is fundamentally a culture of peace“/ U.N. Doc. A/51/761, Report of the Secretary-General on an Agenda for Democratisation, p. 7.

²¹ See UN Doc. S/RES/1542(2004) - Security Council resolution 1542 (2004) on establishment of the UN Stabilization Mission in Haiti (MINUSTAH).

²² LAW, D. M. (2006): The Post-Conflict Security Sector, p. 1.

²³ See UNDP (United Nations Development Programme), Human Development Report 1994: New Dimensions of Human Security.

precisely through the state security, defense and police forces. In the post-conflict or post-authoritarian period, when the state is identified as a failed state, these components do not work in relation to the given situation. From the perspective of the international community, the key priority is strengthening the rule of law and the position of state authorities, as the security of the state's residents is tied to politics. „Citizen security is influenced by politics – the political climate, policies and decisions that sanction certain forms of behaviour and shape institutional responses to insecurity.“²⁴ In relation to the security transition, in the international community is mentioning „the reform the security sector (SSR)“. The UN Security Council Resolution 2151 (2014)²⁵ stresses that SSR in post-conflict environments is critical to the consolidation of peace, stability and good governance, preventing countries from relapsing in conflict. But the reform of the security sector cannot be done without the reform of the judiciary. According to the European Union - both of these reforms represent „measures promoting integrity, legitimacy, accountability, guaranteeing the principles of representation and responsiveness of public institutions, and strengthening democratic oversight and control“²⁶. Demobilisation, Disarmament, and Reintegration (DDR) programs are part of the SSR process, and at the same time, it should be noted that the institutional as well as legislative changes themselves, which include transitive mechanisms, are part of the concept of transitional justice.

Conclusion

The importance of post-conflict reconstruction and the evolution of the United Nations and states policies geared toward tackling the root causes of conflicts are beyond doubt²⁷. However, post-conflict assistance represents an interference with the sovereignty of the state. And that regardless of the legality/illegality of that assistance and the extent and content of this intervention. The unifying elements of the democratic and security transition are the rule of law and the human rights level aimed at the protection of the individual. Rule of law in the state means the performance of functions in the state interactively and independently in full compliance with the law.

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²⁴ VALTERS, C. – RABINOWITZ, G. – DENNEY, L. (2014): Security in postconflict contexts: What counts as progress and what drives it? p. 5.

²⁵ See UN Doc. S/RES/2151(2014) - Security Council Resolution 2151 (2014) on security sector reform.

²⁶ See e.g. FLURI, P. - SPENCE, D. (2008): The European Union and Security Sector Reform.

²⁷ BRABANDERE, E.D. (2010): The Responsibility for Post-Conflict Reform, p. 121.

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TERRITORIAL ALLOCATION OF THE VISEGRAD GROUP COUNTRIES' BILATERAL DEVELOPMENT AID¹

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Abstract: The Visegrad Group countries, also sometimes referred to as “re-emerging” donors, provided development aid during the Communist period and later re-launched their development aid programmes at the beginning of the 21st century. Nowadays, they are members of the OECD Development Assistance Committee, which brings together the world’s largest official aid donors. The present paper focuses on a bilateral component of development aid provided by the Visegrad countries. The aim of the paper is to examine and compare the territorial allocation of bilateral aid provided by the Visegrad Group countries over the period 2003 – 2021. The results show that there are several commonalities among the Visegrad countries in terms of bilateral aid allocation, such as consistency between declared territorial priorities and the actual aid disbursements, similar composition of the largest recipient countries, strong focus on middle-income partner countries, especially European states in immediate neighbourhood, and other similarities. However, the Visegrad countries’ bilateral aid seems to be territorially fragmented, less focused on those countries where aid is most needed, and driven by donor’s self-interests.

Key words: Visegrad countries, foreign aid, bilateral ODA, territorial allocation

JEL: F35, F50

Introduction

The Visegrad Group (V4) countries, consisting of Czechia, Hungary, Poland and Slovakia, started to provide official development assistance (ODA) to a greater extent after completion of the transition process towards democracy and a market economy, as well as after joining the European Union in 2004. These Central European countries became members of the OECD Development Assistance Committee (DAC), which brings together the world’s largest aid donors, in 2013 (Czechia, Poland and Slovakia) and 2016 (Hungary).² The V4 countries are often referred to as “new” or “emerging” donors, differentiating them from “old” traditional Western donors with a longer history of providing development aid. From another perspective, the term “re-emerging” donors is also used when talking about the Visegrad countries due to their past experience in providing foreign assistance to developing countries from the Communist period.³ However, development assistance provided by the Visegrad countries was suspended during the transition period of the 1990s, turning these countries from donors of aid into recipients.⁴ Development aid programmes of the V4 countries were re-launched at the beginning of the 21st century. The Visegrad countries adopted strategic

¹ This paper is part of the project of young teachers, researchers and PhD students EUBA named “Development assistance of the Slovak Republic. Evaluation of two decades of Slovak development aid provision and its future” (*Rozvojová spolupráca Slovenskej republiky. Zhodnotenie dvoch dekád poskytovania slovenskej rozvojovej pomoci a jej budúcnosť*) no. I-23-104-00.

² OECD (2023): Development Assistance Committee (DAC).

³ SZENT-IVÁNYI, B. – TÉTÉNYI, A. (2008): Transition and Foreign Aid Policies in the Visegrád Countries: A Path Dependent Approach.

⁴ SZENT-IVÁNYI, B. – LIGHTFOOT, S. (2015): New Europe’s New Development Aid, p. 53.

documents regulating their development cooperation between 2001 and 2003.⁵ Currently, the V4 countries are well-established within the international donor community. According to data from 2021, the share of ODA provided in the Visegrad countries' GNI represents 0.13% (Czechia, Slovakia), 0.15% (Poland) and 0.29% (Hungary).⁶ This indicates that most of the Visegrad countries are still far from reaching their political commitment at the EU level to increase ODA up to 0.33% of GNI by 2030, or even from more ambitious international commitment to achieve 0.7% ODA to GNI ratio.

Even though the bulk of the Visegrad Group countries' ODA tends to be provided multilaterally, especially through the European Union institutions, this paper focuses on a bilateral component of development aid provided by those countries. The present paper deals with the patterns of geographical distribution of the Visegrad Group countries' bilateral development aid. In this context, the aim of this paper is to examine and compare the territorial allocation of bilateral ODA provided by the Visegrad Group countries over the period 2003 – 2021. This paper attempts to answer the following research questions *RQ1: Is the geographical distribution of the V4 countries' bilateral ODA consistent with the territorial priorities stated in official documents or other national strategies?* and *RQ2: What are the similarities between the Visegrad countries in terms of the territorial distribution of their bilateral development aid?* Regarding methodology, we apply comparative analysis using data on development aid disbursements, representing donor's actual expenditures on ODA, retrieved from the OECD database.

This paper is organized as follows. Section 1 provides an overview of literature on development aid provided by the Visegrad donors. It also identifies the territorial priorities of the V4 countries in terms of development aid allocation patterns. Section 2 is dedicated to analysis and comparison of the actual territorial allocation of the Visegrad Group countries' bilateral official development assistance, using data on aid disbursements obtained from the OECD database. Last section concludes the present paper with the main findings and answers the research questions asked above.

1 Literature Review

Researchers such as Szent-Iványi⁷, Opršal et al.⁸, Jančovič and Szabó⁹ and others argue that geographical proximity and historical relations with recipient countries are fundamental factors determining the Visegrad countries' bilateral development aid allocation. Szent-Iványi examines the allocation of the Visegrad countries' aid resources and finds that these countries distribute most of bilateral ODA primarily to the recipient countries in their immediate neighbourhood and countries “inherited” from the Communist era.¹⁰ He also emphasizes that there are some individual country characteristics. Similar results are obtained by Opršal et al. who argue that the Czech Republic and Poland prioritise the post-Soviet recipient countries, reflecting geopolitical self-interests of donor countries, as well as recipients situated in a closer proximity.¹¹ Jančovič and Szabó examine determinants influencing territorial allocation of Slovak bilateral ODA and come to a similar conclusion that Slovakia prefers geographically closer recipient countries with similar historical experience from the Communist era

⁵ KUGIEL, P. (2012): The Development Cooperation Policies of Visegrad Countries – An Unrealistic Potential.

⁶ OECD (2023): Development Co-operation Profiles.

⁷ SZENT-IVÁNYI, B. (2012): Aid Allocation of the Emerging Central and Eastern European Donors.

⁸ OPRŠAL, Z. et al. (2021): Polish and Czech foreign aid: a ‘mélange’ of geopolitical and developmental objectives.

⁹ JANČOVIČ, P. – SZABÓ, J. (2022): Principal Determinants of Territorial Allocation of the Slovak Republic's Bilateral Development Aid: Path-Dependent Trajectory?

¹⁰ SZENT-IVÁNYI, B. (2012): Aid Allocation of the Emerging Central and Eastern European Donors.

¹¹ OPRŠAL, Z. et al. (2021): Polish and Czech foreign aid: a ‘mélange’ of geopolitical and developmental objectives.

and subsequent transition period.¹² Therefore, it can be expected that the largest recipient countries of the V4 countries' development aid are post-Communist countries, Eastern European and Western Balkan states.

There exist some common characteristics that influence bilateral development aid of the V4 countries in terms of territorial priorities as well as volume of resources allocated to partner countries, such as similar historical context¹³ from economic and political development point of view, small size of the Visegrad countries, limited economic ties with developing countries¹⁴ and limited financial resources allocated to development aid. In addition to that, all Visegrad donors share the same strong comparative advantage in development cooperation with partner countries, resulting from their own experience from successful political and economic transition to democracy and a market economy, as well as from integration within the European Union.¹⁵ According to OECD Development Cooperation Peer Reviews,¹⁶ another common feature of the Visegrad donors is the geographical fragmentation of bilateral development aid. This means that relatively small aid budgets are spread across many partner countries and a high share of small short-term interventions, which could undermine development aid efficiency.¹⁷

Szent-Iványi and Lightfoot argue that one of the commonalities among the East-Central European donors, including the V4 countries, in terms of their aid allocation patterns is relatively low attention towards the "traditional" recipient countries of ODA in Sub-Saharan Africa.¹⁸ In this regard, the Visegrad countries tend to be criticized for not providing enough aid to the least developed countries with the largest developmental needs, especially in Sub-Saharan Africa,¹⁹ as much of the V4 countries' bilateral ODA is directed towards middle-income Eastern and Southern European countries. From another perspective, authors such as Dreher et al. find that "new" donors, including Hungary, Poland and Slovakia, care, on average, less for recipient needs than "old" traditional donors.²⁰ They also argue that Central European donors' development aid appears to be regionally concentrated and that their poverty orientation is weaker than that of the "old" donors. Similar results are obtained by Kugiel who argue that development policies of the V4 countries are highly politicised and donor-driven.²¹ This implies that development assistance is used as a political tool to support donors' economic and political interests rather than meet developmental needs of the recipient countries. Furthermore, some researchers, such as Szent-Iványi, label the Visegrad countries as "egoistic" donors when it comes to decision-making on territorial allocation of their bilateral development aid.²²

Territorial priorities of the Visegrad countries' bilateral development assistance are mentioned in national strategic documents devoted to development cooperation policies of these countries. Development Cooperation Strategy of the Czech Republic 2018 – 2030 states that the Czech Republic will cooperate with low-income as well as middle-income countries

¹² JANČOVIČ, P. – SZABÓ, J. (2022): Principal Determinants of Territorial Allocation of the Slovak Republic's Bilateral Development Aid: Path-Dependent Trajectory?

¹³ KUGIEL, P. (2012): The Development Cooperation Policies of Visegrad Countries – An Unrealistic Potential.

¹⁴ SZENT-IVÁNYI, B. (2012): Aid Allocation of the Emerging Central and Eastern European Donors.

¹⁵ KUGIEL, P. (2012): The Development Cooperation Policies of Visegrad Countries – An Unrealistic Potential.

¹⁶ See, for instance, OECD (2016): OECD Development Co-operation Peer Reviews: Czech Republic 2016.

¹⁷ OECD (2023): OECD Development Co-operation Peer Reviews: Hungary 2023.

¹⁸ SZENT-IVÁNYI, B. – LIGHTFOOT, S. (2015): New Europe's New Development Aid, p. 63.

¹⁹ See, for instance, KOPIŃSKI, D. (2012): Visegrad Countries' Development Aid to Africa: Beyond the Rhetoric.

²⁰ DREHER, A. et al. (2011): Are 'New' Donors Different? Comparing the Allocation of Bilateral Aid Between nonDAC and DAC Donor Countries.

²¹ KUGIEL, P. (2012): The Development Cooperation Policies of Visegrad Countries – An Unrealistic Potential.

²² SZENT-IVÁNYI, B. (2012): Aid Allocation of the Emerging Central and Eastern European Donors.

in a balanced way.²³ Czech Republic's priority countries for the period 2018 – 2023 include three middle-income countries, such as Bosnia and Herzegovina, Georgia and Moldova, and three least developed countries, such as Cambodia, Ethiopia and Zambia. Afghanistan, Syria and Ukraine were included among the so-called "specific" countries, made up of fragile countries with special needs of humanitarian, stabilization and development assistance.²⁴ According to Hungary's International Development Cooperation Strategy for the period 2020 – 2025, Hungary's main partner countries are in the European Neighbourhood and the Eastern Partnership, which is consistent with its foreign policy interests.²⁵ This document also states that Hungary will focus more on African continent, especially Sub-Saharan Africa, as well as the Middle East. The strategy for the period 2020 – 2025 does not mention specific partner countries of Hungarian bilateral development assistance. However, the previous International Development Cooperation Strategy for the period 2014 – 2020 listed Afghanistan, Bosnia and Herzegovina, Iraq, Yemen, Cambodia, Kyrgyzstan, Laos, Kosovo, North Macedonia, Moldova, Mongolia, Montenegro, Palestine, Serbia, Ukraine, Vietnam and Sub-Saharan countries as Hungary's partner countries in development assistance.²⁶

Geographical priorities of Polish development cooperation are defined in the Multiannual Programme for Development Cooperation for 2021 – 2030: Solidarity for Development.²⁷ The document states that partner countries are selected from among countries belonging to the European Neighbourhood Policy, including the Eastern Partnership countries, and selected Middle Eastern, North African and Sub-Saharan countries.²⁸ Currently, Poland's priority countries comprise four Eastern Partnership countries (Belarus, Georgia, Moldova and Ukraine), two Middle East countries (Lebanon and Palestine) and four countries of Sub-Saharan Africa (Ethiopia, Kenya, Senegal and Tanzania).²⁹ These partner countries belong to the long-term priorities of Polish bilateral development cooperation, as they are listed in the previous Multiannual Development Cooperation Programme for 2016 – 2020.³⁰ Territorial priorities of the Slovak Republic's development assistance, laid out in the Medium-Term Strategy for Development Cooperation of the Slovak Republic for 2019 – 2023, consist of partner countries and programme countries with which Slovakia has more intensive development cooperation and where allocates more financial and human resources.³¹ Slovakia's partner countries for the period 2019 – 2023 include the Western Balkans (Albania, Bosnia and Herzegovina, Kosovo, North Macedonia and Serbia), Eastern Partnership (Belarus, Georgia, Moldova and Ukraine), East Sub-Saharan Africa (Burundi, Ethiopia, Eritrea, South Sudan, Kenya, Rwanda, Somalia, Tanzania and Uganda) and the Middle East (Iraq, Jordan, Lebanon, Syria and Afghanistan). Kenya, Moldova and Georgia represent programme countries of Slovak bilateral development assistance over the period 2019 – 2023. The Slovak Republic's priority countries are in principle consistent and do not change significantly over time.³²

²³ MFA OF THE CZECH REPUBLIC (2017): Development Cooperation Strategy of the Czech Republic 2018 – 2030.

²⁴ MFA OF THE CZECH REPUBLIC (2023): Bilateral development cooperation.

²⁵ MFAT OF HUNGARY (2023): International Development Cooperation Strategy for the period 2020 – 2025.

²⁶ MFAT OF HUNGARY (2014): International Development Cooperation Strategy and Strategic Concept for International Humanitarian Aid of Hungary 2014 – 2020.

²⁷ MFA REPUBLIC OF POLAND (2021): Multiannual Programme for Development Cooperation for 2021 – 2030: Solidarity for Development.

²⁸ Ibid.

²⁹ STATISTICS POLAND (2023): Development Cooperation.

³⁰ MFA REPUBLIC OF POLAND (2018): Multiannual Development Cooperation Programme for 2016 – 2020.

³¹ MFEA OF THE SLOVAK REPUBLIC (2019): Medium-Term Strategy for Development Cooperation of the Slovak Republic for 2019-2023.

³² JANČOVIČ, P. – SZABÓ, J. (2022): Principal Determinants of Territorial Allocation of the Slovak Republic's Bilateral Development Aid: Path-Dependent Trajectory?

The above-mentioned Visegrad countries' territorial priorities have some common features in terms of individual country's bilateral development aid allocation patterns. First, all the V4 countries identify the Eastern Partnership countries, especially Georgia, Moldova and Ukraine, as territorial priorities of their bilateral development cooperation. Second, all the Visegrad countries mention Sub-Saharan Africa and the Middle East, either specific countries of the regions or the regions as a whole, as their territorial priorities in official documents devoted to development cooperation.

2 Results and Discussion

Table 1 reports the largest recipient countries of the Visegrad countries' bilateral official development aid over the most recent four-year period (2018 – 2021) in order to assess consistency between declared territorial priorities and the actual allocation of the V4 countries' bilateral aid. In general, most of the largest recipients are consistent with the territorial priorities of the V4 countries (highlighted in bold in table 1) stated in official documents devoted to development cooperation strategies. Given the fact that the V4 countries are relatively small donors with limited resources allocated to bilateral ODA, the Czech Republic's strategy seems to be the most appropriate, as the country clearly defined only six priority countries and three "specific" countries with special needs for development assistance, and all these priorities belong to the 13 largest recipients of Czech bilateral aid over the period 2018 – 2021. On the other hand, the other V4 countries identified more territorial priorities in their official documents compared to the Czech Republic, and not all territorial priorities are among the 20 largest ODA recipients in the period of 2018 – 2021. In addition to that, bilateral ODA provided by the Visegrad countries seems to be territorially fragmented, as the Visegrad donors tend to allocate bilateral aid to a large number of partner and non-partner recipient countries with relatively small amounts of ODA disbursed. These findings are supported by Dufková and Šálek³³, Mazur and Banach³⁴, Sládková and Kaba³⁵ and others who argue that bilateral aid provided by the Visegrad countries is geographically fragmented, which may constitute an obstacle to making development aid more effective.

Table 1 also shows that the V4 countries' bilateral ODA is mostly focused on middle-income countries. According to OECD data, the Czech Republic allocated 53.3%, Hungary 83.2%, Poland 87.9% and Slovakia 75.2% of bilateral ODA to middle-income countries in 2020.³⁶ Over the period under examination, the Visegrad countries' bilateral ODA was primarily focused on European states, especially the Eastern Partnership (Ukraine, Belarus, Moldova, Georgia, Armenia and Azerbaijan) and Western Balkan (Serbia, Bosnia and Herzegovina, Montenegro, North Macedonia and Albania) countries. An intensive Visegrad countries' development cooperation with European partner countries can be explained by the use of the declared comparative advantage, which consists in their own experience from successful transition to democracy and a market economy, as well as from integration into the EU and NATO. However, as outlined in the OECD Development Co-operation Peer Review of the Slovak Republic³⁷, the Visegrad countries should re-define their comparative advantage in development cooperation and adapt it to the recipient countries where aid is most needed (low-income countries and least developed countries), since those countries do not have similar trajectory consisting in political and economic transition process and Euro-Atlantic integration. On the other side, the share of least developed countries (LDCs) in total bilateral

³³ DUFKOVÁ, G. – ŠÁLEK, P. (2022): Effects of Development Aid on Donor's Exports: A Case of the Czech Republic.

³⁴ MAZUR, G. – BANACH, J. (2021): V4 & Development Co-operation Policy.

³⁵ SLÁDKOVÁ, Z. – KABA, D. (2021): AidWatch 2021.

³⁶ OECD (2023): Development Co-operation Profiles.

³⁷ OECD (2019): OECD Development Co-operation Peer Reviews: Slovak Republic 2019.

aid provided by the V4 countries remains at low levels. In 2020, the Czech Republic allocated 24.3%, Hungary 6.4%, Poland 6.8% and Slovakia 6.1% of bilateral ODA to LDCs, whereas the DAC country average was 24.4%.³⁸ Between 2010 – 2020, the V4 countries allocated, on average, 21.8% (Czechia), 12.3% (Hungary), 21.5% (Poland) and 8% (Slovakia) of bilateral aid to LDCs,³⁹ indicating that the Czech Republic and Poland tend to allocate more ODA to LDCs as compared to Hungary and Slovakia.

Table 1: Largest recipient countries of the Visegrad countries' bilateral ODA in the period 2018 – 2021 (in million US\$ at 2021 constant prices)

<i>Rank</i>	<i>Czech Republic</i>	<i>Hungary</i>	<i>Poland</i>	<i>Slovak Republic</i>
1.	Serbia (30.19)	Serbia (67.61)	Ukraine (323.29)	Serbia (24.14)
2.	BiH (23.31)	Laos (58.49)	Belarus (201.41)	Kenya (8.24)
3.	Ethiopia (22.01)	Ukraine (56.00)	Myanmar (62.97)	Ukraine (5.80)
4.	Moldova (20.73)	Syria (47.17)	Tanzania (57.08)	Türkiye (5.21)
5.	Türkiye (17.08)	Jordan (40.69)	Türkiye (54.61)	Moldova (3.98)
6.	Georgia (16.47)	Vietnam (28.27)	India (24.13)	Rwanda (3.56)
7.	Ukraine (15.21)	Mongolia (23.93)	Mongolia (22.44)	Georgia (3.37)
8.	Iraq (13.74)	Türkiye (22.60)	Kenya (21.06)	Lebanon (3.04)
9.	Zambia (11.83)	Iraq (21.42)	Bangladesh (18.30)	Iraq (2.19)
10.	Syria (10.82)	China (20.60)	Vietnam (15.50)	Afghanistan (1.88)
11.	Jordan (9.51)	Uganda (19.17)	Lebanon (14.79)	Montenegro (1.78)
12.	Afghanistan (8.68)	Azerbaijan (17.33)	Georgia (12.46)	BiH (1.77)
13.	Cambodia (8.06)	Pakistan (16.77)	Iraq (11.84)	Albania (1.76)
14.	Mali (7.59)	India (16.42)	Nigeria (10.81)	Yemen (1.52)
15.	Myanmar (5.56)	Kazakhstan (16.37)	Moldova (9.97)	Armenia (1.44)
16.	Niger (4.60)	Tunisia (15.49)	Syria (9.68)	Algeria (1.40)
17.	Egypt (4.51)	Lebanon (13.92)	Iran (9.07)	South Sudan (1.40)
18.	Lebanon (4.33)	Iran (13.89)	Kazakhstan (7.64)	Congo (1.40)
19.	Belarus (4.13)	BiH (13.01)	Azerbaijan (6.45)	Syria (1.36)
20.	North Macedonia (3.50)	Brazil (12.51)	Palestine (5.68)	Indonesia (1.27)

Note: BiH refers to Bosnia and Herzegovina. Territorial priorities are highlighted in bold.

Source: OECD (2023): Aid (ODA) disbursements to countries and regions [DAC2a].

The largest recipient countries of total bilateral ODA provided by the V4 countries over the period 2003 – 2021, shown in Table 2, can be divided into three main groups. The first group contains recipient countries in immediate neighbourhood, such as the Western Balkan and Eastern Partnership countries. All the Visegrad Group countries declare that the countries in the EU's neighbourhood belong to their territorial priorities due to national interests,

³⁸ OECD (2023): Development Co-operation Profiles.

³⁹ OECD (2023): Development Co-operation Profiles.

which consist in strengthening security^{40,41}, as well as ensuring stability⁴² and prosperity⁴³ in immediate neighbourhood. Closer and intensive bilateral development cooperation with neighbouring European states can also be explained by the fact the Visegrad countries, especially Hungary and Poland, have sizeable minorities in some of these recipient countries, and thus bilateral ODA may be seen as a tool for supporting them.⁴⁴ The second group includes conflict-affected countries and countries with fragile context, such as Afghanistan, Iraq, Jordan, Syria and Sudan (Table 2). Similarly, Szent-Iványi defines a separate group of the V4 countries' recipients, comprising Afghanistan and Iraq, which receive bilateral aid as a result of international obligations as NATO members.⁴⁵ In addition, countries with special needs for development cooperation, such as countries affected by migration and refugee crisis (e.g., Türkiye), can be added to the second group of the V4 countries' bilateral aid recipients. The V4 countries have started to provide relatively high volumes of bilateral ODA to Türkiye since 2016, reflecting their contributions to the EU Facility for Refugees in Türkiye.⁴⁶ Thereby, international obligations of the Visegrad countries resulting from NATO membership may be extended by commitments arising from EU membership. As pointed out by Szent-Iványi, the third group of largest recipients includes partner countries "inherited" from the Communist period⁴⁷, such as Mongolia, Vietnam, Laos, Angola and Ethiopia, which were members, associate members or observers of the Council for Mutual Economic Assistance (Comecon) and their economies were supported by Soviet Union and its satellite states.

Table 2: Largest recipient countries of the Visegrad countries' bilateral ODA in the period 2003 – 2021 (in million US\$ at 2021 constant prices)

<i>Rank</i>	<i>Czech Republic</i>	<i>Hungary</i>	<i>Poland</i>	<i>Slovak Republic</i>
1.	Afghanistan (184.44)	Serbia (126.16)	Ukraine (571.54)	Sudan (67.99)
2.	Iraq (149.35)	Iraq (109.89)	Belarus (430.92)	Serbia (51.62)
3.	Serbia (113.18)	Ukraine (100.54)	Angola (183.25)	Liberia (24.16)
4.	BiH (80.92)	Laos (69.53)	Ethiopia (131.21)	Kenya (24.12)
5.	Moldova (78.66)	Jordan (52.49)	Türkiye (109.21)	Afghanistan (20.71)
6.	Mongolia (66.99)	Syria (48.89)	China (104.15)	Ukraine (19.42)
7.	Ukraine (65.3)	Vietnam (44.51)	Tanzania (93.15)	Moldova (9.94)
8.	Ethiopia (57.82)	Türkiye (44.35)	Myanmar (65.83)	BiH (9)
9.	Georgia (57.78)	BiH (41.08)	Georgia (56.21)	Georgia (8.46)
10.	Vietnam (35.49)	Afghanistan (39.6)	Afghanistan (45.59)	Iraq (6.59)

Note: BiH refers to Bosnia and Herzegovina.

Source: OECD (2023): Aid (ODA) disbursements to countries and regions [DAC2a].

⁴⁰ MFA OF THE CZECH REPUBLIC (2017): Development Cooperation Strategy of the Czech Republic 2018 – 2030.

⁴¹ MFAT OF HUNGARY (2014): International Development Cooperation Strategy and Strategic Concept for International Humanitarian Aid of Hungary 2014 – 2020.

⁴² MFA REPUBLIC OF POLAND (2021): Multiannual Programme for Development Cooperation for 2021 – 2030: Solidarity for Development.

⁴³ MFEA OF THE SLOVAK REPUBLIC (2019): Medium-Term Strategy for Development Cooperation of the Slovak Republic for 2019-2023.

⁴⁴ SZENT-IVÁNYI, B. – LIGHTFOOT, S. (2015): New Europe's New Development Aid, p. 64.

⁴⁵ SZENT-IVÁNYI, B. (2012): Aid Allocation of the Emerging Central and Eastern European Donors.

⁴⁶ OECD (2023): Development Co-operation Profiles.

⁴⁷ SZENT-IVÁNYI, B. (2012): Aid Allocation of the Emerging Central and Eastern European Donors.

Between 2003 and 2021, Czech, Hungarian and Polish bilateral aid was mainly directed to Europe and Asia, while Slovak bilateral aid was mostly focused on Europe and Africa (Table 3). Poland allocated almost half of the total bilateral ODA provided between 2003 – 2021 to Europe, whereas the other V4 countries allocated to European states one quarter of their total bilateral aid. In terms of the V4 development cooperation with European countries, the Czech Republic, Hungary and Slovakia allocated more aid to Western Balkan countries than to Eastern European states. On the contrary, Poland’s bilateral ODA was directed towards Eastern European countries rather than Western Balkan states (Table 3). The increased orientation of the V4 countries towards development cooperation with European countries can be demonstrated by comparing the share of bilateral ODA provided to European recipients by Visegrad donors (24.66% – 46.46%) and all official DAC donors (3.04%) between 2003 – 2021 (Table 3). This indicates that the Visegrad countries’ bilateral aid provided to European countries is influenced by national foreign and security policy interests, as stated in strategic documents devoted to development cooperation of the Visegrad Group countries, as well as geographical proximity and historical ties.

Table 3: Allocation of the V4 countries’ development aid by selected regions, % of total bilateral ODA provided between 2003 – 2021 (at 2021 constant prices)

<i>Region</i>	<i>Czech Republic</i>	<i>Hungary</i>	<i>Poland</i>	<i>Slovak Republic</i>	<i>All DAC countries</i>
Europe	26.24%	25.75%	46.46%	24.66%	3.04%
Eastern Europe	9.16%	7.65%	40.02%	6.26%	0.76%
Western Balkans	13.61%	14.30%	1.96%	15.31%	1.29%
Africa	11.07%	13.98%	20.40%	26.95%	31.34%
North of Sahara	1.29%	3.56%	0.70%	0.59%	2.09%
South of Sahara	9.55%	9.57%	19.19%	26.03%	27.73%
<i>Eastern Africa</i>	<i>5.61%</i>	<i>5.58%</i>	<i>11.04%</i>	<i>20.35%</i>	<i>13.40%</i>
America	5.98%	2.17%	1.71%	0.95%	7.07%
Asia	40.74%	44.14%	25.92%	14.73%	27.93%
Far East Asia	8.71%	13.62%	7.56%	1.89%	4.69%
South & Central Asia	17.58%	11.32%	11.64%	8.91%	12.01%
Middle East	14.37%	19.21%	6.76%	3.58%	10.37%
Oceania	0.01%	0.01%	0.01%	N/A	1.69%

Note: Eastern Europe includes Belarus, Moldova and Ukraine.

Source: OECD (2023): Aid (ODA) disbursements to countries and regions [DAC2a].

Regarding African recipient countries, the Slovak Republic and Poland allocated substantially higher share of their bilateral ODA to African states as compared to the Czech Republic and Hungary in the period 2003 – 2021. However, the share of African states in total bilateral ODA provided by Visegrad donors over the period 2003 – 2021, except for Slovakia, is considerably lower than the share of bilateral aid provided by all DAC countries to Africa in the same period of time (Table 3). This is supported by Mazur and Banach who argue that the V4 countries, with the exception of Slovakia, are less involved in development assistance addressed to African countries in comparison to other official DAC donors.⁴⁸ The common characteristics of the V4 donors include weak focus on North African countries, as well as the preference for Eastern African states in terms of development cooperation with Sub-Saharan Africa. Another characteristic of the V4 countries’ bilateral development

⁴⁸ MAZUR, G. – BANACH, J. (2021): V4 & Development Co-operation Policy.

cooperation is insignificant share of ODA provided to the recipient countries from Latin America and the Caribbean and Oceania (Table 3).

Conclusion

The aim of this paper was to examine and compare the territorial allocation of bilateral ODA provided by the Visegrad Group countries over the period 2003 – 2021. This paper also attempted to answer the following research questions *RQ1: Is the geographical distribution of the V4 countries' bilateral ODA consistent with the territorial priorities stated in official documents or other national strategies?* and *RQ2: What are the similarities between the Visegrad countries in terms of the territorial distribution of their bilateral development aid?*

In response to *RQ1*, most of the largest recipients of the Visegrad countries' bilateral ODA are consistent with the territorial priorities stated in official documents devoted to development cooperation strategies. However, bilateral ODA provided by Visegrad donors seems to be geographically fragmented, since the V4 countries are relatively small donors with limited resources allocated to bilateral development assistance, which are distributed among a large number of partner as well as non-partner recipient countries. In response to *RQ2*, there are several commonalities in terms of the territorial allocation of the Visegrad countries' bilateral development aid. First, the Visegrad countries declare the same comparative advantage in development cooperation, resulting from their successful transition to democracy and a market economy, as well as from Euro-Atlantic integration. Second, bilateral aid is mostly directed to middle-income countries, especially Eastern Partnership and Western Balkan states. Third, a weak orientation towards least developed countries as compared with other official aid donors. Fourth, the V4 countries declare that territorial priorities are selected in accordance with national interests, consisting in security, stability and prosperity in immediate neighbourhood, which indicates an egoistic approach to bilateral development cooperation. Fifth, the largest recipients over the period 2003 – 2021 include countries in immediate neighbourhood, countries with fragile context and special needs for development assistance, and countries with which the Visegrad states cooperated during the Communist period.

Regarding policy recommendations, the Visegrad countries should re-define their comparative advantage in development cooperation, as most of the recipients where it can be exploited belong to middle-income countries with less need for development assistance. In addition, the V4 donors should focus more on poorer developing countries, especially least developed countries, in order to meet international commitments and fight against global poverty. Although some Visegrad countries have taken steps to reduce geographical fragmentation of their bilateral ODA, it would be more efficient to focus on even fewer partner countries with larger amounts of aid disbursed.

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LITHIUM MARKET IN CHILE

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Abstract: In the article, we deal with the lithium market in Chile. After defining the basic trends in the world, it approximates the current reserves and production of lithium in Chile. In the paper, we analyze the development of lithium mining and export in Chile compared to the world. Chile dominates the top ranks of the lithium market in all categories. Lithium mining also brings certain risks: changes in biodiversity, ecosystems, fauna and flora; socio-economic conflict with local communities; and etc. However, extracting lithium from brines is less harmful to the environment than extracting lithium from rocks using sulfuric acid.

Keywords: Chile, lithium reserves, lithium production

JEL: F10, Q31, Q33

Introduction

Lithium, also known as white gold or white oil, has become an important and strategic raw material over the past decade. In connection with sustainable development and reduction of energy consumption, the concept of electromobility has been developed. It is related to the increased interest and demand for lithium as one of the main raw materials for electric batteries used in vehicles, mobile and other electronic devices. Lithium is also used in traditional industries: in the production of glass, ceramics, metallurgy, the chemical industry, but also in medicine.

In order to meet the goals of the Paris Agreement, the amount of mineral resources needed for "clean energy" technologies is expected to quadruple between 2020 and 2040, and the role of the Latin American region is and will be significant in this process.¹ Since the beginning of the new millennium, global lithium production has increased by approximately 20% per year.²

The supply chain of lithium batteries consists of several stages: mining itself, refining, synthesis of cathode active materials, manufacturing of battery cells and assembly of battery blocks, which usually take place at different locations in different countries.³

Chile owns the largest reserves of lithium, while Chile's production makes up one third of global production. We assume that the importance of lithium is crucial for the economy of Chile and will have growing potential in the future. In this paper, we examine the lithium market in Chile and its position in the world. First, we analyze the largest producers in the world and the countries with the highest proven reserves of lithium. Subsequently, we describe the specifics of the Chilean lithium market. Through analysis and comparison, we examine the importance of lithium for the economy of Chile and the development of the lithium market, especially over the last decades.

¹ ODELL, S. D. – BEBBINGTON, A. (2023): Mine ownership and community relations: Comparing hydrosocial dynamics of public and private companies in Chile, p. 2.

² LIU, W. et al. (2019): Spatiotemporal patterns of lithium mining and environmental degradation in the Atacama Salt Flat, Chile, p. 1

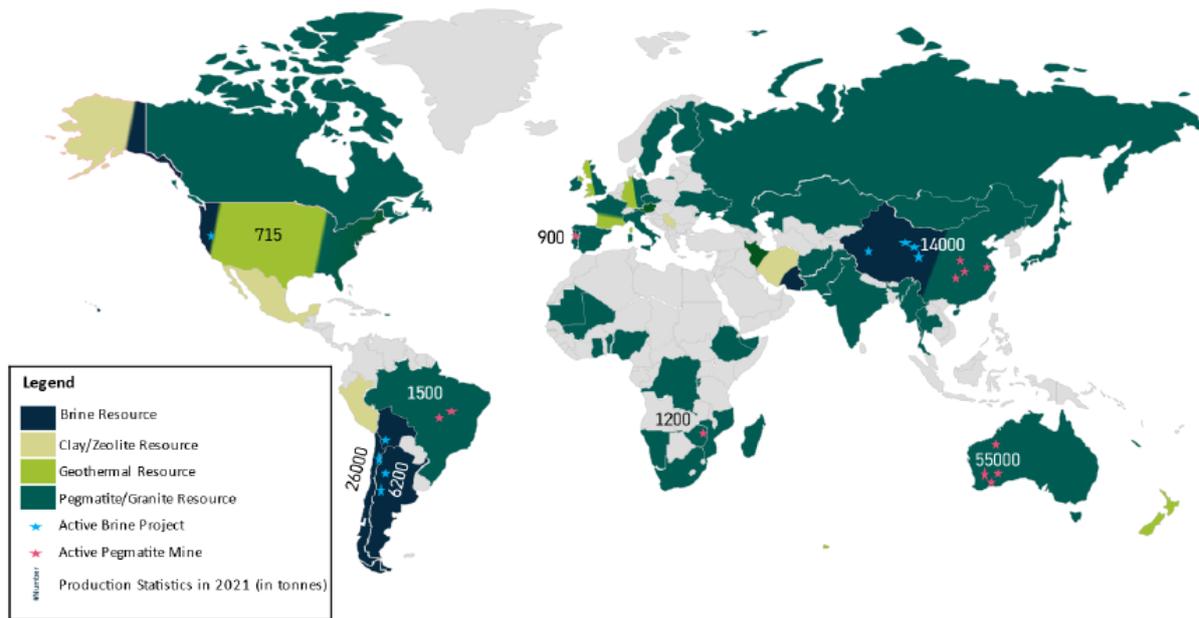
³ DESAULTY, A. M. et al. (2023): Tracing the origin of lithium in Li-ion batteries using lithium isotopes.

1 Reserves and production of lithium worldwide

Lithium is found in nature in several forms. Geologists most often distinguish between sources of lithium in brines and rocks. Desautly et al. mention three sources: brine, hard-rock reserves, and sediment-hosted deposits (clay, deposits in sediment). Khakmardan et al. work also with sources of lithium from oil fields, geothermal brine, and lithium zeolites (from the oil-field, geothermal brines, and lithium zeolites).⁴

Globally, the majority of lithium reserves are found in brines (approximately 58% of all resources), 26% in minerals, 7% in lithium clays, and 9% in oil fields, geothermal brines, and lithium zeolites.⁵ The following map shows the currently explored sources of lithium in individual countries of the world.

Figure 1: Map of lithium resources



Source: KHAKMARDAN, S. (2023): Comparative Life Cycle Assessment of Lithium Mining, Extraction, and Refining Technologies: a Global Perspective, p. 607.

The largest lithium reserves are located in Chile. According to available data, these reserves are estimated at 9.3 million metric tons in 2022. Australia is next with an estimated amount of 6.2 million metric tons. Argentina owns the third largest lithium reserves, followed by China and the United States (Figure 2).⁶

From a geological point of view, the nature of lithium differs from country to country. Lithium resources are found in brines in Chile and Argentina, in rocks in Australia, and in both rocks and brines in China. Production of lithium from clay and sediments is underway in several projects in the USA, Mexico, Peru, and Serbia. Sources of lithium from rock (zinnwaldite) can be found e.g. also on the territory of Germany and the Czech Republic, but in their case it is only a pilot or laboratory projects.⁷

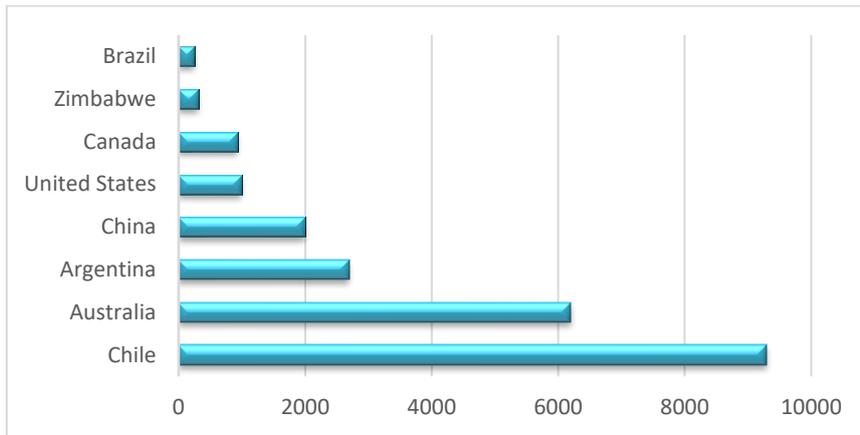
⁴ KHAKMARDAN, S. (2023): Comparative Life Cycle Assessment of Lithium Mining, Extraction, and Refining Technologies: a Global Perspective, p. 607.

⁵ KHAKMARDAN, S. (2023): Comparative Life Cycle Assessment of Lithium Mining, Extraction, and Refining Technologies: a Global Perspective, p. 607.

⁶ STATISTA (2023): Reserves of lithium worldwide as of 2022, by country.

⁷ KHAKMARDAN, S. (2023): Comparative Life Cycle Assessment of Lithium Mining, Extraction, and Refining Technologies: a Global Perspective, pp. 607-608.

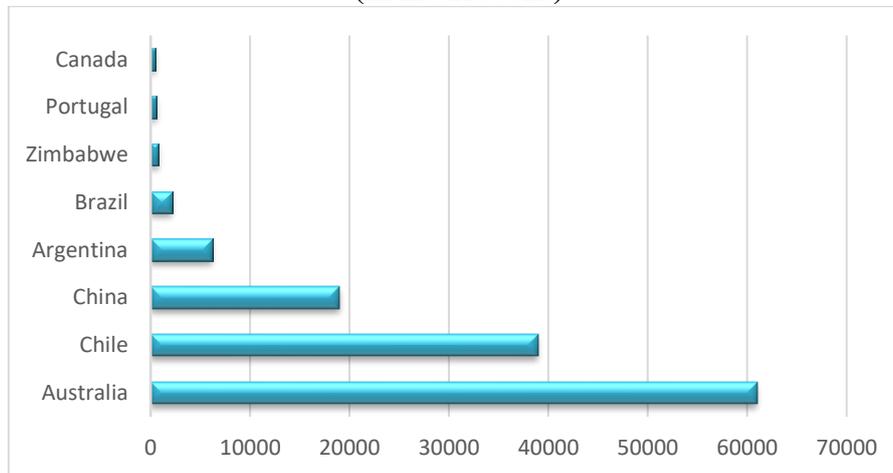
Figure 2: Reserves of lithium worldwide as of 2022, by country (in 1,000 metric tons)



Source: STATISTA. (2023): Reserves of lithium worldwide as of 2022, by country.

In lithium production, Australia and Chile are in first place (this time in reverse order), followed by China and Argentina (Figure 3). These four countries are responsible for most of the world's lithium exports. As for exports, Chile, Germany, China, Austria, Belgium, Argentina, and Sweden have been in the top 15 for at least 8 years. In most years, China was the largest exporter, followed by Germany and Chile ⁸ (data for 2019).

Figure 3: Major countries in worldwide lithium mine production in 2022 (in metric tons)



Source: STATISTA. (2023): Major countries in worldwide lithium mine production in 2022.

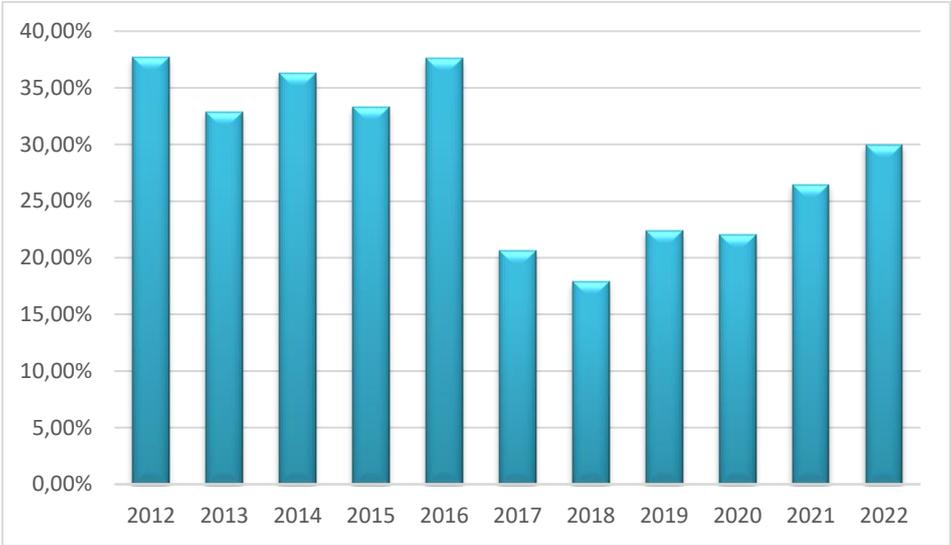
2 Reserves and production of lithium in Chile

Chile is the second largest producer of lithium in the world, and the largest producer of lithium from brines in the world. It produces almost 1/3 of the global production. For the year 2022, lithium production in Chile reached 39 thousand metric tons. *Overall, Chile's participation in the global lithium production market has dropped considerably in recent years*

⁸ YANG, P. et al. (2021): Lithium resource allocation optimization of the lithium trading network based on material flow, p. 5.

when compared to the period between 2012 and 2016.⁹ Chile's total cumulative production during the last 35 years was 246,956 tons¹⁰ (data until 2019).

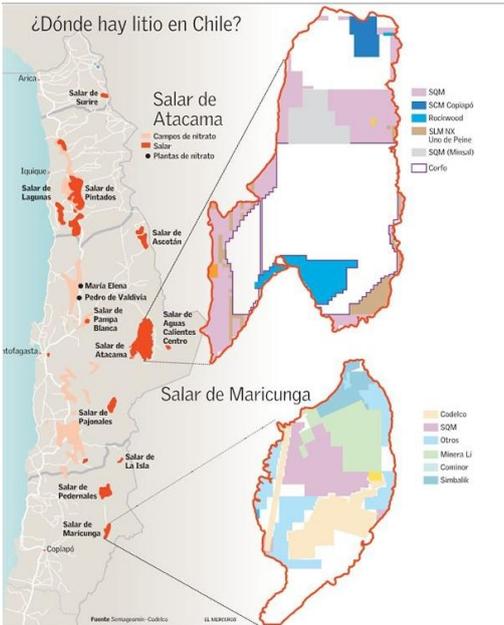
Figure 4: Lithium mine production in Chile as share of global production



Source: STATISTA. (2023): Lithium mine production in Chile from 2012 to 2022, as share of global production.

The largest sources and reserves of lithium in Chile are located in the north of the country, in the Salar de Atacama. The second largest sources of lithium are in the Salar de Maricunga, where lithium is not yet produced due to environmental concerns, but exploration and research of several Chilean mergers with foreign partners are underway there (Figure 5). In addition to these deposits, there are approximately another 23 in Chile.

Figure 5: Map of the main lithium reserves in Chile



Source: OLCA. (2021): Defensa del territorio: Comunidades resisten a la explotación del litio en Maricunga.

⁹ STATISTA (2023): Lithium mine production in Chile from 2012 to 2022, as share of global production.

¹⁰ CABELLO, J. (2020): Lithium brine production, reserves, resources and exploration in Chile: An updated review, p. 1.

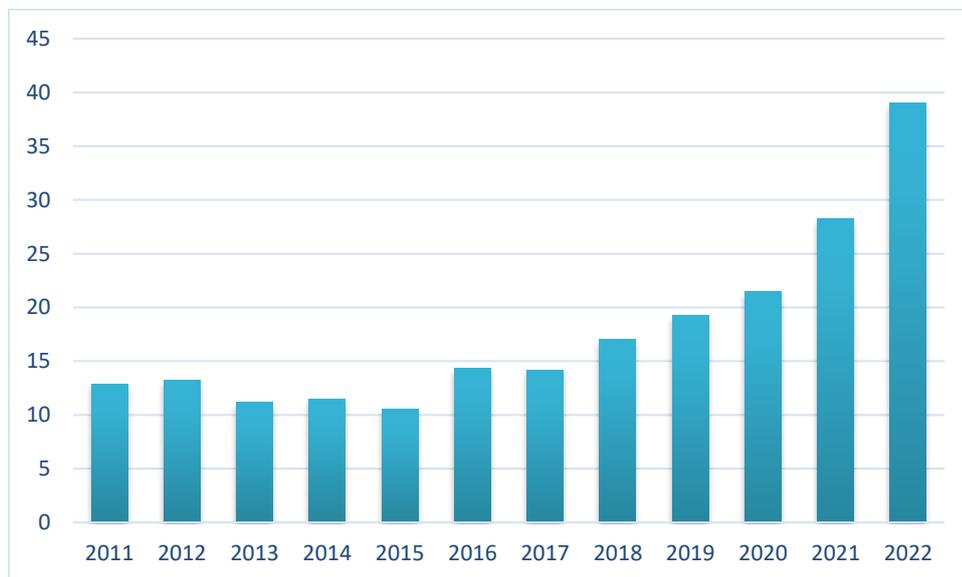
Although lithium mining in Chile has been the subject of study and research mainly for the past decade, primarily research into its economic utility and potential, the first mention of lithium brines in Chile dates back to 1969, when the research was carried out in the Salar de Atacama.¹¹

Subsequently, in Chile, during the military junta, the company Rockwood started mining lithium in 1984. As the second company in Chile, Sociedad Química y Minera de Chile (SQM), which is the world's largest producer of lithium, started mining lithium in 1994.¹²

Today, the lithium market in Chile is in the hands of two companies: the aforementioned SQM and Albemarle (a US company that bought Rockwood in 2015).¹³ Paradoxically, in Chile, a country with a long-standing market-friendly policy, lithium production is controlled by the state, and only these two companies operate according to strict production quotas and the requirement to sell up to 25 percent of production at discounted prices to local buyers.¹⁴

Lithium mining experienced a more significant expansion from 1997 (4,500 tons/p.y.) to 2017 (14,100 tons/p.y.).¹⁵ The increase in mining and production of lithium continues to this day (Figure 6).

Figure 6: Lithium mine production in Chile (in 1,000 metric tons)



Source: STATISTA. (2023): Lithium mine production in Chile from 2011 to 2022.

In production, Chile has a comparative advantage: low operating costs. On the other hand, according to research by Yang et al. belongs to countries with high transportation costs.¹⁶

¹¹ MORAGA et al. (1974) in CABELLO, J. (2020): Lithium brine production, reserves, resources and exploration in Chile: An updated review, p. 1.

¹² LIU, W. - AGUSDINATA, B. D. (2021): Dynamics of local impacts in low-carbon transition: Agent-based modeling of lithium mining-community-aquifer interactions in Salar de Atacama, Chile., p. 2.

¹³ LIU, W. - AGUSDINATA, B. D. (2020): Interdependencies of lithium mining and communities sustainability in Salar de Atacama, Chile, p. 2.

¹⁴ VÁSQUEZ, P. I. (2023): Lithium production in Chile and Argentina: Inverted roles, p. 1-2.

¹⁵ LIU, W. et al. (2019): Spatiotemporal patterns of lithium mining and environmental degradation in the Atacama Salt Flat, Chile, p. 1.

¹⁶ YANG, P. et al. (2021): Lithium resource allocation optimization of the lithium trading network based on material flow, p. 12.

3 Lithium as commodity of Chilean trade

Within Chile's foreign trade, lithium is becoming an important and strategic raw material. In 2022, lithium became Chile's third most exported commodity after copper and various copper derivatives and products in USD. It was in this year that its production increased significantly (Table 1). In 2019, lithium was the 15 most exported commodity in USD.¹⁷ In addition to higher production, this trend is also related to the world price of lithium, which has risen significantly in the course of 2022.¹⁸

The growth of lithium production and export has great potential in Chile, and their increase is expected. Even ten years ago, lithium was seen as a common commodity in Chile and one year of lithium sales generated as much revenue as copper in one month.¹⁹

Table 1: Exports of Chile: Exported Value of top 4 products (in thousands USD)

	2018	2019	2020	2021	2022
<i>Copper ores and concentrates</i>	18,193,332	17,955,582	17,475,792	26,659,152	23,051,192
<i>Copper, refined, in the form of cathodes and sections of cathodes</i>	15,809,609	13,275,528	13,509,016	20,159,154	18,275,024
<i>Lithium carbonates</i>	942,547	833,644	680,366	882,881	7,581,953
<i>Copper, unrefined; copper anodes for electrolytic refining</i>	2,256,206	1,440,200	1,837,099	2,495,846	2,689,254

Source: TRADEMAP. (2023): List of products exported by Chile.

Conclusion

In this paper, we focus on the lithium market in Chile. Chile has the largest proven reserves in the world. The importance of lithium for the Chilean economy has gradually grown and reached its highest importance from the point of view of foreign trade in 2022. Over the last decade, lithium production has increased globally, but also in Chile. We expect an increase in the coming years as well, due to the implementation of the Paris Agreement and the efforts of many countries for carbon neutrality, and the concept of a sustainable economy.

Lithium mining also brings certain risks. Liu et al. deal with threats to fauna, flora and the ecosystem itself.²⁰ According to Khakmardan et al., the use of water in the extraction of lithium from salt flats/brines can create a high risk of a natural shortage of fresh water for people and nature.²¹ Authors Liu and Agusdinata draw attention to the threat to water resources and the related stress for local communities.²² Threats to water resources due to lithium mining, as well as to biodiversity and the social well-being of local communities, they admit in their next study.²³

¹⁷ TRADEMAP. (2023): List of products exported by Chile.

¹⁸ TRADING ECONOMICS. (2023): Lithium.

¹⁹ BARANDIARÁN, J. (2018): Lithium and development imaginaries in Chile, Argentina and Bolivia, p. 385.

²⁰ LIU et al. (2019): Spatiotemporal patterns of lithium mining and environmental degradation in the Atacama Salt Flat, Chile, p. 146.

²¹ KHAKMARDAN, S. (2023): Comparative Life Cycle Assessment of Lithium Mining, Extraction, and Refining Technologies: a Global Perspective.

²² LIU, W. - AGUSDINATA, B. D. (2021): Dynamics of local impacts in low-carbon transition: Agent-based modeling of lithium mining-community-aquifer interactions in Salar de Atacama, Chile.

²³ LIU, W. - AGUSDINATA, B. D. (2020): Interdependencies of lithium mining and communities sustainability in Salar de Atacama, Chile.

However, extracting lithium from rocks using sulfuric acid is more harmful to the environment, up to three times as much. Also for this reason, we can assume that production from brines will become more and more attractive in the context of sustainable development. It means an opportunity not only for Chile but also for other South American countries forming the so-called lithium triangle - Argentina and Bolivia.

From this point of view, it is necessary to examine not only the resources (their size, possibility of mining, economic costs of mining), but also the different approaches of these countries to the regulation of the mining industry. As we mentioned earlier in the paper, the Chilean government significantly regulates the lithium market, while its neighbor Argentina, on the other hand, applies a liberal economic policy in the field of lithium mining and processing. This can play a fundamental role in the future development of both production and price. Last but not least, the global lithium market will significantly influence Bolivia's decision on mining in the future. Despite the potential and less ecological demands of lithium extraction from brines, we assume a dynamic development of extraction from other sources as well (mainly rocks, minerals and clays). The author plans to expand the research in the near future.

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PLAGIARISM IN POLITICAL CULTURE POLITICAL DISCOURSE ANALYSIS IN THE CONTEXT OF PLAGIARISM SCANDALS OF SELECTED EUROPEAN POLITICIANS

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Abstract: The article aims to find out to what extent the academic plagiarism issues appearing during elections or active political participation can be politicized and what are the real consequences of them in connection with the political culture. Using the method of critical discourse analysis, we have examined the political discourse in the context of plagiarism scandals of selected contemporary European politicians, aiming to answer how power relations can take a role in plagiarism discourse. Introducing the concept of political victimhood into analysis, we have included subanalysis into our research dividing the manifestation of victimhood into two categories: egocentric manifestation of victimhood and manifestation of victimhood blaming the system. Analysed rhetoric demonstrate violation of the principles of ethics, integrity and morality. Moreover, the failure to hold political accountability could be specific for the Slovak cases. It is strongly suggested that the only solution is to adopt legislation that allows subsequent withdrawal of a university degree once acquired.

Keywords: plagiarism, political culture, politicians, power relations, political discourse analysis

JEL: I28, Z13

Introduction

Recent plagiarism cases of the European politicians, and most importantly their reactions to the scandals, have opened a social debate about the awarding of academic degrees and the maintenance of academic integrity in most of European countries, not only in the higher education environment but also among the public and in the media. It has also raised the question of the ethics and political accountability of public figures.

The article aims to find out to what extent the academic plagiarism issues appearing during active political participation can be politicized and what are the real consequences of them in connection with the political culture. Using the method of critical discourse analysis, we have examined the political discourse in the context of plagiarism scandals of selected contemporary European politicians, aiming to answer how power relations can take a role in plagiarism discourse, and whether, in this case, the benefits outweigh its drawbacks. Particularly, we have observed what kind of statements these politicians try to establish as true. For this purpose, we have formulated the research question asking what are the reactions of the prominent European politicians to the allegations of plagiarism of their academic papers.

According to Chilton (2004)¹, political discourse involves, among other things, the promotion of representations, and a pervasive feature of representation is the evident need for political speakers to imbue their utterances with evidence, authority and truth, a process that we shall refer to in broad terms, in the context of political discourse, as “legitimization”. Thus, politicians should guard against the operation of their audience’s ‘cheater detectors’ and provide

¹ CHILTON, P. (2004): *Analysing Political Discourse, Theory and Practice*, p. 23.

guarantees for the truth of their sayings. With that being said, there is an importance of critical discourse analysis to examine the politicians' reactions to allegations of any kind, but especially those that seriously violate the law or the principles of ethics, integrity and morality. It should be emphasized that only through language tied into social and political institutions can one take political action, e.g., declare war, declare right or wrong, raise or lower taxes etc. applying "strategic" use of language, the term first used by Habermas (1979).²

Moreover, the concept of victimhood is often discussed in politics, however this concept has been largely ignored in empirical social science research (Armaly and Enders, 2022)³. There are several subcategories related to it, e.g. identity-based, economic, cultural, historical ones but also political victimhood, which refers to individuals or groups who believe they are victims of political persecution, oppression, or suppression. It can involve claims of censorship, infringements on civil liberties, or unfair treatment by the government or ruling authorities.

In our article, within our discourse analysis, we have focused on manifestations of political victimhood: either an egocentric one entailing only perceptions of one's own victimhood, and one focused on blaming "the system." (Armaly and Enders, 2022, *ibid*). Such rhetoric demonstrates that some political messaging can make supporters feel like their politician is a victim indeed, which has consequences for subsequent attitudes and behavior of the public.

Short presentation of the politicians and their plagiarism case is followed by their reactions to the cause. For better clarification of power relations in this particular discourse, we also included the reactions of their political opponents. Moreover, for a better transparency, we created a table, which summarises the main pieces of information analyzed.

1 Literature review

What is really behind the much-used word "plagiarism" and what are the consequences associated with political plagiarism? The term "plagiarism" has no precise legal definition. As Maierová (2021)⁴ states, many definitions of plagiarism declare that someone else's ideas presented as one's own are the basis of plagiarism. In the academic world, plagiarism is considered destructive to the advancement of sciences, and the plagiarists of academic works can be charged with sanctions. It is often viewed as "a form of intellectual theft" (Ashworth et al. 1997, p. 200)⁵. Moreover, an interesting view is presented by Frye (2016)⁶. In his article he considers whether academic plagiarism norms are economically efficient. It concludes that academic plagiarism prohibiting non-copyright infringing plagiarism are not efficient and should be ignored.

Plagiarism cases involving politicians stand out, as the accused plagiarists have more power to deny or tackle the accusations of plagiarism. As such, this specific type of plagiarism goes far beyond academia. It represents a direct, aggressive, and effective threat against democracy itself. (Tudoroiu, 2017)⁷

Sekerák (2022)⁸, in his study, elucidates some of the cases through the examples of Slovakia and the Czech Republic. Based on the theory of political accountability, it is clarified that the reactions of politicians to the exposure of their plagiarism cases were fundamentally different. Almost no common pattern of reactions can be found in the two countries.

² HABERMAS, J. (1979): *Communication and the Evolution of Society*.

³ ARMALY, M.T.- ENDERS, A.M. (2022): 'Why Me?' The Role of Perceived Victimhood in American Politics.

⁴ MAIEROVÁ, E. (2021) : *Plagiarism in tertiary education and digital media*, p.75.

⁵ ASHWORTH, P. – BANNISTER, P. – THORNE, P. (1997): *Guilty in whose eyes? University students' perceptions of cheating and plagiarism in academic work and assessment*, p. 188.

⁶ FRYE, B.L. (2016): *Plagiarism is not a crime*, p. 133.

⁷ TUDOROIU, T. (2017): *No, Prime Minister: PhD Plagiarism of High Level Public Officials*, p. 631.

⁸ SEKERÁK, M. (2022): 'I am De Facto a Thief in this Matter': Thesis Plagiarism Cases of Elected Representatives and the Concept of Political Accountability (Case Study of Slovakia and the Czech Republic).

It is also important to consider the perception of the academic plagiarism in various political cultures. Mahmud, Bretag, and Foltýnek (2019)⁹ explored students' attitudes towards plagiarism and academic misconduct and they have found that it varies across national cultures, although the relationship between national culture and students' perceptions of plagiarism policy remains unexplored. Student survey data from the UK, Czechia, Poland and Romania were analysed for differences in students' perceptions of three specific aspects of plagiarism policy – access, support and detail – at their respective universities. The study found significant differences between the UK and the three Eastern European countries for all measures except students' awareness of the penalties applied for plagiarism. Low 'power distance' and high 'individualism' were related to positive perceptions of plagiarism policy and process. The findings suggest that institutional plagiarism policy and procedures need to be responsive to the unique characteristics of national cultural context.

Abalkina and Libman (2020)¹⁰ argue that in the Russian context, a plagiarized PhD thesis is likely to indicate that a governor both is inclined to dishonest behavior and possesses poor managerial capabilities, which should have a particularly negative effect on the performance of their regions in terms of the development of infrastructure.

2 Methodology

Critical discourse analysis has its power to attract and annoy, according to Tenorio,¹¹ more than two decades have passed from the analysis of excerpts to the study of large corpora, from allegedly interested selection to random collection of data. Its social implications encouraged its development. "*Leaving mere intuition aside and exploring the trace of ideology in texts other than literary ones contributed to its scientificity and helped broaden its scope.*" (Tenorio, 2011).

Perceiving oneself to be a victim in face of criticism is a common identity position in politics. Armaly and Anders (2022) state that victimhood is a central theme of modern political messaging. Donald Trump, for example, revels in this topic and has consistently portrayed himself as a victim of the media and of his political opponents. Thus, supposing the accused politicians would demonstrate such victimhood manifestations, we decided to include subanalysis into our research dividing the manifestation of victimhood into two categories: egocentric manifestation of victimhood and manifestation of victimhood blaming the system (Armaly and Anders, 2022, *ibid*).

Moreover, when considering analysing the political discourse in this specific context, according to van Dijk (1997)¹², politicians are not the only participants in the domain of politics. "*The delimitation of political discourse by its principal authors' is insufficient and needs to be extended to a more complex picture of all its relevant participants*" (van Dijk, 1997). Therefore, we should also include the various recipients in political communicative events, in our cases, at least the political opponents and representatives of academia.

Based on the numerous public discussions, vast media attention to this particular subject as well as the studies published in this context (e.g. Tudoroiu, 2017¹³; Osipian, 2010¹⁴; Wheeler and Anderson, 2010¹⁵ and many more), it is evident that a new term is being

⁹ MAHMUD, S. - BRETAG, T. - FOLTÝNEK, T. (2019): Students' perceptions of plagiarism policy in higher education: A comparison of the United Kingdom, Czechia, Poland and Romania, p. 271.

¹⁰ ABALKINA, A. - LIBMAN, A. (2020): The real costs of plagiarism: Russian governors, plagiarized PhD theses, and infrastructure in Russian regions

¹¹ TENORIO, E. H. (2011): Critical Discourse Analysis, An overview, p. 658.

¹² Van DIJK, T.A. (1997): What is political discourse analysis?, p. 15.

¹³ TUDOROIU, T. (2017): No, Prime Minister: PhD Plagiarism of High Level Public Officials

¹⁴ OSIPIAN, A. L. (2010): Le bourgeois gentilhomme: Political corruption of Russian doctorates.

¹⁵ WHEELER, D. - ANDERSON, D. (2010): Dealing with plagiarism in a complex information society.

established in the political culture: *epidemic of political plagiarism* and it certainly deserves direct attention as a topic that cuts across many areas of public life.

3 Plagiarism scandals of contemporary European politicians

Our aim was to observe what kind of statements these politicians try to establish as true and how power relations can take a role in their plagiarism discourse or to what extent such serious issues can be politicized. We also compare the consequences of the scandals, which, in the worst case scenario, we see as serious threat against democracy itself. For this purpose, we have formulated the following research question:

RQ: *What are the reactions of the prominent European politicians to the allegations of plagiarism of their academic papers?*

Short presentations of the politicians and their plagiarism case is followed by their reactions to the cause. For better clarification of power relations in this particular discourse, we also included the reactions of their political opponents. We have selected representatives of national political institutions - governments, parliaments and presidencies. We analysed the cases from Romania, Austria, Germany, Hungary, Slovakia and Czechia.

Romania

In 2021, Romanian Innovation and Digitalisation Minister **Florin Roman**, affiliated with National Liberal Party, resigned from his post over allegations of plagiarism relating to his thesis. Roman explained his resignation by saying that he did not want the suspicions surrounding his person to have a negative impact on Prime Minister Nicolae Ciuca. Roman claimed that he had faced criticism and misinterpretation of everything he had done wrong since his first day in office. He added that there had been too much of that already:

"I resigned today as Minister, thanking the Prime Minister and the government team. When white turns black, when every word is misinterpreted, when you assume material errors, but you end up in being lynched from the first day of office, it's too much. I do not want this scandal to affect the activity of the Executive." (Romania Journal.ro, 2021)

Dacian Ciolos, who was the Romanian Prime Minister from 2015-2017, described Roman's resignation as *"an inevitable step"*.

"Florin Roman is not a victim. He is a representative of the Romanian political class that has destroyed the best of what existed in Romania," adding that it is precisely fake academic degrees that prevent *"competent and honest"* people from entering politics. (aktuality.sk, 2021)

As a reaction, the Minister accused USR chairman Dacian Ciolos of orchestrating an attack against him, announcing he will sue Ciolos.

"I will see Mr. Ciolos in court, he is the one who coordinated the topic and the attack. He stuck the plagiarist tag to me without a court or commission to give a verdict. For the rest, to those who set their eyes on those 2 billion euros for the 'connection' to digitisation by monopoly, I tell you one thing: You won! You did not manage to charge me with criminal offenses, but you caused the resignation of a minister over negligence in the resume" (Romania Journal.ro, 2021)

Emilia Sercan, a journalist who has investigated dozens of high-profile plagiarism cases in Romania, described falsified academic works as the "Achilles' heel" of politicians.

"Bad news for politicians: if your fortunes are sheltered, your 'academic' works are on the shelf, at the library," (euronews.com, 2021)

Austria

Austrian Minister of Labour and Family **Christine Aschbacher** resigned after the publication of allegations of plagiarism, which she allegedly committed while writing her thesis

and also dissertation, for which she received her PhD. degree at the Slovak University of Technology (STU) in 2021.

Austrian media (orf.at, 2021) pointed out the fact that due to the date of submission of her dissertation makes title withdrawal impossible. After numerous plagiarism scandals, which also affected high-ranking members of the Slovak government, the Higher Education Act was amended accordingly. However, titles may only be withdrawn if the corresponding thesis was submitted after 1 January 2021.

Thus, also in Slovakia, too, there should be no threat of disqualification as Aschbacher had already submitted her dissertation in 2020. And yet, the STU was among the first higher education institutions in Slovakia to join a public call by Slovak educational institutions against impure title attainment. *"An academic title should not be a trinket with which politicians or entrepreneurs only want to increase their social status. It must be the result of decent research work."*(orf.at, 2021).

Doc.Dr. Stefan Weber, an Austrian media researcher and writer often called as "plagiarism hunter" (in German "Plagiatsjäger") made the relevant passages in Aschbacher's work public, acknowledging the decision with incomprehension and chooses irony in his statement: *"Apparently I have too strict a concept of plagiarism, I say ironically."* (orf.at, 2021).

Under attack by the opposition, Aschbacher *"rejected"* what she called Weber's *"insinuations"*. *"I worked according to knowledge and conscience"*. (sot.com.al, 2021)

The decisions of the past years on the works of ex-Science Minister **Johannes Hahn** (ÖVP), State Opera Director **Bogdan Roscic**, ex-SPÖ Federal Executive **Thomas Drozda** and Aschbacher had always followed the same pattern: *"I find parts of the text that have no inverted commas and no footnotes, and I call it plagiarism. Apparently I'm too strict. But then I would also have to call the University of Salzburg that they taught me the citation rules too strictly in 1989. Irony off."* said Weber (orf.at, 2021).

Hungary

In 2012, the website of the Hungarian magazine *Heti Világgazdaság* accused **Pál Schmitt**, the Hungarian president, of plagiarizing the work of a Bulgarian sport expert in his doctoral dissertation. Schmitt announced his resignation as president but claiming that allegations were *"unfounded"* and lamented that he had been called *"a cheat"* by members of parliament before an official investigation even started. However, he decided to resign issuing his personal statement *"My personal issue divides my beloved nation rather than unites it. It is my duty to end my service and resign my mandate as president."* (Kotkamp, 2021)

"He should have made this decision long ago." said Adam Ver, an academic. *"It looks like this is not a country without consequences after all, so I can only welcome the decision."*

Germany

Franziska Giffey, former Minister of Family stepped down from her position in 2021 over a doctoral dissertation she submitted to the Free University of Berlin in 2010, which allegedly contained plagiarized passages (dw.com, 2021). The minister insisted that she wrote her thesis in good faith.

"The members of the federal government, my party and the public are already now entitled to clarity. That is why I have decided to ask the chancellor [Angela Merkel] to have the federal president dismiss me from my position." (politico.eu, 2021)

Giffey insisted she did not intentionally try to deceive anyone with her academic work.

"I regret if I have made any mistakes in the process. If the Free University of Berlin comes to the conclusion that I should be stripped of my title, I will accept this decision. I am already drawing the consequences from the ongoing and burdensome proceedings. In doing so, I stand by my word." (politico.eu, 2021)

Giffey has been a part of part of a long list of German officials accused of plagiarizing content, including

Karl-Theodor zu Guttenberg, former Minister of Defense, came under pressure after a Bremen University law professor began reviewing his thesis with the aid of the internet.

"*I did not deliberately cheat, but I made serious errors*". "*I will gladly concede to my opponents that I was appointed minister for defence, not self-defence.*" he said in his resignation speech. (theguardian.com, 2011)

As he was Germany's most popular politician – an honour he received via a poll in 2009 and built a reputation as a plain-speaking man of action, his departure weakened the position of Christian Democratic Union (CDU) party.

Anette Schavan, former German Education and Research Minister, was awarded the degree in educational science at the University of Düsseldorf after completing her dissertation in 1980. More than 30 years later, she was charged with plagiarism by an anonymous accuser who posted an analysis of the dissertation online. The University of Düsseldorf investigated and in February 2013 revoked the degree. She denied any intent to mislead and took her case to court. However, as she later proclaimed: "*After being able to think about the judgment ... for a few days, I have decided not to appeal and to end the legal fighting.*" (cnn.com, 2013)

The media reaction didn't give Schavan any choice but to step down. The center-left Süddeutsche Zeitung writes:

"*With Guttenberg and Schavan, the government has a plagiarizer rate of 12.5 percent. That's almost as much as the percentage of flawed pages in Schavan's doctoral thesis. This is harming the conservative coalition government, of all times in an election year, and the civic virtues it holds so high: motivation and abiding by the rules. Plagiarizers disregard both of those.*" (spiegel.de, 2013)

Paradox is that this plagiarism case didn't harm Schavan's career or reputation. Even though she stepped down, she became the Germany's ambassador to the Vatican and was also bestowed an honorary doctorate by the University of Lübeck.

Slovakia

Boris Kollár is a current Speaker of the National Council of the Slovak Republic and the chairman of the political movement We are family. In 2020, he was accused of plagiarism of this thesis.

Kollár repeatedly denied the accusations. He said he wrote the thesis himself, over several months, and it certainly cannot be compared with Danko. He refused to accept political responsibility.

"*We have to honour the school system, and if the SPOLU party doesn't like it, I recommend they run for parliament, get in and change the system.*" (tvnoviny.sk, 2020)

After media pressure, Kollár partially admitted that he had taken some of the paragraphs of the thesis from the internet. "Yes, I downplayed it, it's not right, but many people do it." (tvnoviny.sk, 2020)¹⁶

Igor Matovič, another prominent politician, then Prime Minister, was very articulate about the need for Andrej Danko to step down but in case of Boris Kollár, he justified his action by saying that he does not want to risk the fall of the government and the return of the "mafia" to the helm of the state.

"*I won't call on the Speaker of the National Council Boris Kollár to resign in connection with the suspected plagiarism of his diploma thesis. If I have to put one diploma and the stability of the governing coalition on the scales, my priority will certainly be to maintain the governing coalition*". (pravda.sk, 2020)

¹⁶ KOSEČEKOVÁ, R. (2020): Boris Kollár o svojej diplomovke: Uľahčil som si to tak, ako to robí skoro každý študent. online

Igor Matovič is a former Prime Minister of the Slovak Republic as well as Minister of Finance, currently serving as the Member of the National Council of the Slovak Republic. In July 2020, Matovič admitted to plagiarizing his masters' thesis. Although he denied that he had knowingly committed plagiarism, he refused to resign and survived a confidence vote.

"22 years have passed since then and I have lived in the belief that I definitely have an OK thesis... and I didn't. Or rather - if I had suspected there was a problem, I would never have criticized Danko and co. for plagiarism, I'm not that much of a suicidal person." (DenníkN, 2020)

When former Speaker of the National Council of the Slovak Republic Andrej Danko faced a case of the plagiarism, Igor Matovič called protests for his resignation. When he himself was in the same situation, he responded with Facebook statuses:

"Should I lose my title because of that? Apparently yes ... and after all, I ordered such a change in the law from the Minister of Education and the Minister of Justice. Will I resign because of it? I will resign. As soon as I fulfil everything I promised the people before the election." (Facebook-Igor Matovič, 2020)

"...if what they write is true, it's really too bad. However, I don't seem to have copied, without citation, to the extent that they write, a book that had exactly the same title as my thesis and especially by my favorite author ... but I won't count and measure it. I haven't looked at my thesis since 1998, and I never will again." (Facebook-Igor Matovič, 2020).

Czechia

Tatiana Malá, former Minister of Justice, defrauded on two diploma theses at once. The first thesis, an engineering thesis, was written in 2005 on the topic 'Mikroklimatické podmínky v chovu rabíků' (Microclimatic conditions in rabbit breeding), in which she copied from a thesis on the same topic written two years earlier, as did Andrej Danko, a Slovak politician, former Speaker of the National Council of the Slovak Republic. The second one she wrote on the topic "Modification of parental rights and obligations to a minor child for the period after divorce" at the Pan-European University in Bratislava, in which she copied a few pages from a textbook with only minor modifications. After pressure and a petition against her, Malá resigned on 10 July 2018.

"It is no problem for me to defend it, same as I will do in case of the steps I take and the decisions I make as minister. I repeatedly say that I worked hard on my thesis and spent a long time working on it." (praguebusinessjournal.com, 2020)

The table below summarises plagiarism cases by European politicians over the last ten years. In all cases, except the Slovak ones, the politicians have resigned from their posts and their resignation statements mostly share a common characteristic feature: stressing the need to step down from the office they held mainly because of the political pressure on the politician, which they say, they can no longer bear, or in order not to further damage the reputation of the political party they represented.

Table 1: Overview of plagiarism cases of selected European politicians over the last decade

Politician and his/her position at the time of a scandal	Plagiarism relating to	Consequence of the case	Statement on the case
Country			
Political Affiliation			

Florin Roman Minister of Innovation and Digitalisation Romania <i>National Liberal Party</i>	Thesis	Resignation	<i>“When white turns black, when everything is misinterpreted, when you make material mistakes, but when you reach the lynching from the first day of office – it is too much.” (Guardian, 2021)</i>
Christine Aschbacher Minister of Labour and Family Austria <i>Austrian People’s Party</i>	Thesis Dissertation	Resignation	<i>“The hostility, the political agitation, and the insults are unfortunately being unloaded not only on me, but also on my children, and with unbearable force. I cannot allow this to continue in order to protect my family. For this reason, I am resigning from office.” (Reuters, 2021)</i>
Pál Schmitt President Hungary <i>Fidesz</i>	Dissertation	Resignation	<i>“My personal issue divides my beloved nation rather than unites it. It is my duty to end my service and resign my mandate as president.” (Politico, 2021)</i>
Franziska Giffey Minister of Family Germany <i>Social Democratic Party of Germany</i>	Dissertation	Resignation	<i>“I stick to what I said, that I did my work on the dissertation to the best of my abilities and conscience, I regret if I made mistakes.” (Reuters, 2021)</i>
Karl-Theodor zu Guttenberg Minister of Defense Germany <i>Christian Social Union of Bavaria</i>	Dissertation	Resignation	<i>“Resigning was the most painful step of my life, I was always ready to fight, but have to admit I have reached the limit.” (New York Times, 2011)</i>
Anette Schavan Minister of Education and Research Germany <i>Christian Democratic Union of Germany</i>	Dissertation	Resignation	<i>“I think today is the right day to leave my ministerial post and to concentrate on my duties as a member of parliament. I will not accept the university's decision and will take legal action. I have never copied nor plagiarised. The accusations hit me very hard.” (BBC, 2013)</i>

Boris Kollár Speaker of the National Council of the Slovak Republic Slovakia <i>Movement We Are Family</i>	Thesis	Refused to accept political responsibility Still in office	<i>"Yes, I downplayed it, it's not right, but many people do it."</i> (tvnoviny.sk, 2020)
Igor Matovič Prime Minister Slovakia <i>Ordinary People and Independent Personalities</i>	Thesis	Refused to resign	<i>"Should I lose my title because of that? Apparently yes ... and after all, I ordered such a change in the law from the Minister of Education and the Minister of Justice. Will I resign because of it? I will resign. As soon as I fulfill everything I promised the people before the election."</i> (Facebook-Igor Matovič, 2020)
Tatiana Malá Minister of Justice Czechia <i>ANO 2011</i>	Thesis	Resignation	<i>"We had to be very careful not to copy something somewhere. I got some kind of grade, I think it was an A, so don't get really mad at me, that's all I'll say about that."</i> (irozhlas, 2020)

Source: author's own, 2022

To answer our research question we can state that in all the cases of plagiarism analyzed, those involved have been held accountable, and although they often did not admit their mistake, they were forced to resign, whether they were ministers or the president. However, the failure to hold political accountability could be specific for the Slovak cases. Those ones present the evident abuse of power as the accused politicians have refused to resign from their public office, despite pressure from the public and academia, and to this day actively hold important state positions and are even still active in the university environment.

Moreover, based on the analysis of the reactions of the chosen politicians, we assume that in European political culture, politicians have been trying to demonstrate their intellectual sophistication and dedication to research. They all feel like victims being targeted and wronged by their political opponents, which is expressed either in egocentric form or the form where the politician is blaming the system. Such rhetoric demonstrates that some political messaging can make supporters feel like their politician is a victim indeed, which has consequences for subsequent attitudes and behavior of the public. The following table summarizes examples of analysed politicians' reactions to the plagiarism accusations in two forms of political victimhood manifestation.

Table 2 : The examples of analysed politicians' reactions to the plagiarism accusations in two forms of political victimhood manifestation.

Egocentric manifestation of victimhood	Accused politician	Manifestation of victimhood blaming the system	Accused politician

<p><i>"Yes, I downplayed it, it's not right, but many people do it."</i> (tvnoviny.sk, 2020)</p>	<p>Boris Kollár</p>	<p><i>„The hostility, the political agitation, and the insults are unfortunately being unloaded not only on me, but also on my children, and with unbearable force.“</i> (Reuters, 2021)</p>	<p>Christine Aschbacher</p>
<p><i>„Will I resign because of it? I will resign. As soon as I fulfill everything I promised the people before the election.“</i> (Facebook-Igor Matovič, 2020)</p>	<p>Igor Matovič</p>	<p><i>"I did not deliberately cheat, but I made serious errors". " I will gladly concede to my opponents that I was appointed minister for defence, not self-defence."</i> (theguardian.com, 2011)</p>	<p>Karl-Theodor zu Guttenberg</p>
<p><i>„I repeatedly say that I worked hard on my thesis and spent a long time working on it.“</i> (praguebusinessjournal.com, 2020)</p>	<p>Tatiana Malá</p>	<p><i>„If the Free University of Berlin comes to the conclusion that I should be stripped of my title, I will accept this decision.“</i> (politico.eu, 2021)</p>	<p>Franziska Giffey</p>
<p><i>"My personal issue divides my beloved nation rather than unites it. It is my duty to end my service and resign my mandate as president."</i> (Kotkamp, 2021)</p>	<p>Pál Schmitt</p>	<p><i>"I resigned today as Minister, thanking the Prime Minister and the government team. When white turns black, when every word is misinterpreted, when you assume material errors, but you end up in being lynched from the first day of office, it's too much.“</i> (Romania Journal.ro, 2021)</p>	<p>Florin Roman</p>

It is also clarified that the reactions to the exposure of their plagiarism cases as well as the consequences were slightly different depending on the country of their origin.

The only common pattern of the reactions, which can be found is the **lack of integrity**. They only admit to "*making mistakes*" or make the claim that „*everything is misinterpreted*". And if they resign, they typically do it "*to protect their family*" or to protect their political affiliation, not because they admit to any wrongdoing.

The imposition of political responsibility in the plagiarism cases shall be a matter for politicians' consideration or self-reflection as the law does not force them to do so. Large majority of the public accuses these plagiarists of hypocrisy for a reason. Even when they are cornered, politicians hardly reveal what they really did. Admitting to making mistakes or making the claims that "*standards of achieving academic titles were stated differently then*" just emphasizes the serious democratic failures in their countries: degeneration of political culture. Moreover, the plagiarists are not the only ones facing reputational or career damage. Repeated cases might impact upon entire institutions or perhaps countries. The reality is that hard-working students can find the value of their degree undermined without them doing anything wrong, so plagiarism scandals could be devaluing higher degrees in central Europe.

It is evident that the only solution in our particular case - academic plagiarism, was to adopt legislation that allows subsequent withdrawal of a university degree once acquired.

On the other hand, although those, who plagiarize should suffer repercussions, one must admit that excessive impact risk destroying lives and ending promising careers. We bear in mind that calling for drastic action against plagiarists, it's harder to determine what the continued repercussions should be and raises the question how long a plagiarism allegation remains relevant and what, if any, impact it should have on the alleged plagiarist as time passes.

Conclusion

Numerous cases of academic plagiarism by prominent politicians in different European countries have had different political and legal consequences. The article demonstrates particular cases through the examples of Romania, Hungary, Austria, Germany, Slovakia and Czechia.

When an act of plagiarism is revealed, the politician is referred to as dishonest and fraudulent. Someone who willingly violates the ethical standards to advance a career becomes highly suspicious. This then questions all the activities and ideas a politician stands for. Once the politicians are found guilty of plagiarising, they face an inevitable downfall. The public highly criticizes them, and their reputation is tarnished to a certain point. As a result, they're often forced to resign and step down from politics altogether. However, based on the analysis of the reactions of the chosen politicians, when they are accused of plagiarism of their academic works, they seem to lack integrity. Even when they are cornered, politicians hardly reveal what they really did. They only admit to "*making mistakes*" or make the claim that „*everything is misinterpreted*". And if they resign, they typically do it "*to protect their family*" or to protect their political affiliation, not because they admit to any wrongdoing. In the worst case scenario, Slovak cases present the evident abuse of power as the accused politicians have refused to resign from their public office, despite pressure from the public and academia, and to this day actively hold important state positions and are even still active in the university environment.

There is an importance of critical discourse analysis to examine the reactions of politicians to allegations of any kind, especially those that seriously violate the law or the principles of ethics, integrity and morality as politicians should guard against the operation of their audience's 'cheater detectors' and provide guarantees for the truth of their sayings. It should be emphasized that only through language tied into social and political institutions can one take political action, e.g. declare war, declare right or wrong, raise or lower taxes etc. applying "*strategic*" use of language. Thus, the examination of individual modes of discourse in this specific environment, where the researcher is looking for common elements, could help to find examples of biases, discrepancies, and pieces of evidence of doubt, which could lead to

the evidence of power abuse, inequality, and dominance in society and after all could aid to fight social injustice.

In the future, it would be very useful to analyse the differences between the discourse of aspirational candidates for significant statesman's posts and those of actual ones identifying challenging verbal formulations to highlight the deliberate misleading of the public during election campaigns by presenting candidates as the impeccable ones for these important positions.

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STRUCTURE OF PREFERENCES OF ACTORS WITHIN INTERNATIONAL INVESTMENT REGIMES¹

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Abstract: This article is concerned with international investment regimes. The goal of the article is to characterize the structure of preferences of actors of international investment regimes. In order to achieve this goal, the first part will describe the basic motivations of actors in relation to international investment treaties and negotiations of their provisions. The second will present the newest trends in investment regimes that highlight the changing preferences of the main actors towards a bigger emphasis on national sovereignty of the host state. This analysis represents a step towards operationalizing preferences of these actors with the view towards modelling their behaviour, using analytical tools of the game theory or other approaches related to negotiations theory.

Key words: international investment regimes, international investment treaties, screening mechanisms, investment screening

JEL: K23, K33

Introduction

International regimes of foreign investment protection have undergone significant changes in the last years. New generation of investment treaties has brought about a movement towards greater protection of national sovereignty in the form of expansion of regulatory powers of the states in relation to foreign investors. Impact of these changes for investment practice is questionable and could be limited, since international arbitration tribunals still represent a key authority for interpretation of specific provisions of investment treaties, and new investment treaties are not very explicit in defining key concepts, such as legitimate expectations of investors. Partly due to this factor, nation states found new ways to expand their regulatory powers in key areas with most important among these being screening mechanisms. Their proliferation has been accelerating significantly in recent years. This article offers a brief analysis of basic motivations of actors for engaging in investment regimes and changes in the structure of preferences of key actors in recent times. Significant amount of professional literature is devoted to analysis of content of investment treaties and recent changes in them²³⁴⁵. In legal literature, however, there is an understandable lack of effort towards modelling of negotiations of bilateral investment treaties, which could help us better to understand why the observed changes are happening. For this kind of analysis, it is imperative first to understand

¹ The paper was written within the project VEGA 1/0115/23: Application of Cooperative Models of Game Theory in Economy and International Relations.

² UNCTAD (2018): UNCTAD's Reform Package for the International Investment Regime.

³ GAUKRODGER, D. (2017): The balance between investor protection and the right to regulate in investment treaties: A scoping paper. OECD Working Papers on International Investment.

⁴ THALIATH, J. (2016): Bilateral Investment Treaties and Sovereignty: An Analysis with Respect to International Investment Law. *Christ University Law Journal*, 2016, 5, 2, 1-8, pp. 7.

⁵ FRANCK, S. D. (2005): Predicting outcomes in investment treaty arbitration. *Duke Law Journal*, 2005, 65(3), 459-526.

the basic structure of preferences of actors in investment regimes. This article can be seen as a basis for such analysis using for example game theory.

1 Preferences of Actors in Investment Regimes in Relation to Negotiation of Investment Treaties

From the point of view of states as actors in international relations. Investment regimes represent a way to increase its (mostly economic) power. From the point of view of the state exporting capital, the motivation for engaging in investment regimes is to facilitate capital export to use the surplus capital that cannot be used at home, or can be used abroad more effectively due to, for example, lower wages abroad, or absence of regulation in the particular industry. From the point of view of the state importing capital, the preferences are more complex. In economic theory, there are arguments made for both protecting home markets from foreign capital, and for seeking to attract foreign capital, a view expressed for example through the Washington Consensus. This article does not seek to show which is the correct policy, but if the latter motivation prevails, investment treaty is the instrument with the purpose to facilitate foreign investment and regulate the interactions and the relationship between foreign investors and the host state.

While in the case of decision to sign an investment treaty, the interests and preferences of the two states can be common (support of capital flows), negotiating the particulars of an international investment treaty and the exact wording of the provisions can be more complex. In the case, where the negotiations of a bilateral investment treaty are between countries with asymmetrical character of the economy, the preferences for the form that the treaty takes will differ. From the point of view of the country exporting capital, the situation is relatively simple. The country exporting capital will seek to include in the treaty as many provisions for protection of foreign investors as possible. This means, that they will require the treaty to include international arbitration of investor-state disputes, as strict limitation of the ability of state to expropriate foreign investment as possible and as wide a conception of fair and equitable treatment as possible, including protection of legitimate expectation of foreign investors. On the other hand, the country importing capital will have a conflicting preference structure. Such country needs to find a balance between its preference for attracting foreign investment (which is evident by their willingness to negotiate an investment treaty) and their preference for retaining as much regulatory autonomy towards foreign investors as possible. The most popular, and the most simple way to solve this dilemma is to introduce exemptions from particular provisions (such as national treatment) for particular economic sectors (such as auto-industry), which the country importing capital considers important to protect. In this asymmetrical situation, the country exporting capital is always on top, since the country importing capital has to find the balance between conflicting motivations. An example of such negotiations are traditionally treaties between developed and developing countries.⁶

In the case of symmetrical preferences from the point of view of capital flows. The preference structure is also symmetrical. In this case, both countries seek to achieve as many exemptions from investment protection in the key sectors as possible and at the same time to secure that the protection and access of their investors is as great as possible. These are the kinds of negotiations that are usually the most complicated, since it can be assumed that in these cases, the negotiating countries are of similar stature. An example of such negotiations and the complicated nature of the process is the Transatlantic Partnership Treaty.

The final form of the investment treaty should, in case of rational actors, reflect the structure of their preferences in both cases (asymmetrical and symmetrical relationship). As the

⁶ F. e. Agreement Between The Government Of The United Kingdom Of Great Britain And Northern Ireland And The Government Of The Republic Of Angola For The Promotion And Protection Of Investments. (2001): UK-Angola.

article points out in the introduction, the current changes in the new generation of investment treaties are geared towards greater protection of the host state's sovereignty in relation to the foreign investors. This means that while the structure of the preferences did not change, the overall tendency is to put more emphasis on protection of regulatory autonomy of the host states. Any mathematical analysis of these preferences will need to take this fact into account.

2 Preferences of Actors in Investment Regimes in Relation to Foreign Investment Screening

Despite the fact that the new generation of investment treaties provides states with more regulatory autonomy on paper, changes towards greater protection of sovereignty of host states on the level of investment treaties might not necessarily have a significant impact on arbitration practice, where the international arbitration tribunals continue to play a decisive role in interpreting provisions of investment treaties. How the changes in investment treaties will be interpreted by these tribunals remains to be seen. Consequently (although other reasons also play crucial role), the states have recently been introducing measures outside the framework of investment law with the aim of ensuring that states acquire a greater control over their investment environment. These measures have come to be known as screening of foreign investment and it happens most often in strategically important sectors of economy in the pre-establishment phase of investment.

At least eleven countries (including Slovakia) have either introduced, expanded or extended their screening mechanisms in 2022 alone, among them some of the most important actors in investment regimes, such as the United States, the United Kingdom, France or Canada.⁷ Areas, which are most often the target of screening mechanisms include cybersecurity⁸, resistance of supply networks⁹, mining of critical minerals¹⁰, or the banking sector¹¹. In these areas, states reserve the right to approve foreign investment whose value crosses a particular threshold. Proliferation of these mechanisms is a subject of a lively debate in the fields concerned with investment regimes, since they represent another symptom of changing preferences of the main actors. Similar to changes on the level of investment treaties, these trends represent a sign of the tendency of states to protect their sovereignty in relation to foreign investors at the expense of the free flow of capital.

This development suggests that the enthusiasm about unregulated globalization is slowly fading and the nation states are seeking to regain some control over the global economy that they lost during the period of peak globalization. Reasons for this development within investment regimes are not clear, although at least two hypothesis seem reasonable. First, this development might have to do with the change of perception of investment regimes on the part of developing nations, who became disillusioned with them from the point of view of their impact on the economy of these countries and they are therefore creating pressure on investment regimes to better reflect their national interests. Second, and more likely hypothesis is that at the time of dynamic development of China (and to some extent India) as a global economic power, the traditional powers feel that from the point of view of relative gains, unbridled globalization no longer represents the best way retain an advantage over these emerging powers. An additional factor that could be considered is the technological competition in the field of information technology that manifests in this context by an increase in nationalism due to the

⁷ UNCTAD (2023): The Evolution Of FDI Screening Mechanisms – key trends and features.

⁸ GOVERNMENT OF THE USA. (2022): Executive order 1408; GOVERNMENT OF THE UK. (2022): New and improved National Security and Investment Act set to be up and running.

⁹ Ibid.

¹⁰ Government of Canada. Policy Regarding Foreign Investments from State-Owned Enterprises in Critical Minerals under the Investment Canada Act, 2022.

¹¹ KINSELLAR. (2022): Romania approves secondary norms to its new FDI regime.

nature of these technologies and their importance in the field of national security and propaganda. No matter which of these explanations is the most relevant, this development represents a clear changes of position of main actors towards investment regimes, which needs to be analysed further.

Conclusion

This article was concerned with the structure and nature of preferences of actors within international investment regimes. In the first part of the article, the basic structure of preferences of actors in the context of investment treaty negotiations was presented. The second part of the article dealt with the recent trends in investment regimes, which point towards the changes in the overall orientation of investment regimes towards greater protection of national sovereignty and regulatory autonomy of the host states, while at the same time, the most basic structure of preferences does not necessarily change. The states still seek to maximize their investment abroad and regulate foreign investment at home. The emphasis of the regulation at home seems to be increasing. This analysis represents a basis for operationalization of preferences of actors in the context of investment regimes, which can be used create models of negotiation of international investment treaties or development of screening mechanisms in specific areas using game theory, or other analytical tools.

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INTERNATIONAL EXPERIENCE IN PREVENTING AND COMBATING CORRUPTION IN THE COORDINATES OF UKRAINE ECONOMIC DEVELOPMENT: BAROMETER OF GLOBAL CORRUPTION

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Abstract: This study looks into contemporary approaches to developing a successful anti-corruption strategy as a component of the Ukrainian economic security system's credibility. The article examines the functional aspect and produces a set of anti-corruption policy indicators. In order to combat systemic corruption in the national economy, the essay offers useful suggestions for enhancing the functional orientation of anti-corruption policy tools in the system of decentralization of the national economy. The study looks closely at the historical development of ideas on the causes and perceptions of corruption in public relations; it investigates and substantiates the main tenets of systemic corruption and its primary manifestations; and it studies Ukraine's 2020-2024 anti-corruption strategy. The practical part of the work is represented by an economic and statistical analysis of the results of NABU activities in a dynamic sequence for 2021-2022.

Keywords: anti-corruption dirigism, anti-corruption policy, economic security, global corruption barometer, corruption, NABU activity results, national economy.

JEL Classification: E02, F52, G18, O17.

Introduction

Corruption and the shadow economy are seen as a major danger to national security and one of the main barriers to the country's progress in the modern evolution of Ukrainian statehood. The threat that corruption and the shadow economy pose to the state's very existence makes them the biggest impediment to improving the population's standard of life, economic growth, the development of civil society, and the battle against organized crime. One of the greatest obstacles to bringing in foreign investment and cutting-edge technologies for the national economy of Ukraine is the rise of corruption in that country. All-encompassing corruption in all spheres of the national economy and branches of state administration, the high level of development of the shadow economy create many obstacles to the implementation of relevant reforms and negatively affect the investment attractiveness of Ukraine, which significantly slows down the progress of these processes and reduces the effectiveness of the implemented reforms, which acquire only a formal character. One of the priority tasks of the state anti-corruption policy in Ukraine should be the creation and implementation of the analysis quality system and assessment of corruption risks in the sphere of public administration. Corruption and shadow economy are closely intertwined and mutually generate each other¹.

The shadow economy can exist and develop on a significant scale only in conditions of all systems corruption for state power and management. It forms corrupt relations in all spheres of politics and economy, on which its prosperous existence depends. Corruption forces it to

¹ BEREZA, O. (2014): Formation and features of the institutional basis of anti-corruption policy of Ukraine. *Scientific notes of the Institute of Legislation of the Verkhovna Rada of Ukraine*. No. 4, pp. 116-122.

remain in the shadows and conduct illegal business, creates the basis for the formation of its new spheres and types. The shadow economy is the financial basis of corruption, and corruption is the financial basis of the shadow economy.

The establishment of an efficient and legitimate institutional foundation that would return shadow (including corrupt) funds to the budget and support the growth of the country's socio-economic system is the most fruitful strategy for combating the shadow economy, particularly in the economic and public service spheres. As a result, we concentrate on the most pressing issues facing our society pension provision, the provision of public services, the educational and medical spheres where the problem of shadowy activity and the spread of corruption has taken on particularly significant dimensions. It is clear that the small amount of work we have does not permit us to delve more deeply into all facets of the national economy. The manner in which the state amasses assets unites them all.²

One of the main reasons for the growth of corruption is the rapid, illegal and unfair enrichment of the oligarchy, which most often occurred during the intensification of foreign trade ties, as well as a result of large-scale foreign conquests, military robberies or direct bribery by foreign states. It was globalization in ancient times that was the cause of crises in corruption and the death of civilizations and ethnic groups.

2 Literature review

The examination of international law texts reveals the existence of various theories of corruption. Many scientific books, especially those written by attorneys, economists, political scientists, and government employees, provide many theoretical and applied elements of battling corruption.

The study of successful anti-corruption measures as a component of the legitimacy of Ukraine's economic security system has drawn the attention of many academics. A wide range of issues connected to study on state regulatory requirements for tackling systemic corruption in the national economy. For instance, Humenyuk L. (2009) investigates in his article the theoretical and sociological analysis of corruption as a threat to the national security of Ukraine. Beglitsia V. (2015) presents different experience of European countries in the formation of an anti-corruption strategy in his scientific article. Bereza O. (2014) in the work paid attention to formation and features of the institutional basis of anti-corruption policy of Ukraine. Voloshenko A. (2015) research on developing strategies for the swift detection and elimination of corruption hazards is seen in his articles. Vasilyeva O. (2019) devoted her efforts on international anti-corruption experience in public agencies. Vasilyeva O. (2019), for instant, had dedicated her works to foreign experience of anti-corruption activities in public authorities. Karpenko L. (2023) is working on the issues of international retrospective of the anti-corruption standards development in the economic security system of Ukraine.

However, the mechanism of preventing the occurrence of corruption in state authorities, which is the primary reason for belonging to the most corrupt countries in the world, remains inadequately researched, despite the sufficiently large amount of scientific output and the interest of domestic and foreign researchers in the chosen topic in the process of forming the state anti-corruption policy. The development of new forms and techniques of state control over the execution of the state's anti-corruption strategy, as well as improvements to existing ones, were required due to the current systems' inefficiency.

² VOLOSHENKO, A. V. (2015): Ways to timely detection and neutralization of corruption risks / *Actual problems of the economy*. 2015, No. 12 (174), pp. 312-321.

3 Research goal, methods and research base

The article's goal is to provide the international experience in preventing and combating corruption in the coordinates of Ukraine economic development. The study's focus is on the organizational, administrative, and regulatory foundations for implementing state regulatory requirements for battling corruption in Ukraine's national economy.

Modern general scientific and specialized research methods are used in the work to achieve the goals and solve the problems. These methods include: terminological analysis and operationalization of concepts - used to reveal and clarify general theoretical propositions that reveal the essential nature, peculiarities, and nuances of scientists' views on the interpretation of the category of corruption; scientific abstraction and concretization - with the author's formulation of the fundamental type of corruption; scientific abstraction and concretization - with the author's formulation of the basic type comparing the magnitude of the subsistence minimum in Ukraine using statistical and economic methodologies. There are statistical methods for comparing the size of the subsistence minimum in Ukraine in accordance with international standards in 2017-2023.

Research information base is the legislative and regulatory acts defining an effective anti-corruption policy as a component of the legitimacy of the public administration system in Ukraine, sources of international organizations, scientific works and monographs of domestic and foreign economists and civil servants, periodical specialized scientific literature

4 Data and methodology

Currently, there is no unequivocal definition of corruption in international and national regulatory documents, which indicates the multifaceted and contradictory nature of this phenomenon. There is a need to specify the essence of the definition "corruption", which provides the model semantics of the theoretical basis of anti-corruption mechanisms. It should be noted that the modern concept of corruption stops at the traditional understanding of corruption as the abuse of state power for private gain. We propose to consider corruption in a narrow sense as any action aimed at achieving or obtaining any benefits, privileges or benefits through illegal conspiracies and bribes, and in a broader sense as an antisocial, immoral and illegal phenomenon that includes a set of corrupt acts, which destroy the legal foundations of society and state power and are associated with the improper use by persons authorized to perform the functions of the state, the power, official powers, and relevant opportunities granted to them for the purpose of satisfying personal interests or the interests of third parties³.

According to the Organization of the United Nation (OUN), it has information:

- The annual volume of bribes is estimated at one trillion dollars. The world economy loses 2.6 trillion dollars due to corruption. These funds make up more than five percent of global (Gross Domestic Product) GDP.

- According to the United Nations Development Program (UNDP), in developing countries, corruption-related losses exceed the amount of official development aid by 10 times.

Thus, corruption is the serious crime that undermines socio-economic development in all societies. No country, no region, no society is immune from corruption.

Transparency International conducts an annual sociological survey called the World Corruption Barometer to measure public perceptions of corruption, gauge public opinion regarding which governments and public institutions are the most corrupt, and factor in actual experiences with corruption. The efficiency of the authorities in battling corruption is also

³ ZAVHORODNIY, V. (2012): Foreign experience of participation of public organizations in anti-corruption measures. *Scientific Bulletin of the Dnipropetrovsk State University of Internal Affairs*. No. 1, pp. 295-307.

included in the survey based on respondents' perceptions. Since 2003, the study has been carried out year in more than 60 different nations.⁴

According to the 2022 Corruption Perceptions Index (CPI), most nations are failing to combat corruption. A scale from 0 (extremely corrupt) to 100 (very clean) is used by the CPI to rate 180 nations and territories throughout the world according to their perceived levels of public sector corruption. Just 43 out of 100 is the global average, which has not altered for more than ten years. Twenty-six nations have achieved their lowest scores ever, and more than two-thirds of all nations have scores below 50.155 nations have not significantly advanced in the fight against corruption since 2012, despite concerted efforts and some hard-won victories. For fifteen years, world peace has been eroding. Corruption has been a major cause of this as well as a consequence.

By eroding public trust and undermining governments' ability to safeguard citizens, corruption increases and makes it harder to control security concerns. Conflict, on the other hand, undermines government efforts to combat corruption by opening up new chances for it. Even nations with high CPI ratings contribute to the dangers that corruption brings to international security. They have long welcomed foreign filthy money, which has helped kleptocrats advance their nefarious geopolitical goals and expand their riches and power.

The results of the "Global Corruption Barometer" study by Transparency International and the Gallup International Association showed that in 2021, Ukrainians considered the most corrupt institutions to be the most corrupt, and the courts took the first place - 66%. For comparison, law enforcement agencies - 64%, civil service - 56%, health care - 54%, parliament - 53%, political parties - 45%.⁵

The next step in the research consist of presentation some information for 2022. Ukraine received 33 points out of a possible 100 in the Corruption Perceptions Index (CPI) for 2022.⁶ Our indicator increased by one point, and now Ukraine ranks 116-th out of 180 countries in the SRI. Algeria, Angola, Zambia, Mongolia, Salvador and the Philippines also have 33 points. Bosnia and Herzegovina, Gambia, Indonesia, Malawi, Nepal, Sierra Leone are one point ahead of us - all of them have 34 points. And there is the one point less than Ukraine - the Dominican Republic, Kenya and Niger.

There are also changes in indicators among friends of Ukraine. Poland lost 1 point, but remained the leader in CRI indicators among our neighbours - with 55 points, it ranks 45-th. But Slovakia managed to improve its indicators over the year - 53 points (49-th place), Romania - 46 points (63-rd place) and Moldova (91-st place). Despite the russian invasion, our country has shown that its progress in the fight against corruption is a constant process that continues even in the most difficult period of the state's existence⁷.

5 Key research findings

What significance do the findings of the CRI for Ukraine have in relation to the war? Thus, Ukraine's 33 points in 2022 represent the highest indicator for our nation since the revised CRI methodology was introduced. Thus, the indicator for Ukraine has increased by 8 points over the last ten years.

⁴ KARPENKO, L. – IZHA, M. (2023). International Retrospective of the Anti-Corruption Standards Development in the Economic Security System of Ukraine. *Journal of Public Policy and Administration*. USA. Vol. 7, No. 1, 2023, pp. 18-24. doi: 10.11648/j.jppa.20230701.13

⁵ KARPENKO, L. – IZHA, M. – VERBITSKY, D. – BURDEINYI, O. (2023): International Retrospective of the Anti-Corruption Standards Development in the Economic Security System of Ukraine. *Journal of Public Policy and Administration*. USA. Vol. 7, No. 1, 2023, pp. 18-24. doi: 10.11648/j.jppa.20230701.13

⁶ Transparency International (2023). *The Global Anti-Corruption Coalition*. [online]. [cit.2023-05-01]. Available at: <http://www.transparency.org/>

⁷ UKRSTAT (2023). *Statistics* [online]. [cit.2023-05-01]. Available at: <http://www.ukrstat.gov.ua/>

Our nation has demonstrated that, despite the Russian invasion, development in the fight against corruption is a continuous process that continues even in the most trying times of the state's existence. The adoption of the state Anti-Corruption Strategy and the long-awaited appointment of the director of the Specialized Anti-Corruption Prosecutor's Office (SAP), which served as the impetus for stepping up investigations into high-level corruption, are two unquestionably beneficial developments from the previous year. The High Anti-Corruption Court also showed its efficacy in 2022, hearing 49 cases, 37 of which ended in decisions.⁸

With the help of other institutions, the National Anti-corruption Bureau (NABU) was able to locate and defeat the external foe. The National Anti-Corruption Bureau of Ukraine concentrated on its primary activity of exposing corruption in the second half of 2022. Although it started in the first half of the year, collaboration with law enforcement and security organizations to track down the enemy and deal with the effects of Russian aggression has persisted. NABU employees seconded to the Main Directorate Intelligence of the Ministry Defense of Ukraine (GUR MOU) established the receipt of reports on the plans of the enemy and the deployment of his forces, as well as data on their defeat. Detectives joined the implementation of special operations. One of them was the evacuation of three Ukrainian marines to the territory controlled by Ukraine after staying in the occupied city for more than half a year⁹.

Employees of the Department Special Operations of NABU provided operational support in about 80 events of the Security Services of Ukraine (SSU) in Kharkiv and Odesa regions. In the second half of the year, employees of the NABU, who have the skills of sappers, continued to clear the territories and buildings freed from the occupiers in the east of the country¹⁰.

The cooperation between NABU and State Enterprise "Ukrainian National Center for Peace Building", which performs the functions of the National Information Bureau (NIB), proved to be effective. Employees of the Bureau helped colleagues from the NIB to launch a "hotline" for prompt response to the facts of human rights violations during the armed aggression of the Russian Federation against Ukraine. In particular, on the basis of the technical complexes of NABU, calls received to the NIB "hotline" were received. During the second half of 2022, more than 15,000 appeals from citizens of Ukraine were processed¹¹.

NABU focused its efforts on working with foreign partners and informing the international community about developments in the fight against corruption. It also strengthened the international focus of its activities. In the second half of 2022, two projects of the National Bureau immediately won recognition on a global scale. According to the EPAC-EACN version, "Anti-Corruption School of NABU" was named the year's top anti-corruption project. The Special Investigation Service of the Republic of Lithuania held the Integrity Hackathon, an international innovation competition in the field of integrity and the fight against corruption, and the Anti-Corruption Augmented Reality project took first place¹².

The commitment of Ukraine as a prospective EU member to the selected anti-corruption agenda was once again demonstrated by participation in international events. Speaking at the

⁸ Ukraine Finance Ministry (2023). *Living wage in Ukraine 2023* [online]. [cit.2023-05-01]. Available at: <https://index.minfin.com.ua/ua/labour/wagemin/>

⁹ National Anti-Corruption Bureau of Ukraine (2023). *Work reports* [online]. [cit.2023-05-21]. Available at: <https://nabu.gov.ua/activity/reports/>

¹⁰ Integrated compliance management - The Future of Compliance Programs; Denmark Corruption Report; last updated: september 2020. URL: <https://www.ganintegrity.com/portal/country-profiles/denmark>

¹¹ BEGLITSIA, V. (2015): Experience of European countries in the formation of an anti-corruption strategy. *Scientific works*. Issue 252, T. 263, State administration, pp. 17-23.

¹² HUMENYUK, L. (2009): Theoretical and sociological analysis of corruption as a threat to the national security of Ukraine. *Scientific Bulletin of the Lviv State University of Internal Affairs*. Vol. 2. (economic series). Lviv, pp. 100-110.

International Anti-Corruption Conference IACC 2022 in Washington, USA, acting director of the National Bureau Gizo Uglava used this idea as a unifying theme. This is the greatest public anti-corruption event ever held, and this year's situation in Ukraine received particular attention.

The National Bureaus initiatives are still supported by international partners. The All-Ukrainian Anti-Corruption Mutt Court was held on the eve of International Anti-Corruption Day in collaboration with various anti-corruption organizations. For Ukrainian law students, it became one of the most significant occasions. To take part in the initiative, 107 teams from 52 universities across all of Ukraine registered. 10 of the 82 teams who completed the selection process successfully competed offline in simulated scenarios resembling those encountered by investigators. The National Bureau strengthened its collaboration with international partners in the area of investigations in addition to its prevention-focused cooperation.

NABU joined the OSCE and United Nations Office on Drugs and Crime (UNODC) programmed to prevent money laundering utilizing virtual assets. Following that, a week of training at the CEELI Institute in the Czech Republic helped NABU investigators and analysts hone their abilities in monitoring cryptocurrency transactions and looking for illicit assets. In general, Bureau staff acquired new skills through more than 10 offline seminars and trainings from the relevant authorities in six different nations.¹³

Practical part of the article. According to the Part 3 of Article 26 of the Law of Ukraine "On the National Anti-Corruption Bureau of Ukraine", the written report must contain the following mandatory information:

- 1) statistical data on the results of activity with mandatory indication of such information
- 2) interaction with other state bodies, local self-government bodies, enterprises, institutions and organizations;
- 3) cooperation with competent bodies of foreign states, international and foreign organizations and agreements concluded with them on cooperation, representation of interests abroad;
- 4) cooperation with non-governmental organizations and mass media;
- 5) number of employees of the National Bureau, qualifications and experience of its employees, improvement of their qualifications;
- 6) activities of the internal control unit of the National Bureau; the number of reports on the commission of offenses by employees of the National Bureau, the results of their consideration, bringing the employees of the National Bureau to justice;
- 7) estimate of the National Bureau and its implementation;
- 8) other information related to the results of the National Bureaus activities and the performance of its duties.

In accordance with Article 26 of the Law of Ukraine "On the National Anti-Corruption Bureau of Ukraine" (NABU), we provide statistical data on the results of activity for 2021-2022 (Table 1).

Table 1: Dynamics of NABU activity results for 2021-2022 years

Type of activity	I half of the 2021	II half of the 2021	I half of the 2022	II half of the 2022	Tp % (II half 2022 compared to I half 2021)

¹³ VASILYEVA, O. (2019): Foreign experience of anti-corruption activities in public authorities / *Investments: practice and experience*. 2019, No. 13, pp. 62-65.

The number of registered statements and notifications about criminal offenses in terms of criminal offenses assigned by law to the jurisdiction of the National Bureau	236	297	163	293	-1,35
The number of operative and investigative cases initiated by the National Bureau,	18	13	20	17	30,77
and their effectiveness	2	8	6	5	-37,5
The number of persons against whom indictments have been drawn up for their commission of criminal offenses assigned by law to the jurisdiction of the National Bureau	43	86	31	68	-20,93
The number of persons in respect of whom the court's guilty verdict has entered into legal force regarding their commission of criminal offenses assigned by law to the jurisdiction of the National Bureau	16	16	21	15	-6,25
The number of persons in respect of whom the acquittal verdict of the court regarding their commission of the respective offenses became legally binding	1	0	1	6	-

The Table 1 continuation: Dynamics of NABU activity results for 2021-2022 years

Type of activity	I half of the 2021	II half of the 2021	I half of the 2022	II half of the 2022	<i>Tp</i> % (II half 2022 compared to I half 2021)
Information on the amount of losses	97017248000*** UAH	98582868000 ** UAH	113389558000** UAH	120875826000** UAH	+22,6

and damages caused by criminal offenses brought under the jurisdiction of the National Bureau by law, the status and amounts of their compensation	2806338820 UAH** including in the I half of 2021: 1112856000 UAH	3796941630 UAH** including in the II half of 2021: 84056410 UAH	4544965270 UAH*** including in the I half of 2022: 748023509 UAH	5794962480 UAH*** including in the II half of 2022: 1249997210 UAH	X
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** established losses as of the end of the reporting period

*** compensated losses as of the end of the reporting period

Source: formed by the author on the base of National Anti-Corruption Bureau of Ukraine (2023). *Work reports* [online]. [cit.2023-05-21]. Available at: <https://nabu.gov.ua/activity/reports/>

According to the results of the statistical study shown in the Table 1, unfortunately, the size of established losses increased as of the end of the reporting period. The number of appeals has slightly decreased.

Conclusions

In view of the destructive all-encompassing influence of corruption on the national economy and its ability to expand without constant opposition, the need to allocate the anti-corruption function of the state, which involves the comprehensive implementation of legislative, institutional, organizational-political, socio-economic and moral-ideological measures, is substantiated. The outlined measures should be aimed at creating high-risk conditions for corruption activity, taking into account the following fundamental principles of activity of anti-corruption entities: legality; openness and transparency; priorities of service to the state; permanence; collegiality in all cases of adoption of decisions vital for the population; purposefulness; scientific validity; economic feasibility; preventive measures; intended use. It has been proven that together with the coordinated activity of state authorities in the implementation of the tasks of the state anti-corruption policy and the observance of the basic principles that ensure the effectiveness of anti-corruption mechanisms, it is necessary to implement a complex of modernization state-management measures aimed at the formation of a strong political will in the country for the implementation of anti-corruption policy measures; ensuring effective functioning of anti-corruption institutions; ensuring transparency in relations between the public and private sectors; popularization of the idea of active opposition of civil society to manifestations of corruption.

According to the results of the methodological components systematization of the state anti-corruption policy, it was established that the anti-corruption policy consists in the development and implementation of versatile and consistent measures of the state and society to eliminate (minimize) the causes and conditions that generate and feed corruption in various spheres of life. It should be integrated into the basic strategy of the state's development in state-political, socio-economic, state-legal, social-civic, socio-cultural aspects.

Thus, the problems in the researched area require a complex approach to their solution - the combination of theory and practice, because the level of corruption can be considered as a powerful recitalist of reforms in any area. Success in the implementation of anti-corruption policy should be the opening of opportunities for the growth of the national economy, improvement of the quality of the population life and ensuring the fairness of state policy.

We firmly believe that systems must be put in place to ensure appropriate supervision of discretionary decisions (when confirming eligibility for government assistance or social services); to control conflicts of interest and ensure transparency through the reporting and/or control of personal assets and liabilities; to ensure that interactions between government

officials and businesspeople are improper; and to ensure that personal assets and liabilities are disclosed.

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EFFECTS OF INFLATION ON INVESTMENTS¹

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Abstract: This article examines the relationship between inflation and bank reserves in Slovakia, where a significant amount of reserves are stored in bank accounts that are highly susceptible to the erosive effect of inflation. The aim of the article is to analyse the detrimental impact of inflation on bank reserves and explore various investment tools that can serve as potential safeguards against inflationary erosion. Our findings suggest that a proactive approach towards finding suitable investment options can help protect bank reserves and mitigate the adverse consequences of inflation.

Keywords: inflation, assets, mutual funds, investments

JEL: E21, E22, G11

Introduction

Inflation poses a significant challenge to the stability and preservation of bank reserves, especially in economies where a substantial portion of these reserves is held in bank accounts that are highly susceptible to the adverse effects of inflation. Slovakia, as a member state of the European Union and a representative of one of the Central European economies, is not exempt from this phenomenon. This article seeks to investigate the intricate relationship between inflation and bank reserves in Slovakia, with a specific focus on the vulnerability of bank accounts as the primary means of storing reserves. Inflation, as a macroeconomic phenomenon, has been extensively studied in the field of economics. Scholars have dedicated significant attention to unravelling its causes, implications, and potential countermeasures. Understanding inflation necessitates a comprehensive examination of various factors, including changes in the money supply, aggregate demand, production costs, and other relevant elements. Moreover, the impact of inflation on different sectors of the economy, including financial institutions, has attracted considerable interest from both domestic and foreign researchers.²

In the context of Slovakia, inflation poses a substantial threat to the value of money. The vulnerability of bank accounts to inflation arises from their nature as financial instruments with relatively low returns and limited protection against rising prices. Additionally, this effect is further supported by the relatively low level of financial literacy among Slovaks, ranking the country among the lowest in the European Union. Only Romania, Bulgaria, and Cyprus scored

¹ The paper was written as part of the project of young teachers, scientific workers and doctoral students entitled "Global financial crisis from an economic and linguistic point of view" no. I-23-101-00.

² MADSEN, J. B. (2003): Inflation and investment. In: *Scottish Journal of Political Economy*, Vol. 50, No. 4, pp. 375-397; GILLMAN, M. – KEJAK, M. (2011): Inflation, investment and growth: a money and banking approach. In: *Economica*, Vol. 78, No. 310, pp. 260-282.

lower.³ This problem has persisted in Slovakia for an extended period,⁴ prompting the National Bank of Slovakia to initiate several projects aimed at promoting financial literacy awareness.⁵

While the impact of inflation on bank reserves in Slovakia has been discussed in the literature, it is essential to consult scientific articles published in Slovak journals to gain a deeper understanding of the local dynamics and challenges specific to this region. Slovak journals that focus on economics and finance provide valuable insights into the intricacies of the Slovak financial system, the behavior of inflation, and the vulnerability of bank accounts as repositories of reserves. To address the vulnerability of bank reserves, it is crucial to explore potential investment tools that can effectively protect against inflationary side effects. By investing reserves in alternative assets or financial instruments that have historically demonstrated resilience in inflationary environments, financial institutions in Slovakia can mitigate the risks associated with inflation. These investment tools can include government bonds, real estate, diversified portfolios, or foreign currency investments.

In summary, this article aims to contribute to the existing literature by examining the impact of inflation on bank reserves in Slovakia, with a particular emphasis on the vulnerability of bank accounts. Additionally, we explore various investment tools that can help safeguard bank reserves from the erosive effects of inflation. Through a comprehensive evaluation of these tools, we aim to provide practical recommendations for citizens and financial institutions in Slovakia to effectively protect their reserves and navigate the complex inflationary landscape.

1 The current state of knowledge

To gain a deeper understanding of the issue under investigation, it is necessary to provide an overview of the current state of the global economy, which directly influences developments in Slovakia. The financial world was shocked by the news of the Silicon Valley Bank (SVB) collapse, which ranks 16th among the largest American banks in terms of assets. The bank encountered liquidity problems, leading to deposit withdrawals amounting to 42 billion USD in a single day. This is the second-largest retail bank collapse in the USA, raising concerns about the health of the banking sector and the potential resemblance to the 2008 financial crisis. The situation has already prompted a response from the US central bank, the Federal Reserve (Fed). Together with the Treasury Department, the Fed announced the guarantee of all SVB deposits, aiming to support the currently wavering confidence in the banking system. Jerome Powell, the head of the Fed, sent a clear signal to the markets that major banks will not be allowed to fail.⁶

The desired trend in inflation in the US has caused a rebound from the bottom. In October 2022, inflation in the United States increased by 7.7% compared to the previous year, slowing down from September's 8.2%. This situation suggests that inflation in the US could be

³ KOPÁČOVÁ, J. – ŽILKOVÁ, K. (2020): Finančná gramotnosť študentov učiteľstva pre primárne vzdelávanie Financial Literacy in Pre-Service Primary Teachers. In: *Studia Scientifica Facultatis Paedagogicae*, Vol. 19, No. 1, pp. 65-79.

⁴ CUPÁK, A. et al. (2018): *Financial Literacy Gaps Across Countries: The Role of Individual Characteristics and Institutions* [online]. [Cited 17.5.2023.] Available online: https://nbs.sk/_img/documents/publik/wp_2_2018_cupak_financial_literacy_en.pdf

⁵ National Bank of Slovakia (2019): *Stratégia Národnej banky Slovenska na podporu finančnej gramotnosti* [online]. [Cited 17.5.2023.] Available online: https://nbs.sk/_img/documents/_ts/191107/nbs_strategiafingram_2019.pdf

⁶ GALATI, L. – CAPALBO, F. (2023): *Silicon Valley Bank Bankruptcy and Stablecoins Stability*. [online]. [Cited 19.5.2023.] Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4437015; AZIMLI, A. (2023): *The Reaction of the Financial Sector to the Collapse of the Silicon Valley Bank (Svb)*. [online]. [Cited 19.5.2023.] Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4432585; ANWER, Z. et al. (2023): *On the Impact of Silicon Valley Bank Failure: Evidence on the Reaction of Major Global Asset Classes*. [online]. [Cited 19.5.2023.] Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4410761

brought under control. Consequently, there is optimism that the Federal Reserve will raise interest rates at a slower pace and end the tightening sooner. This would imply a less pronounced economic slowdown and an earlier market recovery. Mild optimism is also encouraged by the decline in energy prices, particularly oil (down 10% on a monthly basis), and improved consumer and business sentiment in Europe, where average inflation across Eurozone countries stands at around 7%.

Similarly, several studies have examined the current economic developments in Slovakia.⁷ The situation in Slovakia is significantly more severe, with current inflation reaching approximately 14%.⁸ Slovak households have several tools at their disposal to combat inflation. Each household allocates a portion of its financial assets in a specific manner, whether to maintain a certain standard of living in retirement, secure the financial well-being of offspring, or protect and enhance property value by mitigating the effects of inflation. There are numerous avenues available to deploy surplus funds in a way that generates future returns. Often, individuals opt for savings vehicles such as savings accounts, term deposits, pension schemes, life insurance policies, and similar instruments. Additionally, disposable income can be directed towards investment ventures in conjunction with saving.⁹

To contribute to the objective of this study, our focus lies on specific mutual funds overseen by domestic asset management companies. According to the Slovak Association of Asset Management Companies, there are 24 asset management companies operating in the Slovak financial market, managing assets with a total value of nearly 12 billion euros:

- Money market funds (26.419 mil. €)
- Short-term investment funds (455.742 mil. €)
- Bond funds (1,060.865 mil. €)
- Equity funds (3,015.106 mil. €)
- Mixed funds (4,865.660 mil. €)
- Structured funds (71.529 mil. €)
- Real estate funds (2,404.877 mil. €)
- Alternative investment funds (26.521 mil. €)

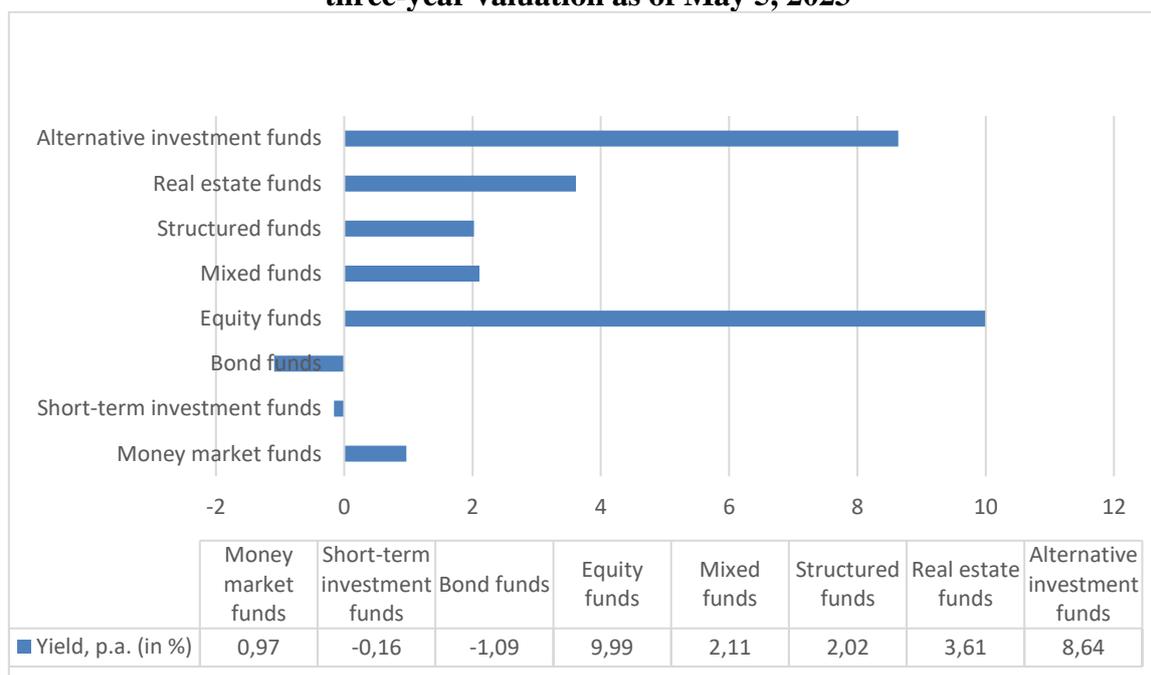
while the following graph illustrates the average appreciation/return on investment.

⁷ GONOS, J. – NEMEC, J. – TOMKOVÁ, A. (2022): Zhodnotenie ekonomickej kondície Slovenska v pandemickom období na základe vybraných ekonomických ukazovateľov. In: *Journal of Global Science*, Vol. 7, No. 3; BELANOVÁ, K. et al. How Increased Inflation Affects Businesses. In: *SAR Journal-Science and Research*, Vol. 6, No. 1, pp. 3-8.

⁸ European Central Bank (2023): *Measuring inflation – the Harmonised Index of Consumer Prices (HICP)* [online]. [Cited 21.5.2023.] Available online: https://www.ecb.europa.eu/stats/macroeconomic_and_sectoral/hicp/html/index.en.html

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Figure 1: Weighted annualized values of funds in the Slovak Republic for the average three-year valuation as of May 5, 2023



Source: Based on SASS data¹⁰.

2 Methods

Within the framework of the Slovak Republic, the analysis and examination of mutual funds data are made accessible through the resources provided by the Slovak Association of Asset Management Companies (referred to as SASS henceforth). The SASS classifies mutual funds based on factors such as the composition of assets in their portfolios, the regulatory framework under which they operate, or their distribution methods. In order to assess the effect of inflation on the assets of Slovak citizens, we rely on the inflation forecast from 2023 to 2026 as projected by the Ministry of Finance of the Slovak Republic:

Table 1: Inflation forecast

Year	2023	2024	2025	2026
Inflation rate	9,8	5,3	4,2	2,2

Source: Ministry of Finance of the Slovak Republic¹¹

For our calculations, we will utilize the year-to-year yield as the measurement parameter:

$$Net\ yield^t = Net\ yield^{t-1} * (average\ yield / 100) + Net\ yield^t \quad (1)$$

The concept of *net yield* pertains to the comprehensive accumulation of earnings or gains derived from an investment endeavor, encompassing dividends, interest, capital gains, and various other forms of returns. The variable t denotes the time period, typically measured in years. Additionally, the term *average yield* denotes the weighted annualized values of funds. It

¹⁰ Slovak Association of Asset Management Companies (2023): *Aktuálny stav kolektívneho investovania* [online]. [Cited 22.5.2023.] Available online: <https://www.ass.sk/>

¹¹ Ministry of Finance of the Slovak Republic (2023): 62. zasadnutie výboru pre makroekonomické prognózy (február 2023) [online]. [Cited 22.5.2023.] Available online: <https://www.mfsr.sk/sk/financie/institut-financnej-politiky/ekonomicke-prognozy/makroekonomicke-prognozy/62-zasadnutie-vyboru-makroekonomicke-prognozy-februar-2023.html>

is crucial to mention that the average yield is calculated while holding other factors constant, a principle known as *ceteris paribus*.

3 Results

Based on our findings, it can be observed that the most vulnerable financial instrument is the ordinary deposit account, which Slovak citizens have stored in banks.

Table 2: Results

Asset	Initial reserves (mil.)	Avg. yield (p.a.) (in %)	2023		2024		2025		2026	
			Net yield	N.Y. + I						
Money market funds	26,419	0,97	26,67526	24,0611	26,93401	23,0069	27,19527	22,2544	27,45907	21,9759
Short-term investment funds	455,742	-0,16	455,0128	410,422	454,2848	388,047	453,5579	371,155	452,8322	362,408
Bond funds	1060,865	-1,09	1049,302	946,47	1037,864	886,537	1026,551	840,045	1015,362	812,609
Equity funds	3015,106	9,99	3316,315	2991,32	3647,615	3115,77	4012,012	3283,1	4412,812	3531,64
Mixed funds	4865,66	2,11	4968,325	4481,43	5073,157	4333,46	5180,201	4239,05	5289,503	4233,27
Structured funds	71,529	2,02	72,97389	65,8224	74,44796	63,593	75,95181	62,1527	77,48603	62,0132
Real estate funds	2404,877	3,61	2491,693	2247,51	2581,643	2205,22	2674,84	2188,87	2771,402	2217,99
Alternative investment funds	26,521	8,64	28,81241	25,9888	31,30181	26,7378	34,00628	27,8279	36,94443	29,5672
Bank reserves	45614,71	0	45614,71	41144,5	45614,71	38963,8	45614,71	37327,3	45614,71	36506,1

Source: Own calculations based on SASS and Ministry of Finance of the Slovak Republic

These typically refer to current accounts or notice deposit accounts, where the appreciation often hovers around 0%. Taking into account the inflation rate, Slovak residents would lose nearly 10 billion euros in real value of money over a span of 4 years. This accounts for a decline of 22%. Conversely, individuals who utilized conservative mechanisms such as bonds to grow their assets faced even greater losses. Not only are bonds unprofitable in the short term, but their real value diminishes further when factoring in inflation, causing investors to lose 23% of their savings. Money market funds, considered the most conservative investment method, demonstrate an average year-to-year yield of 0.97%. As a result, the overall value of money market funds decreases from 26,419 to 21,975.9 million euros. This represents a decrease of almost 17%, while in case of short-term investment funds, the decrease is 20%. Only two investment tools have the potential to surpass the inflation rate. Equity funds prove to be the most profitable instrument, as they not only achieve an annual profit above the inflation level but also yield a 46% higher nominal value, which, when adjusted for inflation, is 17% higher. Another relatively successful tool is alternative investment funds, which exhibit an overall appreciation rate, including inflation, of 11.5%. Structured funds and real estate funds experience declines of 13% and 7.8%, respectively.

Conclusion

In conclusion, our analysis highlights the critical challenge that inflation presents to the stability and preservation of bank reserves, particularly in economies like Slovakia, where a significant portion of these reserves is held in vulnerable bank accounts. As a member state of the European Union and a representative of the Central European economies, Slovakia is not immune to the impact of inflation.

This article aimed to explore the complex relationship between inflation and bank reserves in Slovakia, with a specific focus on the vulnerability of bank accounts as the primary storage mechanism for reserves. The macroeconomic phenomenon of inflation has been extensively studied in the field of economics, with scholars dedicating significant attention to understanding its causes, implications, and potential countermeasures. A comprehensive examination of various factors, such as changes in the money supply, aggregate demand, and production costs, is necessary to grasp the dynamics of inflation. The impact of inflation on different sectors of the economy, including financial institutions, has garnered significant interest from both domestic and international researchers.

In the context of Slovakia, inflation poses a substantial threat to the value of money. Bank accounts, as financial instruments, exhibit relatively low returns and limited protection against rising prices, making them particularly vulnerable to the erosive effects of inflation. Furthermore, the relatively low level of financial literacy among Slovaks, ranking the country among the lowest in the European Union, reinforces this vulnerability. To address the risks associated with inflation, it is crucial for financial institutions and individuals in Slovakia to consider alternative investment tools that have historically demonstrated resilience in inflationary environments. Such tools may include government bonds, real estate investments, diversified portfolios, or foreign currency investments. By diversifying their investment strategies, financial institutions and individuals can mitigate the adverse effects of inflation and safeguard their reserves in the face of economic uncertainties.

In summary, this article contributes to the existing literature by examining the impact of inflation on bank reserves in Slovakia, with a specific emphasis on the vulnerability of bank accounts. It underscores the need to address the challenges posed by inflation through informed investment choices and enhanced financial literacy, ultimately enabling individuals and financial institutions in Slovakia to navigate the complexities of the inflationary landscape and safeguard their financial well-being.

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INTERCULTURAL COMMUNICATION IN PRACTICE: OVERCOMING CHALLENGES AND BUILDING A THIRD CULTURE

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Abstract: Culture is one of the key factors in how people perceive and interpret their environment. All values, norms, meanings, and symbols in society are expressed through culture. Culture remains at the heart of interpersonal communication. We live in a culturally diverse world where people encounter people of other cultures, nationalities, religions, and beliefs on a daily basis. For this reason, an understanding of intercultural communication and the differences that arise from it is extremely important. In this context, it is quite possible that individuals encounter problems in interpersonal communication because they are unaware of the peculiarities of a culture other than their own. Therefore, in this paper we discuss intercultural communication in practice and introduce the concept of the so-called third culture based on literature research. The main aim of the article is to introduce the concept and thus contribute to the debate on theoretical approaches to the study of intercultural communication at Slovak universities.

Keywords: intercultural communication, third culture, barriers to intercultural communication

JEL: D83, M14, Y80

Introduction

The study of intercultural communication seeks to answer the primary question: “*How do people understand one another when they do not share a common cultural experience?*”¹ Until a few decades ago, diplomats, expatriates, and occasional travellers were mainly faced with this question. Today, as we live in multicultural societies within a global world, we face this question every day. Challenges and obstacles in intercultural communication arise as a result of events that take place in the real world around us and in the daily confrontation with intercultural interactions based on personal experiences and observations. In addition, a rapidly changing world influenced by technology, travelling, education, and migration brings us into contact with different cultures. To meet the challenges of this changing environment, Samovar and Porter² suggest that we exercise caution and circumspection when “*interacting with people whose entire cultural background, whose very way of perceiving the world and acting, may be quite different*” from our own. Differences are often seen in a negative light, yet they can be enriching if we can appreciate and make use of them in a proper way. Much of the tensions and challenges in intercultural interactions and encounters can be attributed to the ways in which several aspects of intercultural communication - surface and deep culture dynamics, differences in values and beliefs, stereotypes, and prejudices - are influenced by our own worldview, environment, and ultimately by various media.

The concept of surface and deep culture can best be explained by using the model of *iceberg*, the tip of which floats above the water (surface culture), but the rest of the iceberg is hidden beneath the surface and thus invisible (deep culture). The iceberg model was developed by the anthropologist Edward T. Hall to help explain the context of culture. It suggests similarities

¹ BENNETT, M. J. (1998): Intercultural communication: A Current Perspective, p. 1.

² SAMOVAR, L.A. - PORTER, R. E. (2001): Communication between Cultures, p. 2.

between culture and the iceberg in that iceberg, such as cultures, are disproportionate in terms of visibility. It is only approximately the top 10% of the iceberg mass that is visible above water, while 90% remains hidden below surface.³ Culture is very much alike, as without studying it in more depth, we can only observe its visible aspects. To fully understand the rest, deeper analysis is required, which can be achieved through experience. While cultural features at the surface level (10% of the iceberg) are visible and can generally be easily discerned, cultural features at the deep level (90% of the iceberg) are more difficult to perceive because they are hidden. Sojourners and foreigners are often faced with this challenge of not understanding deep culture. In other words, understanding the deep culture of the host country can be challenging for adaptation depending on the cultural context or environment. More importantly, ignorance or unfamiliarity with the concept of deep cultures can result in culture shock, and recovery or adaptation may vary depending on how the individual transitions to a new cultural situation⁴. Isolation or separateness is not an option in this case because cultural contact is usually unavoidable. In the present paper we will therefore discuss intercultural communication in practice and, based on literature research dealing with this issue, we will present a model of the third culture, which has an irreplaceable place in today's interconnected world. The principal objective of the paper is to introduce the mentioned concept and thus contribute to the discussion on theoretical approaches in the study of intercultural communication at Slovak universities, which could contribute to the advancement and deepening of teaching in the field.

1 Impact of different value systems and beliefs

Exploring and discovering the deep level of cultural values and beliefs about how the world *should be*, not *how it is*, allows us to understand why our worldviews differ. Value and belief systems rooted in religious traditions, historical roots, and family lore influence how we observe and perceive the world around us and, more importantly, how we respond to intercultural interactions and events. Cultural values influence a wide range of our behaviour. Our knowledge and understanding of our own cultural value and belief systems and how we behave within these parameters is key to how we perceive the value and belief systems of other cultures.⁵ Ignorance about our own culture can lead us to make inappropriate judgments about other cultures, and so we may rely on stereotypes to understand our own world and the world around us. Stereotypes are one of the barriers to intercultural communication. In addition to stereotypes, some of the major barriers to intercultural communication include: prejudice, attitude as a mindset, abstraction, personal editing, ethnocentrism, perception, misinterpretation, verbal language, non-verbal language and culture shock.⁶ Most of these barriers were first described by LaRay Barna in 1994, who mainly studied barriers to intercultural communication in the field of education, but these barriers are also commonly used in international business research.⁷ Among cultural barriers, stereotypes are probably the most visible and the most commonly discussed ones. Samovar and Porter define stereotypes as the perceptions or beliefs we hold about groups or individuals, based on our previously formed opinions or attitudes.⁸ They can be described as fixed ideas or images that we have of a particular type of person or thing, but which are not true in reality. Simply said, stereotypes serve as labels we give to other people or situations. Whitley and Kite's definition of a

³ BENČIKOVÁ, D. - MALÁ, D. (2018): Communication Across Cultures for Future Managers, p. 23.

⁴ PATEL, F. – LI, M. - SOOKNANAN, P. (2011): Intercultural Communication: Building a Global Community, p. 141.

⁵ PATEL, F. – LI, M. - SOOKNANAN, P. (2011): Intercultural Communication: Building a Global Community, p. 142.

⁶ BENČIKOVÁ, D. - MALÁ, D. (2018): Communication Across Cultures for Future Managers, p. 45.

⁷ SEEGER, I. – GUSTAFSSON, S. (2021): Barriers to Intercultural Communication - A Case Study on IKEA Japan, p. 4.

⁸ BENČIKOVÁ, D. - MALÁ, D. (2018): Communication Across Cultures for Future Managers, p. 46.

stereotype as *beliefs and opinions about the characteristics, attitudes, and behaviours of members of different groups*⁹ is also a simple and straightforward explanation of how stereotypes work. The tendency to stereotype is also influenced by the mass media, schools, families, and peers, but the effects of stereotyping extend beyond one's own imagination and can be extremely harmful, derogatory, discriminatory, and damaging.¹⁰ Intercultural relationships and interactions can both create and destroy stereotypes. Although stereotypes can be both negative and positive, negative stereotypes lead to prejudice. Prejudice often fuels negative attitudes or biases towards a particular cultural group and can ultimately lead to discrimination. As stereotypes, prejudices are preconceived opinions that are not based on reason or experience but are founded on a negative attitude towards certain groups. A prejudice is an unreasonable dislike of a group of people or thing, or, on the other hand, an inexplicable preference of one group over another. It is defined as irrational, preconceived opinion that leads to preferential treatment to some people and unfavourable bias or hostility against others, due to or indirect contradiction of, ignorance of facts.¹¹ For example, a person who says: "*I don't want (a group of people) to live in my neighbourhood*" expresses prejudice. Like stereotypes, prejudice involves preconceptions about individuals or groups based on unfounded opinions, attitudes, or beliefs. Stereotypes and prejudices represent a set of problems that are difficult to address because they exist below the level of consciousness. One solution to the problem of stereotyping and prejudice is education on intercultural differences, which, at the cognitive level, would lead to the elimination of stereotypes and prejudices, and lead to mutual respect, understanding and increased cooperation.

2 Towards a third culture

In the 1980s, communication experts such as Ron Arnett and John Stewart outlined a relational view of communication that overcomes many of the limitations associated with a one-way conception of empathy. By emphasizing a productive rather than reproductive approach to understanding, empathy can go beyond trying to determine where the other person is coming from; rather, it can create what interculturalists call a *third culture*, characterized by unique values and norms that may not have existed prior to the relationship.¹² Through relational empathy, communicators with different cultural backgrounds can create a more inclusive culture that allows them to communicate more effectively with each other. As intercultural communication expert Fred Casmir describes it, the third culture is the result of harmonizing the component parts into a cohesive whole. The emergence of this third culture is the essence of relational empathy and is essential for successful intercultural communication.¹³

The dialogical nature of building a third culture reflects the notion of intercultural competence, which can help reconcile seemingly conflicting values across cultures, create a dynamic balance, integrate values through synergy, and enable transformation at the personal, social, and structural levels.¹⁴ Building a global community through the creation of a third culture satisfies a human desire to make our lives meaningful and valuable in response to a changing environment.¹⁵ In particular, building a third culture recognizes the positive synergies between cultures and brings cultures together on the basis of what they consider to be shared

⁹ WHITLEY, B.E. – KITE, M.E. (2022): *The Psychology of Prejudice and Discrimination*, p. 6.

¹⁰ PATEL, F. – LI, M. – SOOKNANAN, P. (2011): *Intercultural Communication: Building a Global Community*, p. 144.

¹¹ BENČIKOVÁ, D. – MALÁ, D. (2018): *Communication Across Cultures for Future Managers*, p. 48.

¹² BROOME, B. J. (2015). In: *The SAGE Encyclopedia of Intercultural Competence*, p. 289.

¹³ Ibid.

¹⁴ BROWAEYS, M. J. – PRICE, R. (2015) *Understanding Cross-Cultural Management*, p. 430.

¹⁵ PATEL, F. – LI, M. – SOOKNANAN, P. (2011): *Intercultural Communication: Building a Global Community*, p. 144.

values and beliefs. Community building reflects human expectations and aspirations of what is acceptable, respectful, and just for the common good of all humanity. Staub¹⁶ agrees that part of the human desire is to *fully develop and harmoniously integrate one's abilities, values, and goals* in deep connection with others, and this is another attribute of community building. It is in such a community that they can find their voice and meaning through the affirmation of their identity. Gudykunst¹⁷ emphasizes that *being part of a community does not mean giving up one's individuality*. Third culture is based on creative and adaptive development and interdependence in a continuous process of dialogic communication that requires people to change their attitudes in order to survive within the third culture community.¹⁸ Intercultural synergy can bring about positive results and potentials that cannot be realised by either culture alone. The concept of the third culture respects, encourages, and takes into account cultural diversity and differences and considers diversity and variety as the basis of excellence. It develops on the basis of diversity, dialogues, common frameworks, norms and worldviews. Participants in building a third culture bring with them social and cultural capital, which is considered an asset in intercultural communication and international business. Third culture building accepts cultural diversity and sees it as an advantage rather than a disadvantage. It is an enriching experience providing a new empowered environment that allows for the growth and development of respectful, dignified, and equitable relationships between cultures.¹⁹

Because commonalities are shared and emphasised, members of the third culture are free from prejudice and bias. The third culture does not tolerate unilateral accommodation, coercion, and cultural domination of one party over another.²⁰ It requires participants to embrace emerging core values, to rethink their previous ideas and assumptions, and to fight racism, ethnocentrism, prejudice and bias. As Gudykunst points out²¹ *the way we think about strangers influences the way we act toward*. Building a third culture community based on equal status is unlikely to succeed if some participants assume cultural, racial, ethnic, or linguistic superiority over others. Casmir and Asuncion-Lande²² note that third culture is open and allows for new information and continuous growth. Gudykunst²³ argues that *openness, not intimacy, is the key to community development*. According to Gudykunst, third culture community building is based on relationships and interdependence. He notes that communication is mutual and reciprocal. If we align our behaviours appropriate to the third culture, other participants will eventually change their old behaviours to strengthen relationships. Therefore, he suggests that *one person can begin to create a community*²⁴. Third culture provides a mutual access to one another where people interact, dialogue, affirm their identity, identify, and value the common good, and find their voice.

3 Understanding and appreciating one's own and other cultures

Building a third culture requires individuals and communities to continue to challenge the "us-them" mentality. Cameron believes that in the process of creating a new cultural pattern that creatively integrates elements of each participant's indigenous cultures, it is necessary to have

¹⁶ STAUB, E. (1989): *The Roots of Evil: The Origins of Genocide and Other Group Violence.*, p. 37.

¹⁷ GUDYKUNST, W.B. (2005): *Theorizing about Intercultural Communication*, p. 367.

¹⁸ CASMIR, F.L. (1999): *Foundations for the Study of Intercultural Communication Based on a Third Culture Building Model*, p. 111.

¹⁹ PATEL, F. – LI, M. - SOOKNANAN P. (2011): *Intercultural Communication: Building a Global Community*, p. 148.

²⁰ LEE, S. (2006): *Somewhere in the Middle: The Measurement of Third Culture*, p. 255.

²¹ GUDYKUNST, W.B. (2005): *Theorizing about Intercultural Communication*, p. 369.

²² CASMIR, F.L. - N.C. ASUNCION-LANDE (1989): *Intercultural Communication Revisited: Conceptualization, Paradigm Building, and Methodological Approaches*, p. 294.

²³ GUDYKUNST, W.B. (2005): *Theorizing about Intercultural Communication*, p. 374.

²⁴ GUDYKUNST, W.B. (2005): *Theorizing about Intercultural Communication*, p. 369.

the ability to appreciate and embrace cultural differences and integrate them into one's own cognitive mental complexity and framework for thinking and behaving.²⁵ Building a third culture is unlikely without an awareness of one's own culture and the cultures of others. Our perceptions and personal attitudes are shaped by our culture, and we view the world through our cultural lens. Our cultural inventory provides valuable insights for understanding our beliefs and attitudes, our values, and assumptions. Therefore, it is critical that we reflect on the various aspects of our own cultural identity and examine the positive and negative influences on our personal and professional development. Paradoxically, the more intercultural encounters we attend, the more we realize how little we know about our own culture, how limited our understanding of our own cultural perspectives is, and how eager we are to learn more about the strengths and weaknesses of our own culture. Building a third culture therefore emphasises the development of an attitude of understanding and appreciation of one's own and other cultures. We should step out of our cultural comfort zone, transcend our cultural and social heritage, and reach out to and embrace other cultures. To achieve this goal, Corey and Corey²⁶ suggest that we should transcend our narrow and limited cultural "tunnel vision" and avoid the trap of "cultural encapsulation." According to Corey and Corey²⁷, a person with such a cultural worldview is defined as a person who:

1. Defines reality according to one set of assumptions;
2. exhibits insensitivity to cultural differences between individuals;
3. makes unwarranted assumptions without evidence or ignores evidence because it might refute her assumptions;
4. fails to consider other views and makes little effort to adapt to the behaviour of others and;
5. is trapped in one way of thinking, resists adaptation and rejects alternatives.

For this reason, knowledge of our own culture and other cultures will help us to bridge the gap in cultural knowledge. The authors remind us (Corey, Corey) that in this third cultural environment, cultural commonalities and differences can make the third culture enriching and beneficial. This is consistent with Chinese relational philosophy: seeking commonalities while preserving differences.²⁸ The core value of the third culture is *cultural synergy*. Cultural synergy uses cultural differences to create a new system within which the third culture operates and to create a new common approach that embodies the core elements of their team members' identities and goals.²⁹ When differences are taken into account, it is beneficial to seek common ground. Human beings have much in common; for example, all cultures deal with families, relationships, power, justice, obligations, etc. We share many values that are considered universal. In his empirical test in 20 countries, Schwartz identified 11 universal values based on individuals' biological needs, social coordination needs, and survival needs: self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition, spirituality, benevolence, and universalism³⁰.

Gudykunst proposed seven principles that should guide us if we want to understand and appreciate different cultures and create a third cultural community that meets the needs and desires of all involved:

1. Be committed to the principle of building community;

²⁵ PATEL, F. - LI M. – SOOKNANAN, P. (2011): Intercultural Communication: Building a Global Community, p. 148.

²⁶ COREY, M.S. - COREY, G. (2007): Becoming a Helper, p. 190.

²⁷ Ibid.

²⁸ Ibid.

²⁹ ADAIR, W.L. - TINSLEY C.H. - TAYLOR, M.S. (2006): Managing the Intercultural Interface: Third Cultures, Antecedents, and Consequences, p. 226.

³⁰ SCHAWARTZ, S.H. (1992): Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries, p. 45

2. be attentive to what we do and say;
3. be conditionally accepting and open to others;
4. to care about yourself and others;
5. be understanding and appreciate differences;
6. be ethical and engage in behaviour that is morally right;
7. be peaceful in your thoughts, words and actions³¹ .

Understanding and appreciating one's own culture is the key to accepting other cultures with the respect they deserve. When reflecting on intercultural interactions and events daily and in the media, it is necessary to keep an open mind and look at the event from multiple perspectives.

Conclusion

Intercultural communication in practice poses various obstacles and dilemmas for all parties. In this paper we have introduced the concept of building a third culture as an alternative to confrontation and conflict. An open approach with a focus on identifying shared values and beliefs about everything we care about is perhaps one way to create a harmonious and respectful global community. The third culture is a mutually shared space in which members of all cultures can transcend their cultural boundaries and interact on the basis of shared values and beliefs in order to affirm their unique identity and voice. Our value and belief systems are deeply rooted in religion, history, and family, and come to the surface both consciously and subconsciously when we are called upon to identify them through encounters in intercultural communication in education, in the media, and in our socio-political environment. Our critical cultural optics, along with our social conscience, must always be the filter through which we observe our behaviour in order to remain accountable and responsible for the consequences of our words, silences, and actions on the cultural other. The world we live in is becoming smaller and smaller as technology reduces the distance between people in different countries. Thanks to globalisation, people can communicate in ways that were unimaginable just a few years ago. Our neighbours are becoming people who speak different languages and have different values and lifestyles. The aim of studying intercultural communication is to be able to understand people from different cultural backgrounds. This is not very easy, but if we make it a priority and try to adopt feasible and effective strategies, it is possible to minimise and even eliminate some negative ingrained perceptions, facilitate better intercultural communication, and avoid the bad consequences that conflicts can lead to. Since change is inevitable in everything, we should look at things in the light of their evolution and get rid of the rigid old view. For a better future, the opposition between cultures should be replaced by mutual respect and cooperation in order to achieve mutual benefits for two or more parties. We also believe that we have helped to highlight the importance of acquiring intercultural competence and knowledge and that the paper will help to motivate students and those interested in the subject to develop intercultural competence and build a third culture. It is hoped that the paper will also inspire researchers in academia to engage in further research in this area. We strongly believe that educating students in intercultural competence is increasingly important as the world becomes more connected. Knowledge of intercultural communication not only makes us better workers, but also citizens who can respond promptly and correctly to opportunities and various situations (pitfalls) that occur in the international field.

³¹ GUDYKUNST, W.B. (2005): *Theorizing about Intercultural Communication*, pp. 370-372.

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SLOVAK REPUBLIC'S ODA ALLOCATION TO FRAGILE AND CONFLICT-AFFECTED COUNTRIES: THE CASE OF SUDAN¹

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Abstract: The Slovak Republic's commitment to ODA and its allocation to fragile and conflict-affected countries have garnered significant attention in recent years. This article aims to examine whether the Slovak Republic has changed the amount of bilateral aid provided to Sudan in the context of the outbreak of renewed conflict in the country at the end of 2018 and to compare the level of aid in the given period with countries in the region - South Sudan and Kenya. The article describes Slovakia's aid initiatives during the last crisis period in Sudan. This paper has 4 sections. The first section presents the literature review on aid allocation to conflict-affected states, and the second section is on Slovak Republic's development cooperation. The third section highlights the importance of ODA in fragile and conflict-affected states. The fourth section presents a case study of Slovak bilateral ODA to Sudan since the last crisis at the turn of 2018-2019. In the article, we conclude that Slovakia's bilateral ODA to Sudan during the last crisis period did not reach the level of (comparable) countries in the region. We also outline how Slovakia can increase its engagement and ensure that the support provided is effective.

Keywords: aid, development, ODA, Slovakia, Sudan

JEL: F35, O19, F30

Introduction

In recent years, the international community has recognized the importance of supporting countries grappling with fragility and conflict. Fragile and conflict-affected states (FCS) are a heterogeneous group with varying sources and degrees of fragility, but they share common characteristics. Many suffer from weak administrative and institutional capacity, resulting in the disruption or failure by the state to deliver public services such as education, healthcare, energy, and security.² As nations strive to build resilient societies and promote sustainable development, the role of ODA becomes crucial.

The beginnings of ODA by the Slovak Republic in 2003 signified a milestone in its commitment to international development cooperation. Since joining the OECD's Development Assistance Committee (DAC) in 2013, Slovakia has steadily demonstrated its dedication to development aid by actively supporting FCS. This article sheds light on the Slovak Republic's dedication to address the needs of FCS, with a specific focus on ongoing bilateral initiatives in Sudan. Despite Slovakia has dedicated certain resources towards supporting vital sectors of Sudan's economy, Sudan as a country grappling with protracted conflicts and political instability, has not been a focal point for Slovakia's bilateral development aid over time.

1 Literature review

The literature on international aid is inconclusive on the question of how international aid donors allocate aid to FCS. Many scholars argue that aid allocation is motivated largely

¹ This paper is part of the project of young teachers, researchers and PhD students EUBA named „Development assistance of the Slovak Republic. Evaluation of two decades of Slovak development aid provision and its future, no. I-23-104-00.

² ALEM, Y. – SHIRAKAWA, J. B. (2022): Building Capacity in Fragile and Conflict-Affected States, p. 7.

by donor foreign policy priorities. According to Alesina and Dollar donors allocate aid to buy support from strategic allies, regardless of the level of need of the recipient country.³ Bermeo, however, challenges this contention and claims that achieving development outcomes in the recipient country is also a foreign policy aim and one potential motivation for bilateral aid allocation. Based on his research, donor strategic interest and recipient need are not mutually exclusive. Donors may have a strategic interest in assisting governments in fragile countries, as these countries may be associated with sources of insecurity, migration, or terrorism, and by providing aid, donors aim to contain the most immediate threat.⁴ Burnside finds that aid is beneficial to countries that adopt appropriate and stable fiscal, monetary, or trade policies, and otherwise is wasted, but he finds no evidence that foreign aid causes the adoption of good macroeconomic policies.⁵ The majority of authors state that the determinants of bilateral and multilateral aid are quite different, and no one can explain the two together. The nature of aid allocation is multifaceted, but transfers from a wealthy donor to a poorer recipient may often generate a signal of altruistic donor motivation. Nonetheless, Schraeder, Hook, and Taylor conducted a study on the determinants of aid flows in Africa and found evidence that challenges the perception of donor motivation as purely altruistic. Their study highlights the complexity of aid allocation and identifies significant differences among donors based on their position in the world order, strategic interests, and historical relationships with former colonies.⁶

Desai argues that ODA from both DAC and non-DAC donors makes up a significant portion of external financial flows to fragile contexts, highlighting its vital importance as support for sustainable development and peace.⁷ Da Costa and Moreira da Silva, however, highlight the urgent need to prioritize fragile and conflict-affected states in the face of the concurrent climate, pandemic, and economic shocks that have emerged recently. They point out that fragile states, which were already falling behind on the Sustainable Development Goals (SDGs), are now facing increased pressure and are at risk of being left further behind.⁸

The topic of the allocation of Slovak development aid is not often represented in the literature, although the country has been an ODA donor for 20 years. According to Jančovič and Szabó, the absence of empirical literature on Slovak aid allocation may be attributed

to Slovakia's status as a small donor with limited financial resources and its relatively recent entry into providing bilateral official development assistance since 2003, but at the same time, the authors argue that Slovakia should no longer be considered an "emerging" donor.⁹

1.1 Methodology and Data

This article begins with a brief literature review on the topic. It also employs the data analysis research method. The relevant data on the Slovak Republic's ODA disbursements to selected FCS in a specific crisis period is collected and analyzed. More specifically, the article focuses on the classification of countries as fragile and conflict-affected, the importance of aid, and the Slovak approach to FCS. The case study collects data on the Slovak Republic's bilateral ODA disbursements to Sudan between 2019 and 2021.

³ ALESINA, A. – DOLLAR, D. (2000): Who Gives Foreign Aid to Whom and Why?, p. 46.

⁴ BERMEO, S. B. (2016): Aid Is Not Oil: Donor Utility, Heterogeneous Aid, and the Aid-Democratization Relationship, p. 5-6.

⁵ BURNSIDE, C. – DOLLAR, D. (2000): Aid, Policies, and Growth, p. 847.

⁶ SCHRAEDER, P. – HOOK, S. – TAYLOR, B. (1998): Clarifying the Foreign Aid Puzzle: A Comparison of American, Japanese, French and Swedish Aid Flows, p. 320.

⁷ DESAI, H. (2020): States of fragility and official development assistance, p. 17.

⁸ DA COSTA, H. – MOREIRA DA SILVA, J. (2021): Prioritising FCS in a post-pandemic world.

⁹ JANČOVIČ, P. – SZABÓ, J.: Principal determinants of territorial allocation of the Slovak Republic's bilateral development aid: Path-dependent trajectory?, p. 100.

The article provides information on the Slovak allocation patterns of bilateral ODA to FCS by comparing the percentage of ODA allocated to Sudan compared to South Sudan and Kenya and analyzing trends over time.

Data sources: In this article, the government's policy documents, and official statements are examined. This information used in the article is mostly obtained from official government reports, medium-term strategies for development cooperation, aid databases such as the DAC, and OECD reports, which provide comprehensive information on ODA flows to fragile countries such as the States of Fragility 2022, publications from international organizations such as the World Bank or United Nations which deal with the impact of ODA on the countries development. The World Bank Group (WBG) annually releases a list of FCS. Its purpose is to guide decision-making within the WBG and facilitate adaptation to challenging environments. The list is not meant to be comprehensive - it does not include all countries affected, nor rank them. The list is based on global indicators and undergoes internal review, with updates made on July 1st each year. The classification distinguishes between countries with high levels of institutional and social fragility and those affected by violent conflict, based on a threshold number of conflict-related deaths relative to the population.¹⁰

2 Slovak Republic's development cooperation

Slovakia shows solidarity with people living in less developed areas of the world and accepts its share of the responsibility for solving global problems. Slovakia's development cooperation program draws from its own transformative experience in establishing independent state institutions, fostering a market economy, and upholding democratic principles. The country predominantly delivers ODA multilaterally, through the EU institutions.

Slovakia's ODA allocation varies depending on various factors such as strategic priorities, needs assessment, diplomatic relations, regional considerations, development goals, and ongoing projects. In terms of geography, Slovak aid is focused on the Western Balkans, the Eastern Partnership of the EU, East Africa, and the Middle East.¹¹

The Slovak Republic integrates foreign policy and development cooperations to address fragility. In 2019 the country prioritized conflict prevention and supported security sector governance and local actors through bilateral cooperation and micro-grants. Peace and security are also key focuses of Slovakia's voluntary multilateral contributions.¹² Also, Slovakia continues to take its responsibilities seriously as both partner and donor, flexibly responding to the needs of developing countries under the SlovakAid brand.¹³

2.1 Territorial priorities

In 2014, Slovak development cooperation entered the second decade of its existence. Since then, it has been based on three fundamental pillars: passing on the transition experience and support of reforms, elimination of poverty, and assistance to countries affected by conflicts. The Medium-term Strategy for Development Cooperation of the Slovak Republic 2014-2018 within the challenges has identified the increased risk of new outbreaks of tensions and conflicts, threats of organized crime, international terrorism, illegal migration, as well as natural disasters. The Strategy set out 10 territorial priorities of the Slovak ODA for 2014-2018:

1. program countries: *Afghanistan, Kenya, Moldova*
2. project countries: *Albania, Belarus, Bosnia and Herzegovina, Georgia, Kosovo, Ukraine*

¹⁰ THE WORLD BANK (2022): Classification of Fragile and Conflict-Affected Situations.

¹¹ OECD LIBRARY (2023): Slovak Republic.

¹² DEVELOPMENT CO-OPERATION DIRECTORATE (2022): Slovak Republic Mid-term Review, 14-16 March 2022, Bratislava – Paris, p. 3.

¹³ SAMRS (2019): Transparency Info.

3. a country with special humanitarian and development needs: *South Sudan*.¹⁴

During the 2014-2018 period, the importance of flexible development aid to effectively respond to global and regional challenges became evident. Slovakia actively addressed the migration and refugee crises resulting from the Syrian conflict by initiating support for SlovakAid activities in the Middle East since 2016. Moreover, Slovakia provided humanitarian assistance and supported initiatives related to refugee integration, and addressing the root causes of migration, as the country has consistently emphasized the need to address migration causes in origin and transit countries by tackling poverty, creating job opportunities, and improving food security. The Medium-term Strategy for Development Cooperation of the Slovak Republic for 2019-2023 set out as territorial priorities:

1. program countries: *Kenya, Moldova, Georgia*
2. partner regions and countries: *Albania, Bosnia-Herzegovina, Montenegro, Kosovo, North Macedonia, Serbia, Belarus, Georgia, Moldova, Ukraine, Burundi, Ethiopia, Eritrea, South Sudan, Kenya, Rwanda, Somalia, Tanzania, Uganda, Iraq, Jordan, Lebanon, and Syria, Afghanistan*.¹⁵

2.1.1 Fragile contexts

Slovakia encourages building regional markets, improving living and health standards, and improving educational systems, but at the same time realizes that without peace, security, and reforms progress is not possible. The Slovak Republic ranks 28th among DAC countries in terms of the ODA/GNI ratio. In the past 5 years, its ODA/GNI has not increased substantially, remaining around 0.13 %. In 2021, Slovakia spent the largest amount of public resources in the country's history, 167 million USD, on ODA.

Regarding the allocation of resources for aid to conflict-affected countries, in 2020 the Slovak Republic allocated 4.0 million USD to support fragile contexts, accounting for 10.6% of its gross bilateral ODA. Out of this amount, 11 % was designated for humanitarian assistance, decreasing from 16.6 % in 2019. Additionally, 0.6 % was allocated to peace efforts, (3.4 % in 2019). Contributions to conflict prevention, a subset of peace-related initiatives, accounted for less than 1% (2.8 % in 2019).¹⁶ The biggest recipients of aid were the upper middle-income countries (UMIC) and it remains a typical feature of the Slovak aid allocation even in the present day.

Table 1: ODA - Total Net Flows by Slovak Republic

	2009-2010 Average	2011-2012 Average	2013-2014 Average	2015-2016 Average	2017	2018	2019	2020	2021
USD Million	75	83	85	95	119	138	110	164	167
% of GNI	0.09	0.09	0.09	0.11	0.13	0.13	0.11	0.16	0.15

Source: OECD (2022): Statistics on resource flows to developing countries.

3 ODA in the context of FCS

While not all FCS face active conflict, most are at risk: global levels of violence are at a 30-year high. Conflict duration has significantly increased over the past 3 decades. While the conflicts that ended in 1990 lasted approximately 16 years, in 2020 it was over 30 years.¹⁷ Fragile states are already home to nearly 1 billion people and are on course to be home to 60 %

¹⁴ MFAE SR (2013): Medium-term Strategy for Development Cooperation for 2014 – 2018, p. 9.

¹⁵ MFAE SR (2018): Medium-term Strategy for Development Cooperation for 2019–2023, pp. 17-27.

¹⁶ OECD iLIBRARY (2023): Slovak Republic. Fragile Contexts.

¹⁷ PETRINI, B. (2021): The Armed Conflict Survey 2021: The Long Aftermath of Armed Conflicts, p. 23.

of the world's poor by 2030.¹⁸ Without concerted efforts and sustained international assistance, these economies will continue to fall behind in development progress, perpetuating cycles of poverty and instability.

The FCS economies require sustained assistance, as they struggle to recover from conflicts, political instability, or natural disasters. ODA is essential for them to address immediate humanitarian needs. As conflict and fragility can devastate a country's infrastructure, including transportation or communication, ODA can contribute to enabling the country to recover and function more effectively. The FCS usually has high levels of poverty or limited economic opportunities and ODA can be used to support initiatives that reduce poverty. Furthermore, ODA can help in (re)building institutions and improving governance capacity. ODA plays a crucial role in promoting peacebuilding efforts and facilitating conflict resolution in FCS. Also, ODA can be used to ensure respect for human rights and social inclusion.¹⁹

3.1 Fragile and Conflict-affected Situations

The World Bank Group’s Fragility, Conflict and Violence (FCV) Group annually (since 2006) releases a list of FCS. Since 2006 the concept has evolved with the growing understanding of development challenges in FCS. The list has gone through a series of changes in terms of classification from the Low Income Countries Under Stress List (2006-2009), to the Fragile States List (2010), to the Harmonized List of Fragile Situations (2011-2015), and now the List of FCS (see Table 2).²⁰

Table 2: FY23 List of FCS

CONFLICT	INSTITUTIONAL AND SOCIAL FRAGILITY
Afghanistan	Burundi
Burkina Faso	Chad
Cameroon	Comoros
Central African Republic	Congo, Republic of
Congo, Democratic Republic of	Eritrea
Ethiopia	Guinea-Bissau
Iraq	Haiti
Mali	Kosovo
Mozambique	Lebanon
Myanmar	Libya
Niger	Marshall Islands
Nigeria	Micronesia, Federated States of
Somalia	Papua New Guinea
South Sudan	Solomon Islands
Syrian Arab Republic	Sudan
Ukraine	Timor-Leste
Yemen, Republic of	Tuvalu
<i>Armenia (FY22 List)</i>	Venezuela, RB
<i>Azerbaijan (FY22 List)</i>	West Bank and Gaza (territory)
	Zimbabwe
	<i>Kiribati (FY22 List)</i>
	<i>Gambia, The (FY21 List)</i>

¹⁸ BOUSQUET, F. (2022): Fragile and Conflict-Affected Economies Are Falling Further Behind.
¹⁹ DOWNES, M. (2014): How relevant is ODA to preventing conflict or building peace?.
²⁰ THE WORLD BANK (2022): Historical Overview: The World Bank Group’s Classification of FCS.

Source: Own elaboration based on the data from worldbank.org.

Although the WBG has classified Sudan as having a high level of institutional and social fragility for 2023, given the nature of the issues the country is currently facing, it can be assumed that Sudan will be re-categorized as a country affected by violent conflict in the coming period.

4 Case Study on Sudan

Sudan is Africa's third largest country with large oil and mineral resources. Its location in the northeast of Africa forms a crossroads with the Arab world. Over the years, Sudan has been variously described as a complex political emergency, as a politically fragile state, as an unresponsive state, or as a failed state.²¹ The country has faced multiple crises over time (civil wars between Northern and Southern Sudan, armed conflicts on the borders with neighbouring countries, or persisting conflict in Darfur), but one of the most significant is the political and humanitarian situation stemming from the Sudanese Revolution that began in December 2018.²² The initial protests led to a series of political developments, including the removal of long-standing autocratic President al-Bashir who had ruled the country since 1989.²³ However, the transition to civilian rule still faces many challenges – political, economic, and security. Sudan's crisis has resulted in severe humanitarian consequences including economic hardships, hyperinflation, shortages of essential commodities, displacement of millions of people, and limited access to education and basic health services.²⁴

Following a prolonged political gridlock after the 2021 military coup, the country remains without a functioning government. On 15 April 2023, violent armed clashes between rival factions of the military government of Sudan broke out in Khartoum and quickly spread to the periphery.²⁵ The ongoing conflict will further exacerbate existing vulnerabilities and create new ones. The outbreak of violence in Sudan was initially covered at both the diplomatic and media levels in Slovakia, but interest quickly faded without a concise response.²⁶

4.1 Net ODA to Sudan

ODA flows are essential for Sudan to address its development challenges or promote sustainable economic growth. In general, almost half of ODA to Sudan is humanitarian assistance, largely cash grants, mixed project aid, commodities, and food aid provided primarily by EU Institutions, the UK, or Japan.

Table 3: Official development assistance received – Sudan 2018-2021

	2018	2019	2020	2021
Net ODA received	0.97 bn USD	1.54 bn USD	2.35 bn USD	3.77 bn USD
Gross ODA	1.05 bn USD	1.57 bn USD	2.36 bn USD	4.94 bn USD
% of GNI	3.2	5	9.2	11.4
per capita (USD)	23	36	53	82
Bilateral share (gross ODA) %	69.6	80.1	79.4	29.5

Source: Own elaboration based on the data from stats.oecd.org.

²¹ HARMER, A. (2004): Aid to Poorly Performing Countries: Sudan Case Study, p. 4.

²² LE MONDE (2018): Manifestations et arrestations au Soudan.

²³ ABDELAZIS, K. (2019): Explainer: Protesters in Sudan want end to Bashir's 30-year rule.

²⁴ UNDP (2008): Slovak-UNDP Trust fund. Summary Report 2003-2008, p. 17.

²⁵ SERWAT, L. – KAZEMI, E. (2023): Fact Sheet: Conflict Surges in Sudan.

²⁶ MFAE SR (2023): Sudan - travel advice, p. 1.

This assistance plays a crucial role to address immediate needs, such as food, clean water, shelter, healthcare, and education for vulnerable populations, including refugees or internally displaced persons. The second largest sector is Sudan’s agriculture and food security supported mainly by loans. Cash grants and technical cooperation are important to governance and security. By investing in peace and stability, ODA can help create an enabling environment for sustainable development and the improvement of livelihoods. Financial support is also allocated to the health sector to enhance access to quality healthcare services and strengthen Sudan’s healthcare infrastructure.

4.2 Slovak bilateral ODA flows to Sudan

The development cooperation between the Slovak Republic and Sudan has been significant and enduring, with Sudan being one of the largest recipient countries of Slovak bilateral ODA over a long-term period from 2003 to 2021. Slovakia's commitment to development cooperation with Sudan has been evident through its sustained support across various sectors. Over time, Slovak efforts have been mostly directed towards areas such as healthcare, education, agriculture, infrastructure, and governance to improve the well-being of Sudanese citizens, promote sustainable development, and foster self-reliance. Despite the Slovak ambitions to expand bilateral cooperation with Sudan, for example, through development projects,²⁷ this goal has not been significantly fulfilled in the second decade of Slovak ODA. In financial terms, the volume of Slovak bilateral ODA flows to Sudan is significantly disproportionate compared to countries in the region. In Slovak development aid strategies, Sudan has never been included among partner or priority countries, regardless of the evolution of the situation in the state and the critical needs of its population. For a better interpretation of Slovak assistance to Sudan during the crisis period, i.e., during the period of increased instability since the turn of 2018-2019, we compare the data with the allocation of Slovak ODA to Kenya and South Sudan.

Table 4: Slovak bilateral ODA to Sudan, Kenya, and South Sudan in 2019-2021²⁸

	2019	2020	2021
Slovak ODA to Sudan	5 350 EUR	35 665 EUR	26 945 EUR
% Sudan	0.03 %	0.11 %	0.09 %
Slovak ODA to Kenya	2 304 890 EUR	958 270 EUR	1 963 406.98 EUR
% Kenya	12.07%	2.87 %	6.36 %
Slovak ODA to South Sudan	303 120 EUR	359 280.43 EUR	139 999.88 EUR
% South Sudan	1.59 %	1.08 %	0.45 %
ODA in total	19 099 240 EUR	33 373 227.45 EUR	30 850 788.50 EUR

Source: Own elaboration based on the data from the Slovak ODA annual reports 2019, 2020, and 2021.

Sudan is geographically larger than Kenya, covering a vast land area, while Kenya has a relatively smaller territory. In terms of population, Kenya has a higher population compared to Sudan, with an estimated 53 million people, whereas Sudan's population is around 44 million. Both countries are multi-ethnic with diverse populations, but Sudan has experienced political transitions and periods of instability in recent years, affecting Slovakia's confidence as a donor of development aid and its willingness to commit financial resources. Kenya, on the other hand, has been relatively more politically stable. Its stability, economic potential, and influence in the regional politics of East Africa make it an attractive recipient of Slovak bilateral ODA (see Table 4). International donors including Slovakia also support Kenya to address the needs of refugees and internally displaced persons from Somalia or South Sudan. Furthermore,

²⁷ SITA (2006): Sudan remains one of the priorities of Slovak development aid.

²⁸ Data for 2022 expected in June 2023.

Slovakia may be aiming to achieve long-term development goals and a sustainable impact in Kenya. South Sudan is the world's youngest nation and has faced significant challenges since gaining independence in 2011, including political instability, armed conflict, humanitarian crises, and development gaps. Given the country's fragile state and urgent needs, Slovakia may prioritize assisting South Sudan's development efforts and help address immediate humanitarian needs. Sudan, on the other hand, has a larger population, a more diversified economy, and historically had more developed infrastructure compared to South Sudan. However, it has still faced significant developmental hurdles, economic difficulties, and, currently, renewed armed conflict. Both South Sudan and Sudan require development aid to support their efforts in achieving stability and improving the well-being of their populations, but the Slovak ODA allocation between the two countries varies significantly, with Sudan getting the short end of the stick and the absence of any reasonable and sufficient explanation by the Slovak officials.

4.3 Bilateral development cooperation with Sudan in 2019-2021

The program of providing government scholarships to students from developing countries to study at Slovak public universities is a traditional form of Slovak ODA. The Ministry of Education continued to fulfill its commitment from the so-called Obama Summit (2016), where it declared additional commitments to address the migration and refugee crisis. In 2020 Slovakia under ODA provided a total of 48 government scholarships, 24 of which were awarded to students coming from conflict-affected countries, including 3 students from Sudan. The scholarship grant was 4390 EUR and the current expenses were 960 EUR, so in total Slovakia spent 5350 EUR.²⁹

The heavy rains and floods that hit Sudan in 2020 caused widespread disruption, including in the education sector, which was already facing challenges due to the COVID-19 pandemic and political instability. The floods, described as the worst in years, have led to a state of emergency being declared and Sudan being designated a natural disaster area. The Slovak Republic helped Sudan to rebuild three flood-damaged schools in Khartoum with the support of 20 000 EUR.³⁰

Under the Debt Relief Mechanism for Developing Countries in 2021, the Ministry of Finance participated in the IMF's Heavily Indebted Poor Countries initiative to forgive Sudan's debts and resolve its arrears to the IMF. The interest was to bring Sudan's debt to the IMF down so that it can access development finance in the form of grants and concessional loans. Due to the difficult political situation in Sudan at the end of 2021, financial operations amounting to approximately 4.5 million EUR have not yet been implemented.³¹

However, the Slovak Republic continued to support scholarship holders from developing countries according to the OECD/DAC list also in 2021, supporting 8 students from Sudan with a total amount of 26 945 EUR.³²

Conclusion

While Slovakia's bilateral assistance to Sudan during the last crisis period has been commendable, it may not have been as significant compared to other countries such as Kenya or South Sudan, which appear to have received more substantial bilateral aid from Slovakia. Moving forward, it is imperative for Slovakia to continue its commitment to ODA and further strengthen its bilateral engagement with countries like Sudan, ensuring that assistance is targeted and effective. When achieving this ambition, Slovakia should not only take into

²⁹ MFAE SR (2020): Report on ODA of the Slovak Republic for the year 2019, p. 54.

³⁰ SAMRS (2021): Rebuilding three flood-damaged schools.

³¹ MFAE SR (2021): Report on ODA of the Slovak Republic for the year 2021, p. 21.

³² MFAE SR (2021): Report on ODA of the Slovak Republic for the year 2021, p. 58.

account historical ties, and cultural or religious similarities but also focus on the urgent development needs of a given country, which are highly desirable in the context of the situation in Sudan. This could involve deepening partnerships with local stakeholders and focusing on capacity-building initiatives. Slovak diplomacy identifies potential primarily in economic and trade relations, specifically in the area of agriculture and development projects. According to Sudanese officials, education and peacebuilding also matter.³³ For the success of bilateral projects will be significant to reconnect with old contacts. By pursuing targeted approaches, Slovakia has the potential to make a lasting impact on the development trajectories of Sudan, as it continues to declare its vision to positively contribute to shaping a more inclusive and prosperous world.

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³³ PARIZEK, L. – ZAROUG, M. (2002): State Secretary met the Ambassador of Sudan and the Sudanese State Secretary.

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TRADE INTENSITY APPROACH TO STUDY BILATERAL TRADE FLOWS BETWEEN SLOVAK REPUBLIC AND AFRICA

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Abstract: This contribution reviews the development of mutual trade relations between Slovakia and Africa. We investigated export and import flows during the period 1995-2021 using trade flows data for Slovakia and 54 African economies. To achieve the purpose of the paper, we apply standard methods of induction and deduction, abstraction and concretization, analysis and synthesis. To evaluate the intensity of mutual trade relations, we use a trade intensity index of exports and imports. Results show that investigated economies experience a positive development in trade relations. According to trade intensity indices, Slovakia is a less significant trading partner for Africa than its other trading partners.

Keywords: international trade, trade barriers, trade intensity index, Slovakia, Africa

JEL: F10, N77

Introduction

Barriers in international trade is a special object of research in international economic relations, especially when we take into account the bilateral exchange of goods and services. Trade barriers can be divided into two basic groups, namely objective and subjective.¹ Objective obstacles represent real physical barriers or institutional differences, the effects of which can only be reduced in the long term. Geographical distance, geographical location, similarity (difference) of economic structures, or even non-economic parameters such as cultural and historical relations, can be included among the objective barriers. On the other hand, subjective constraints in bilateral trade relations are factors that can be easily removed or compensated for in the short term. This mainly includes tariff and non-tariff barriers such as customs duties or technical barriers. Both types of these obstacles in a certain way limit or even undermine the real potential for qualitative and quantitative intensification of foreign trade.

In the scientific literature, it is possible to find many attempts to measure the effects of subjective and objective barriers on the mutual trade of specific countries. One body of literature deals with gravity models as a theoretical tool to explain the international movement of goods and services,² while another category of works applies the trade intensity index approach.³ In the case of both approaches to the study of bilateral trade flows, the goal is to explain the volume of exports and imports based on empirical data.

In this article, we analyse the development of foreign trade relations between Slovakia and African countries for the period 1995–2021 and, based on the trade intensity index, determine the trends of deepening trade relations in the current period. This approach makes it

¹ CHEN, B. – LI, Y. (2014): Analyzing Bilateral Trade Barriers under Global Trade Context: A Gravity Model Adjusted Trade Intensity Index Approach, p. 326.

² TINBERGEN, J. (1962): Saping the World Economy: Suggestions for an International Economic Policy, p. 313.

³ BOWEN, H. P. (1983): On the Theoretical Interpretation of Indices of Trade Intensity and Revealed Comparative Advantage, pp. 464-472.

possible to designate the nature of mutual trade, its weaknesses and opportunities. Results of the research contribute to the theoretical basis of barriers in bilateral trade flows as well. By conducting this research we try to fill the literature gap that reflects the analysis of Slovakia's foreign trade with less economically significant partners.

1 Data and methods

To analyse the mutual foreign trade between Slovakia and African countries we used the official web page of United Nations Commission on Trade and Development (UNCTAD) which provided 1995–2021 aggregated data on exports, imports, and trade balance. Our dataset covers 54 African countries without Western Sahara due to data unavailability. Data for pre-2011 Sudan and post-2011 divided Sudan and South Sudan are included in the analysis in accordance with the UNCTAD statistics database. To achieve the purpose of the paper, we apply the classification according to the nomenclature of the Standard International Trade Classification (SITC). The data required for computing the trade intensity index was obtained from UNCTAD statistics. For analysis of particular trade barriers, we used the WTO Regional Trade Agreements Database which contains information on trade agreements, including date of entry into force, product or service coverage, and types of agreement.

In preparing this contribution, standard methods of scientific work were used to achieve the main and partial goals. Among the theoretical methods, general methods were used, including methods of induction and deduction, abstraction and concretization, analysis and synthesis. Among others, special methods were applied, especially comparative and systemic. To make data on values and ratios more clear, precise and graphical display techniques were used. We use the trade intensity index as a popular analytical technique for evaluating reciprocal commerce between two trading partners as well. This index makes it possible to determine if trade volumes in the nations under investigation are higher or lower than would be predicted based on their relative position in the global exchange.⁴ The percentage of a country's exports going to a partner divided by the percentage of all exports going to the partner represents the trade intensity index. The computation of the intensity index is in line with obtaining the revealed comparative advantage values and represents its geographical equivalent.⁵ We process the trade intensity index as follows:

$$TII_{ij} = \frac{x_{ij}/X_{it}}{x_{wj}/X_{wt}}, \quad (1)$$

where x_{it} is the value of the home country's export to its trading partner, X_{it} is the value of world exports to the home country's export partner, x_{wj} represents the value of the home country's total world exports, X_{wt} is the total value of world exports. All values correspond to one observed period. The value of the trade intensity index ranges from 0 to infinity. If the index's value is 1, it signifies that the exporting nation exports to the receiving nation in exactly the same proportion as that nation's share of global imports. If the index is greater than 1, it indicates that trade flows are more significant than would be predicted given the nation's importance in the global economy, i.e., country i exports more products to country j than to the entire world. The trade intensity is at a lower level than one might anticipate if the value is less than 1.

⁴ WITS (2010): Trade Indicators.

⁵ CHEN, B. – LI, Y. (2014): Analyzing Bilateral Trade Barriers under Global Trade Context: A Gravity Model Adjusted Trade Intensity Index Approach, p. 328.

2 Trade initiatives in relations between Slovakia and African countries

The contractual basis in the field of economic cooperation, including trade, between Slovakia and African countries is significantly limited, while the Slovak Republic is often governed by European Union (EU) directives. Mutual trade between Slovakia and African countries is mainly covered by Economic Partnership Agreements (EPAs) initiated at the level of the European Union, which, however, have been ratified to a limited extent or are in various stages of processing, both by EU member states and African countries. These agreements do not represent a universal model, but rather are designed in a way to meet specific regional conditions, although they reflect the generally accepted rules of the World Trade Organization (WTO).⁶ They go beyond traditional free trade agreements and focus on the economic development of partner states. As an EU member state, Slovakia is also a participant in free trade agreements with selected integration groups or individual African states. The key items of these agreements are mainly the elimination of tariffs on industrial products and the facilitation of trade in agricultural products. As an example, we can mention the free trade agreements between the EU and Egypt, the EU and the Southern African Development Community (SADC), the EU and Ghana, the EU and Morocco, and others.⁷ In addition to pan-European agreements, Slovakia is also a participant in internal intergovernmental initiatives, such as the Joint Council for Economic Cooperation between the Slovak Republic and the Republic of South Africa, which was established in 2005 for the purpose of regularly assessing issues of mutual economic and commercial cooperation at the intergovernmental level with the participation of the private sector. Mutual trade concentrates on products of the automotive industry, when it comes to exports from Slovakia, and products of the food industry, when it comes to imports from South Africa to Slovakia. It is necessary to mention that several initiatives of bilateral cooperation are also often outdated and come from the period of Czechoslovakia, such as the Agreement between the Government of Egypt and the Slovak Republic on the establishment of a committee for economic, scientific and technical cooperation, which was signed back in 1964. The updated form of this agreement is still only in the negotiation stage. Overall, with the exception of Slovakia's largest trading partners, such as Egypt, Morocco, and South Africa, mutual bilateral relations with African countries are very poorly developed, which exhaustively explains the absence of bilateral trade agreements or other initiatives in the field of economic cooperation. This state of the matter can be easily confirmed by the poor network of Slovak official representation offices on the continent with just a total of 4 embassies in Egypt, Kenya, South Africa, and Nigeria.⁸

3 Results

In the field of Slovakia's foreign exchange of goods with third countries, Africa is one of the less strategically important and so economically significant trading partners. Since the establishment of independent Slovakia in 1993, bilateral trade relations have undergone various development trends, although total trade turnover has increased almost 20-fold from 1995 to 2021. After the global economic and financial crisis in 2008, mutual foreign trade has slightly declined and lately recovered up to 2014 when the decrease in natural resources' prices has driven the trade volume down. In terms of trade share, Africa is still a negligible trading partner, constituting only 0.9 % of Slovak export and import flows. A detailed overview of the development of foreign trade between the Slovak Republic and Africa over the past 27 years is shown in Table 1.

⁶ EUROPEAN COMMISSION (2023): Economic Partnership Agreements (EPAs).

⁷ WTO (2023): Regional Trade Agreements Database.

⁸ MINISTRY OF FOREIGN AND EUROPEAN AFFAIRS OF THE SR (2023): Diplomatic missions of the Slovak Republic.

Table 1: Development of foreign trade of the Slovak Republic with Africa

	1995	2000	2005	2010	2015	2020	2021
Exports	68747,99	63526,75	186089,23	306826,89	746953,73	682427,47	993858,77
Share of total exports, %	0,82	0,53	0,58	0,47	1,00	0,79	0,95
Imports	27360,80	36745,02	85093,50	306340,67	350290,67	693019,25	882310,76
Share of total imports, %	0,34	0,29	0,25	0,47	0,48	0,82	0,84
Balance	41387,20	26781,73	100995,73	486,22	396663,06	-10591,78	111548,00
Export and Imports	96108,79	100271,76	271182,73	613167,56	1097244,40	1375446,71	1876169,53
Share of total turnover, %	0,58	0,41	0,41	0,47	0,74	0,80	0,90

Note: trade volumes are in US\$ thousands, shares of export and import flows are in %, exports and imports represent the mutual trade between Slovakia and 54 African countries.

Source: author's own calculations on the basis of UNCTAD Statistics (2023).

In 2021, compared to the previous year, Slovak exports to Africa increased by as much as 45.6 % as the global trade chains began to recover after the COVID-19 pandemic. In terms of last decade, exports have doubled and represented US\$ 993.8 million in 2021.⁹ With the exception of the worldwide pandemic in 2020, when import volume marginally fell by 9%, the import of commodities from Africa to Slovakia looks to be expanding more gradually and evenly. In 2021 Slovakia's imports of goods from Africa constituted US\$ 882.3 million. That is slightly less than the volume of export flows. During the 1995–2021 period, total imports have grown 32-fold, while export flows only 14-fold. The development of foreign trade between Slovakia and Africa can be characterized by a long-term active trade balance. However, the exception is only some selected years, including the years 1996, 2003, 2011, 2020. In 2021, Slovakia's active trade balance represented US\$ 111.5 million, although in 2014 it reached the highest historical value – US\$ 469.8 million. It is during this period that it is possible to observe a rapid increase in Slovakia's exports to African countries. The most important Slovak export destinations in Africa are Egypt (36.6% of total exports to Africa), Morocco (24%), South Africa (17.5%), Tunisia (7.6%) and Algeria (2.6%). In terms of imports, we can observe a slightly different geographical structure that is represented by Egypt (37.6% of total imports from Africa), Tunisia (19.4%), Morocco (15.6%), South Africa (11%) and Mozambique (7.2%).

Motor vehicles for the transportation of vehicles ranked top among Slovakia's exports to Africa in 2021, making up more than half of the overall export flows. Capital-intensive items such as footwear (6.7%), electric power machinery (5.4%), pumps, gas compressors, and fans (3.1%) did better than less complex goods due to their greater added value. In general, capital-intensive commodities account for the majority of Slovakia's exports to Africa. According to what would be expected given the position of Africans on the global market during the examined period, Slovakia's imports from Africa were made up of more sophisticated goods. Equipment for distributing electricity (29.9%), parts and accessories for machinery (23.9%), coal (7.2%), fruits and nuts (4.7%), and motor vehicles for transportation of persons (4.4%) make up the imports from African countries to Slovakia. It is significant to note that Africa boosted its exports of capital-intensive goods including office machine accessories and automatic data processing equipment, over the time under observation. Yet imports of raw materials with little processing, including metal ores and concentrates, have also gone up. Only the cocoa had a substantial reduction out of the top 10 import items. The declining price of this commodity on global markets can be used to explain this sharp decline.

⁹ UNCTAD (2023): Merchandise trade matrix in thousands United States dollars, annual, 2016–2021.

Table 2: Top 10 Slovakia's export commodities to Africa, US\$ thousands

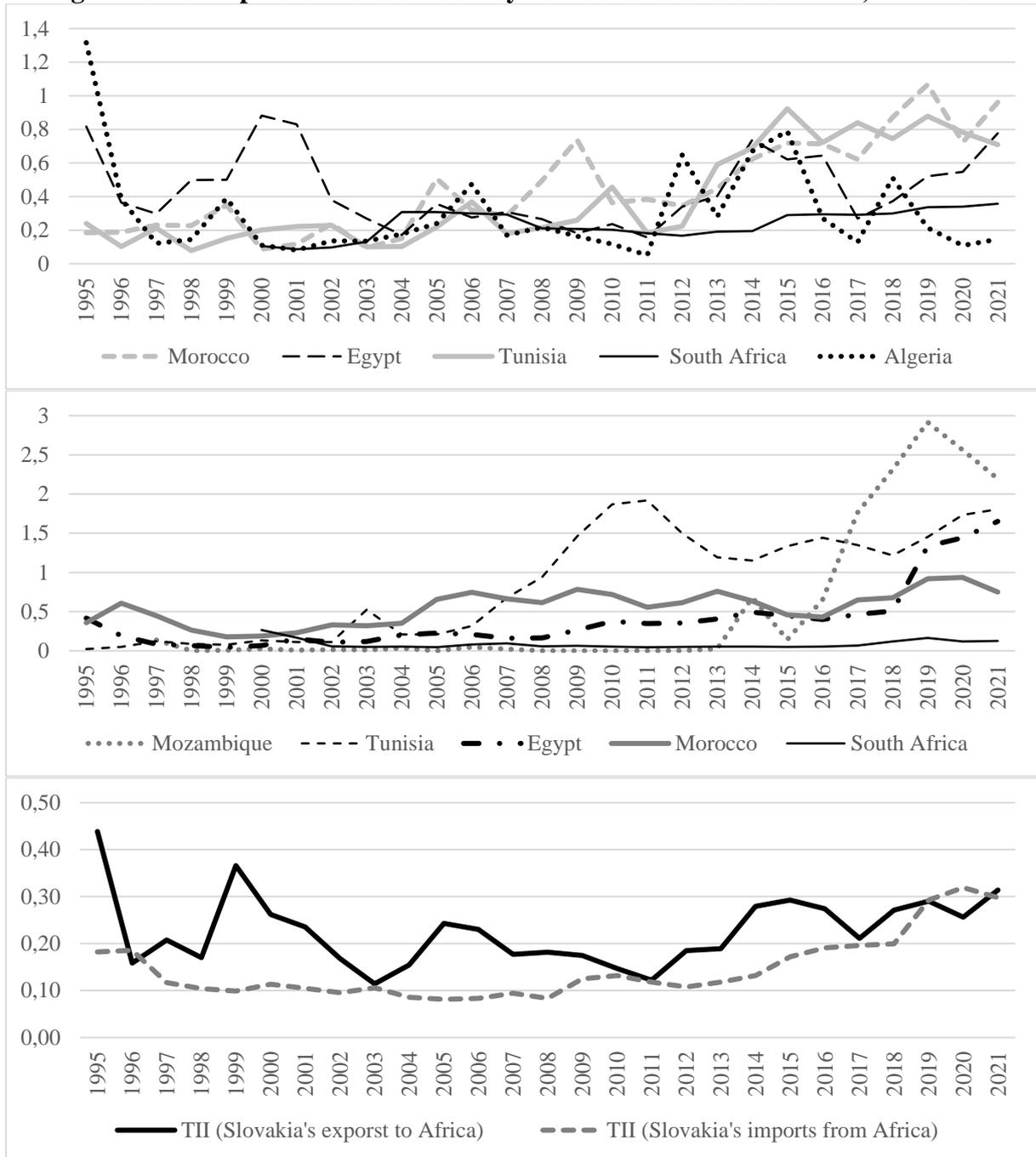
<i>1995</i>		
<i>Product</i>	<i>Exports</i>	<i>Share</i>
Total	68752,7	100,0
Flat-rolled prod., iron, non-alloy steel, not coated	29950,0	43,6
Arms & ammunition	18961,4	27,6
Flat-rolled prod., iron, non-alloy steel, coated, clad	3164,7	4,6
Rubber tyres, tyre treads or flaps & inner tubes	2941,9	4,3
Textile yarn	2718,2	4,0
Cereal preparations, flour of fruits or vegetables	1166,1	1,7
Mach.-tools for working metal, excluding removing mate.	751,3	1,1
Explosives and pyrotechnic products	714,5	1,0
Vapour generating boilers, auxiliary plant; parts	706,3	1,0
Ball or roller bearings	701,9	1,0
<i>2021</i>		
Total	993651,3	100,0
Motor vehicles for the transport of persons	539569,8	54,3
Footwear	66791,4	6,7
Electric power machinery, and parts thereof	53901,2	5,4
Pumps (excluding liquid), gas compressors & fans; centr.	30746,7	3,1
Equipment for distributing electricity, n.e.s.	28133,7	2,8
Rubber tyres, tyre treads or flaps & inner tubes	27345,2	2,8
Parts & accessories of vehicles	24708,4	2,5
Mechanical handling equipment, & parts, n.e.s.	19577,8	2,0
Apparatus for electrical circuits; board, panels	14776,1	1,5
Heating & cooling equipment & parts thereof, n.e.s.	10599,1	1,1

Note: table contains only years 1995 and 2021 due to formal clarity, though analysis includes the investigated period of 1995–2021.

Source: authors according to UNCTAD Statistics (2023).

To evaluate the volume of mutual trade between Slovakia and Africa, we apply the trade intensity index, which indicates whether the value of trade is greater or less than could be expected based on the position of investigated trading partners in international trade. An overview of the intensity of mutual foreign trade between the studied entities in the years 1995–2021 is clearly shown in figure 1. Based on the results, it can be concluded that the value of the trade intensity index represents a weak trade intensity between Slovakia's exporters and African importers. In the observed period, the index developed unevenly, while its value showed the highest level in 1995, namely 0.44. In the following years, the value of the index decreased significantly and recorded a level of 0.11 in 2003. Only since 2011, is it possible to observe its relatively stable increase, although with some exceptions, which led to relatively high values that reached 0.31 in 2021. Nevertheless, mutual trade remains low-intense, as the trade intensity index fluctuates below the value of 1. If we evaluate the imports from Africa to Slovakia throughout the study period, the values of the trade intensity index attained a level that was less than 1 and somewhat lower than the trade intensity index of Slovakia's exports to Africa.

Figure 1: Development of trade intensity between Slovakia and Africa, 1995–2021



Note: the lower figure represents trade intensity index values of Slovakia's exports to Africa and Slovakia's imports from Africa, where the upper and middle figure represents trade intensity indices of top 5 export destinations and top 5 import partners, respectively.

Source: authors' own calculations on the basis of UNCTAD (2023).

Author calculated the trade intensity index for a period of 27 years (1995–2021) and 54 African economies as well, while the overwhelming majority of results represent values lower than 1. In the case of a more detailed analysis of Slovakia's exports to selected countries of the studied region, it is possible to observe a relatively higher, although still low, intensity of exports to the largest export destinations such as Algeria, Egypt, Tunisia, Morocco and South Africa. Only at the beginning of the studied period in 1995, the intensity index of exports to Algeria was higher than 1, which indicates a high intensity of trade. In other words, Slovakia's exports to Algeria represented a higher value than could be expected on the basis of Slovakia's

position in international trade. Similarly, the results of export intensity can be observed in the case of exports to Morocco in 2019, when the value of the index was 1.06. In addition to the mentioned observations, there were also other cases of higher index values than 1, which are, however, rather an exception than some developing trend. The authors did not include all the results of the calculations due to the nature of the contribution and the impossibility of clear formatting. In the other observed years and export destinations, the trade intensity index reached values lower than 1, which indicates lower values of trade flows, as would be expected given the importance of Slovakia in the world economy.

Conclusion

Based on the results of development and intensity of foreign trade between Slovakia and Africa during the period of 1995–2021, we have reached the following conclusions. Slovakia and Africa trade relations experienced positive development in the period under review, especially in the last decade. In the examined 27 years period the turnover of mutual foreign trade increased 20-fold. The increase in Slovak imports from African countries was much more significant than the increase in Slovak exports to Africa. Total imports have grown 32-fold and export flows 14-fold. However, the volume of exports is much higher than imports indicating the long-lasting positive trade balance for Slovakia. Generally, Slovakia's exports to Africa are more capital intensive than imports and represent high added value products including motor vehicles, machinery and electric equipment. On contrary, Slovakia's imports from Africa are less technologically advanced but still more capital intensive as it can be predicted by the African commodity position on the world market.

We can conclude that foreign trade between Slovakia and Africa is mutually not intensive, as the values of the trade intensity indices were lower than 1. There were also some particular country cases of higher index values, which are, however, rather an exception than some developing trends in mutual trade. However, we need to highlight that the last decade has seen an intermittent rise in the upward trend of mutual trade intensity.

Our results show that the intensity of import flows from Africa to Slovakia is, despite rising values, lower than the intensity of exports from Slovakia to Africa. This result indicates a non-reciprocal degree of trade importance shared by the two partners that participated in the analysis. As predicted, Slovakia is a less significant trading partner for Africa than its other trading partners. The volume of trade in this instance supports the disparity in economic size and significance. Africa is a much bigger partner for Slovakia than Slovakia for whole African region. Our results are consistent with theories about how trade ties work between economically minor nations that are far from one another and do not have a common economic structure. In contrast to the majority of African nations, which are least developed, Slovakia has a robust and diverse economy and is a member of the large single market. In this case, objective barriers to trade are a critical constraint for the further development of mutual trade relations. Subjective barriers are significant as well. After the implementation of EU economic cooperation initiatives that target the African continent, trade intensity indices have shown a rising trend during the last decade.

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THE CONCEPT OF BRIDGE IN THE FOREIGN POLICY OF HUNGARIAN PRIME MINISTER VIKTOR ORBÁN¹

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Abstract: During the last ten years, in accordance with goals of the strategy Opening to the East, specific foreign trade and foreign policy steps have been implemented by Hungary, which can be characterized as manoeuvring between various power centres in the interest of not only maximizing commercial advantages, but also strengthening the domestic political position of FIDESZ and the interest groups it represents. However, this policy and its ideological justification tries to build on the concept of Hungary as a bridge between the West and the East, based on the geopolitical position of Hungary, and at the same time its goal is to shape and strengthen its special foreign political identity. The aim of the contribution is to analyse various historical, structural, and normative aspects of the interpretation of Hungary's position in the world economy and politics during the Cold War and after its end, as well as at the second decade of the twenty-first century and especially after the Russian invasion of Ukraine.

Keywords: Hungary, concept of a bridge, foreign policy

JEL: F50, F59

1 Introduction

After 2010, when the right-wing nationalist party FIDESZ won a constitutional majority in the Hungarian parliament, the foreign policy considerations of its highest representative and Prime Minister V. Orbán very clearly formulated theses about the crisis of the West embodied by the USA and the EU and the rise of the East represented by China, Russia, India, and other countries. On the basis of such an assessment of political and economic development trends, the strategy of the Opening to the East was developed.² During the last ten years, in accordance with its goals, specific foreign trade and foreign policy steps have been implemented, which can be characterized as manoeuvring between various power centres in the interest of not only maximizing commercial advantages, but also strengthening the domestic political position of FIDESZ and the interest groups it represents. However, this policy and its ideological justification tries to build on the concept of Hungary as a bridge between the West and the East, based on the geopolitical position of Hungary, and at the same time its goal is to shape and strengthen its special foreign political identity. The aim of the contribution is to analyse various historical, structural, and normative aspects of the interpretation of Hungary's position in the world economy and politics during the Cold War and after its end, as well as at the beginning of the twenty-first century and especially after the Russian invasion of Ukraine.

2 A model of the bridge in the seventies and eighties of the twentieth century

Part of the Hungarian economists and sociologists and especially the younger generation associated in the research workshop Situation (Helyzet) systematically analyses the historical and current development of Hungary in the context of its integration into the world economy and politics. It is based on the theory of the world system of I. Wallerstein and the dependent development of A.G. Frank and F.H. Cardoso, and the position of Hungary, as well as other former countries of state socialism, is characterized, in their opinion, by semi-peripheral status

¹ The paper was elaborated in the framework of the project VEGA No2/2015/10 „ Trends of Development of contemporary Capitalism – Contradictions and Conflicts

² BERNEK, Á. (2018): Hazánk keleti nyitás politikája és a 21. század geopolitikai stratégiai összefüggései.

and dependence on the centre of the world economy.³ They perceive this dependence as a continuous phenomenon determining the conditions of economic, social, but also political development of society, both state socialism and capitalist market economy, but with certain specificities in both systems given by internal and international conditions.

Sociologist of the older generation J. Böröcz talks about the double dependence of socialist countries. On the one hand, it is an imperfect political dependence on the imperial centre, that is, the Soviet Union, which is effective in the foreign policy and military sphere, and on the other hand, it is a dependence on capital and the states of the economic centre. In the period of the fifties and sixties of the twentieth century, economic dependence is negative and manifests itself in the unavailability of capital and the latest technologies.⁴

The reintegration of Hungary, but also of other countries, into the world economy began in the seventies as a result of the crisis of the socialist semi-peripheral regime of accumulation, and the role of the socialist state in this readaptation is usually referred to as the bridge model (however, the term bridge or bridge model does not explicitly appear in the given historical period neither in the works of Hungarian economists nor in political discourse), as it mediated trade specialization between capitalist countries and the Council of Mutual Economic Assistance' states, based on favourable trade relations, subsidized Soviet oil prices, and internal substitution modernization.⁵ Integration or reintegration into the world economy led to financial and technological dependence on the capitalist centre, while despite the easing of internal political conditions in the Soviet Union and its satellites, the dependence of socialist countries on the political centre remained and their sovereignty is not restored.⁶

The degree of reintegration into the world economy and the related financial and technological dependence on the capitalist centre was not the same in individual countries. In many ways, it was determined by internal political and economic developments, different constellations of power groups, but also by different preferences within the official ideology. Political decisions in the field of economy and foreign policy were also important and had a significant impact on the degree of economic opening and credit acquisition. For example, Hungary's excessive borrowing in the wake of the oil crisis led to a debt spiral that nearly brought the country to the brink of state default in the late 1980s.⁷

The issue of economic and political stability was an important factor in the sixties and seventies after the tragic events of 1956 and the efforts of the Hungarian political leadership to gain the trust of society, which also affected the external structural relations and status of Hungary. In addition to a certain degree of political relaxation and some form of national reconciliation, it was also an effort to raise the standard of living of the population and the related necessity of modernizing the economy. The reconstruction of the Hungarian foreign policy of this period by historians, who were often based on other theoretical assumptions than the concept of double dependence, confirms the high degree of influence of political and economic contexts on the strategy and concrete actions of the state in the international environment. The peculiarities of Hungary's development determined, often to a greater extent than in other countries of the socialist bloc, its foreign policy. It focused very strongly on the development of economic relations with Western states, which the Soviet Union tolerated to a certain extent in the conditions of gradual easing of tension between the two blocs.⁸ On the other hand, for the deepening of economic relations with the countries of the capitalist centre,

³ ÉBER, M. Á – GAGYI, Á. – GERÖCS, Cs. – JELINEK, Cs. – PINKASZ, A. (2014): 1989. Szempontok a rendszerváltás globális politikai gazdaságtanához, GERÖCS, Cs. (2021): Magyarország függő fejlődése.

⁴ BÖRÖCZ, J. (2017): Hasítot fa, p. 30.

⁵ GERÖCS, Cs. (2021): Magyarország függő fejlődése, p. 106.

⁶ BÖRÖCZ, J. (2017): Hasítot fa, p. 36.

⁷ BÉKÉS, Cs. (2014): Magyar külpolitika a szovjet szövetségi rendszerben, 1968-1989, p. 137.

⁸ Ibidem, p. 135.

it was extremely important to overcome the remnants of the Cold War as much as possible. This significantly increased Hungary's interest in the process of de-escalation in Europe, which was manifested above all in the fact that its government was very actively involved in the preparation of the Conference on Security and Cooperation in Europe. As it turned out after the signing of the Final Act in 1975, Hungary was among the countries that benefited the most from the newly created opportunities for cooperation.⁹

Hungary joins the IMF and the World Bank in the 1980s and strives to develop relations with the European Community, i.e., organizations forming an important part of the capitalist centre. When the Soviet-American political dialogue was interrupted in the mid-1980s, Hungary strove through active diplomacy to maintain relations between East and West, and in many cases went beyond bloc discipline and sought a certain degree of autonomous progress.¹⁰

The bridge model in the 1970s and 1980s was manifested in Hungary's foreign policy, on the one hand, by respecting power relations in a bipolar world, political dependence on the Soviet Union, and at the same time creating conditions for the development of relations with Western countries conditioned by the objective process of the country's reintegration into the world economy. Financial dependence on the capitalist centre and indebtedness also led to some domestic political concessions, especially in relation to the political opposition.¹¹

3 Economic and political integration after the end of bipolarity, abandonment of the concept of bridge

Internal political and economic changes in Hungary, along with the collapse of the Soviet Union as a power centre, brought about the end of dual dependence. Formal political sovereignty was restored, and property relations fundamentally changed, a market economy was created that was fully integrated into the world capitalist economy. However, neither Hungary nor other countries have managed to overcome their economic dependence on advanced capitalist countries even after thirty years since the beginning of the radical changes, and a few authors characterize the system that arose because of the transformation of the socialist economic system as a dependent market economy. Nölke and Vliegenthart consider the main feature of this economy to be primarily dependent on the investment decisions of multinational corporations, as well as on the transfer of innovations within the structures of these companies.¹² In Hungary, as well as in other socialist countries, political and economic changes were perceived as modernization of society, an important part of which was integration into the EU and NATO. Their entry into these structures was perceived as involvement in the main development stream, a prerequisite for the dynamic development of security. Hungarian political elites perceived economic and political changes and integration processes as a return to Western civilization, leaving a sort of intermediate space between East and West.

At the end of the 1980s, fundamental political changes were agreed upon in Hungary based on negotiations between the ruling Hungarian Socialist Party and the opposition parties, which were completed by the first democratic elections in 1990. In a situation where the Warsaw Pact still existed, the Hungarian Democratic Forum in particular, but also other emerging parties advocated for the country's neutral status. Even before the elections, some representatives of the Hungarian Socialist Party surprisingly spoke in favour of considering Hungary's entry into the NATO political organization. The dissolution of the Warsaw Pact in 1991 definitively put an end to considerations of neutrality, and in the same year, the dissolution of the Council of Mutual Economic Assistance opened the way for Hungary's economic

⁹ Ibidem, p. 155.

¹⁰ KISS, J.L. (2004): A kádárizmustól az EU tagságig: a magyar külpolitika metamorfózisa, p. 46.

¹¹ BÉKÉS, Cs.(2004): Magyar külpolitika a szovjet szövetségi rendszerben, 1968-1989, KISS, J.L. (2004) A kádárizmustól az EU tagságig: a magyar külpolitika metamorfózisa.

¹² NÖLKE, A. - VLIEGENHART, A. (2009): Enlarging the Varieties of Capitalism.

integration with Western countries, which signed an association agreement with the European Community in the same year.¹³

In the Hungarian political discourse during this period, in connection with the entry into the OECD, NATO and later the EU, mainly right-wing parties including FIDESZ, but also partly the left and liberals emphasized that the country ceased to be a ferry that moved between East and West and was firmly anchored in West. On the occasion of Hungary's accession to the EU, the then president Ferenc Mádl stated: "The ferry-country has definitely anchored on the west bank."¹⁴ The term ferry-country was a geopolitical metaphor of the famous Hungarian poet Endre Ady from the beginning of the twentieth century, which he used in one of his essays as an expression of Hungary's position between the modern and democratic West and the feudal and undemocratic East. The context in which this term was used was clearly anti-feudal. Ady demanded the overcoming of feudal remnants in the economy and politics of Hungary.¹⁵

The new historical situation after the end of the Cold War and the collapse of the Soviet Union was perceived by Hungarian political elites as a chance to put an end to the country's position as a ferry moving between East and West. Their political program became the transition from the semi-periphery to the centre, joining the democratic and educated West. At the same time, it meant the rejection of the role of a bridge, any third way or justification of political and military neutrality.¹⁶ Thus, this metaphor was also an expression of the effort to enforce the modernization strategy, which was advocated by both Fidesz, socialists and liberals in the period of the nineties and the beginning of the twenty-first century. The West was considered an unquestionable model for Hungarian modernization understood as a transition to a market economy and liberal democracy. A little later, FIDESZ's foreign policy programs began to place a stronger emphasis on national interests and based on them, on the need to participate in changes in the EU itself.¹⁷

The economic, political and security anchoring of Hungary in the Euro-Atlantic integration structures was an expression of the constellation of social and political forces economically linked to foreign capital and the political elites of Western countries, their interests in consolidating their own power position. Their policy also had a significant geopolitical aspect, which was related to the expectation of the impact of integration on Hungary's position in international politics and especially in the Central European area. The beginning of these processes in the second half of the nineties, when Hungary joined NATO only with the Czech Republic and Poland (1999) and also the pre-accession talks with the EU in 1998 started alongside Hungary with only three other post-socialist countries (the Czech Republic, Poland and Slovenia) indicated that by membership in both integration groups, the country will gain both economic and political advantages, which it will be able to apply in relations with regional partners. However, further developments, both domestically and internationally, turned out to be much more complicated compared to the original expectations of the Hungarian political elites, and after 2010 the concept of the bridge reappeared in Hungarian politics.

4 The strategy of Opening to the East and the concept of bridge

After the parliamentary elections in 2010, in which FIDESZ won a two-thirds majority, together with the centralization of power, it also transformed Hungary's foreign policy. Prime Minister V. Orbán considered the global financial and economic crisis to be an important symptom of the crisis in the West and the rising dominance of China and other countries located

¹³ KISS, J.L. (2004): A kádárizmustól az EU tagságig: a magyar külpolitika metamorfózisa, pp. 51-52.

¹⁴ LAKNER, Z. (2022): Kompország és hintapolitika.

¹⁵ CSAPODY, T. (2006): Kompország politikusai. Koppányok és Szent Istvánok, p. 184.

¹⁶ Ibidem, p. 188.

¹⁷ CSIZMADIA, E. (2017): A magyar politikai fejlődés logikája, pp. 189-200.

to the east of the European Union's borders. Metaphorically, he expressed his political thesis as follows: "We sail under the flag of the West, but the wind blows from the East." In 2012, the Hungarian government adopted a foreign trade strategy called Opening the East, an implicit part of which was the strengthening of political relations with China, Russia, Turkey, and other countries.

In the analysis of supporters of this strategy, the idea of Hungary's role as a bridge on the Eurasian supercontinent appears. The argument in favour of such a role is not civilizational or cultural but geopolitical. Hungary's geographical position implies that it remains a transit country both in the past and in the present, while the emerging multipolar world also provides new geopolitical opportunities.¹⁸ Under the conditions of a multipolar organization of international economic and political relations, according to this concept, Hungary can be an ideal logistics centre for transnational companies from the West and the East.¹⁹ According to A. Rácz, the concept of the bridge, at least in relation to Russia in the second decade of the twenty-first century, is anachronistic regarding to its policy towards the West. He admits that in the mid-nineties it might not have been impossible for Hungary to be a bridge, but given its possibilities, it was not realistic even then. This analyst expressed his belief that Russia rather expects Hungary to fulfil not the role of a bridge in relation to NATO and the EU, but to weaken the coherence of these groupings.²⁰

Other authors assess the concept of bridge (or ferry-country) in the context of Hungarian foreign policy identity. The strategy of Opening to the East also enabled the realization of a new self-image of foreign policy. Its peculiarity is that it is seen at the geographical and symbolic crossroads of Europe.²¹ The goal is for Hungary to position itself in the centre of the European space and to benefit from its mediating role between East and West. In this context, the reconstruction of the Budapest-Belgrade railway with the participation of China has a symbolic character for Hungary. It is an expression of interconnectivity as an approach to international relations, which Hungary adopted from contemporary Chinese politics.²²

5 The concept of the bridge and the arrangement of the world after the end of the war in Ukraine

Prime Minister Orbán sees Hungary's position as a bridge connected with the goal of the country's transition in the next decade among the most economically advanced countries in the world, while referring to the tradition of Hungarian political thinking (rather, its conservative current).²³ He sees the disconnection of relations between states and the emergence of competitive blocs as the biggest obstacle to breaking into the club of the rich, which is among the likely scenarios of development after the end of the war in Ukraine, considering, for example by German analysts.²⁴

According to V. Orbán, such a world order would be a system of hierarchical networks existing side by side, and in this arrangement every economic, political, and cultural transfer could be realized only through the hegemony of the given groupings. The Hungarian prime minister prefers conditions that would allow Hungary to be outside the blocs and supports regional and global integration instead of division. He fears that his country would become a

¹⁸ BERNEK, Á. (2018): Hazánk keleti nyitás politikája és a 21. század geopolitikai stratégiai összefüggései, p. 126.

¹⁹ Ibidem, p. 142.

²⁰ RÁ CZ, A. (2021): Moszkvának vakond kell nem közvetítő.

²¹ PERAGOVICS, T. – SZUNOMÁR, Á. (2022): Kompország újratöltve, p. 12.

²² Ibidem, p. 13.

²³ ORBÁN, B. (2023): Nem a szétbontásra, igen az összekapcsolásra.

²⁴ MÖLLING, Ch. et al. (2022): Sea change for Europe's security order.

periphery in a large international bloc.²⁵ In his reflections, he does not perceive at all the dependence of Hungary's economy on foreign capital long before the outbreak of the war in Ukraine. After the world financial and economic crisis, there was a certain weakening of the centres of economic and political power in which Hungary is integrated. This enabled him to manoeuvre between the EU and NATO on the one hand and the emerging markets on the other.

This economic manoeuvring has brought certain results more than ten years after the declaration of the strategy of Opening the East. Obtaining finance and capital mainly from China, Russia, but also from other countries outside of Europe enabled Hungary to diversify sources of loans and, to a lesser extent, investments.²⁶ In Hungary's foreign policy, this strategy was reflected in the pursuit of a certain autonomy in the development of bilateral relations with non-European countries and overall contributed to strengthening Hungary's self-identification as a bridge between East and West.

Conclusion

The situation after the financial and economic crisis allowed Hungary to implement its strategy of Opening to the East, along with the largely illusory idea of its ruling elite about the role of a bridge between East and West. The conditions of relative autonomy ended with the war in Ukraine, and the world is most likely entering a period characterized by intense bloc competition. In such a new international order, which V. Orbán is not without reason afraid of, the concept of a bridge will with high probability be unrealizable.

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EU TRENDS OF DIGITIZATION AND AUTOMATION OF ACCOUNTING¹

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Abstract: Digitalization and automation of accounting is a trend which EU tries to cover by several legal attempts. Essential part of accounting digitalization and automation is automatic B2B data exchange. We examined implementation of B2B mandatory use of invoice in each of 27 EU member state by examining available national legislature. As of today, there are only 3 member states where B2B invoice is mandatory and 5 member states where B2B invoice is currently being implemented under revealed implementation time framework. Every country develops its own system covering own requirements as EU invoice directive is mandatory only for public procurement. Compatibility, in terms of business administrative burden reduction, among national invoice systems is questionable.

Keywords: accounting, invoice, EU, B2B invoice automation

JEL: M41; M48; O14

Introduction

On 14th December 2022 European parliament approved Decision (EU) 2022/2481 establishing the Digital Decade Policy Programme 2030². This program features 4 main targets: Government, Business, Infrastructure and Skills. Some detailed sub-targets relevant to accounting are:

75 % companies shall use cloud, artificial intelligence and/or big data.

More than 90 % of all SMEs reach at least basic digital intensity.

Key public services will be 100 % online.

80% of citizens will have access to digital ID. 100% citizens will have access to digital eHealth.

Digitalization of accounting has begun with implementation of early IT and computers for the accounting purpose. Since then, using IT have become a standard tool for accounting. Nowadays it is almost impossible to perform accounting without IT infrastructure. Therefore, when mentioning accounting digitalization and digitalization in general, we must clearly define what is the meaning of digitalization. In this paper we understand digitalization as use of digital formats of documents and using computer processes/programs capable of performing automatic or semi-automatic processes or decisions to fulfil the required task and deliver required outputs.

Despite of mentioned EU program for digitalization, early attempt of digitalization in EU can be dated to the directive for 2014/55/EU on electronic invoicing in public procurement.³

¹ This paper was prepared within the grant VEGA No. 1/0121/21 Analysis of the impact of the COVID-19 crisis on the financial health of entities in the Slovak Republic.

² Decision 2022/2481 Of The European Parliament And Of The Council of 14 December 2022 establishing the Digital Decade Policy Programme 2030, p. 74.

³ Directive 2014/55/EU of the European Parliament and of the Council of 16 April 2014 on electronic invoicing in public procurement Text with EEA relevance 2014, p. 63.

Implementation of this directive for public procurements have been verified by the EU Commission launching Call of evidence, launched in 2023. Implementation of this directive is limited to public sector (further as B2G – business to government or G2G - government to government) and its suppliers; it is not required for businesses to business (further as B2B) invoicing. Several countries have implemented invoices also for B2B, which is more detailed researched in this paper. EU free cross-border trade naturally requires unified attitude across the whole EU. EU commission release proposal for new amendment to Value Added Tax (further as VAT) directive 2006/112/EC as regards to digital age⁴. Invoices as a form of standard business correspondence are used to declare occurrence of delivery of goods or services, they are used for the payment purpose as the form of obligation for the supplier and the form of liability for the customer, and as a document declaring occurrence of the tax related transaction. Therefore, VAT directive is focused on requirements on forms of invoices, information mentioned in invoices and methods of delivering invoices from supplier to the customer, in order to eliminate any misconduct or fraudulent business practices.

Briefly description of basic background mentioned in this paper shows reasoning why digitalization and automation of accounting has become the trend to meet at least here mentioned needs for proper B2B and B2G communication and proper reporting.

1 Three main reasons for digitalization and automatization of accounting

As mentioned above, digitalization is the trend which every European country must implement. There are several reasons out of which 3 are the most important:

Digitalization is necessary for further automation. Both digitalization and automation already save expenses⁵. Automatization tools do not need to comply with the labour law, are capable to work more than regular human working hours and are capable to perform much faster than humans.

Digitalization saves office supplies, mainly office paper and utilities such as electricity, heating/cooling of offices, etc. Digitalization reduces carbon emissions significantly⁶. Ecology and sustainable environmental attitudes are nowadays used as PR necessities for any industry. Carbon reduction has become obligatory due to several government programs such as European Green Deal⁷.

Lack of personnel in almost every industry has becoming serious threat for sustainable economic growth (Poor, Slavic, Nikolic, Berber 2021). Digitalization and automatization partially solve the problem of limited available personnel at the labour market by replacing missing personnel by automatic solutions. Accounting profession is expected to change in near future and will be replaced by automatic software-based solutions using Artificial intelligence (further as AI)⁸.

The aim of this paper is to study whether invoice implementation in EU tends to increase or decrease cross-border supplies administration burden by searching to answer the question: Is there a unify implementation attempt in each EU country in order to avoid cross-border administration burden caused by different invoice requirements in each EU country?

⁴ Proposal for a COUNCIL DIRECTIVE amending Directive 2006/112/EC as regards VAT rules for the digital age 2022, p. 88.

⁵ AGOSTINO, D. – SALITERER, I. – STECCOLINI, I. (2022): Digitalization, accounting and accountability: A literature review and reflections on future research in public services, pp. 152-176.

⁶ RADA, E. – CHENG, S. – QU, G. (2023): Research on the Effect of Digital Economy on Carbon Emissions under the Background of “Double Carbon.” 20 (6), 4931.

⁷ A European Green Deal (2023), p. 26.

⁸ Kommunuri (2022): Artificial intelligence and the changing landscape of accounting: a viewpoint, pp. 585-594.

By studying each EU country's legislation regarding einvoice and public disclosures of einvoice implementation framework, we have compared the current status of the B2B einvoice implementation in each EU country.

2 Implementation of accounting digitalization in EU countries as of today

EU officially represents one single market. Every country applies own legal framework and own attitudes. The same applies for accounting and taxation, where every country applies own legal requirements. IFRS as single set of standards is mandatory for any listed company within EU but is not allowed to be used for small business, at least not in Slovakia⁹. Due to different attitudes and requirements in each member state, each EU country has applied different stage of accounting digitalization. Accounting digitalization and automatization of accounting contain so many features which far exceed limited available space in of this paper.¹⁰ Therefore, for this paper we limited our research to examine B2B mandatory einvoice implementation across the EU member states. As mentioned above einvoice is mandatory for B2G supplies already. For B2B it is mostly voluntary applicable by companies. Especially by companies which communicate with their customers and suppliers electronically. Einvoice can be issued in two formats:

1. Paper like format, mostly known as as PDF format.
2. Structured format, for example XML.

Both are capable to carry information which can be withdrawn, evaluated and processed by the receiver of the invoice automatically, without human intervention. Due to this capability, einvoice is the form of authentic B2B data exchange.

2.1 Research methodology

There are 27 EU member states. For each member state we examined legislation summary regarding einvoice focusing on two main parameters:

1. VAT report requirements. This parameter is checked for better understanding the stage of einvoice implementation. For example, country which barely requires transaction-based VAT reporting might not be keen to implement mandatory B2B einvoice.

2. Obligatory required use of einvoice for B2B transactions or current status or current time framework, depending on what is relevant. Besides the volume limitation of this paper the main two reasons to limit this research to VAT related einvoice are:

1. Once a company is capable to automatically receive and process an invoice without human intervention, the company might be capable to implement also automatic performing of other accounting operations without a human intervention. It is necessary to mention that IFRS does not require accounting based on accounting document but based on recognition criteria of a matter of accounting.
2. If a company is capable for automatic processing of received documents or received information, so is the tax authority or an auditor. Automatization of accounting procedures may automatically produce information suitable for Government institutions, mainly Tax administration and Statistical administration. Tax administration is mostly interested in real time taxable transactions to prevent tax evasion (Vlčko, Meluchová 2021) which can be delivered online to the Tax administration without any human intervention.

Our brief observation summary is in the table **Chyba! Nenašiel sa žiaden zdroj odkazov..**

⁹ Národná rada Slovenskej republiky (2002): Act no. 431/2002 Z.z. on accounting, p. 67.

¹⁰ VLČKO, J. – MELUCHOVÁ, J. (2022): Managing risks of automatic accounting, pp. 71-81.

Table 1. Brief overview of the status of implementation of mandatory B2B invoice in 27 EU member states.

<i>Country</i>	<i>Requirements for VAT submission reporting</i>	<i>B2B mandatory invoice</i>
Austria	Einvoice not used for VAT reporting	Not in use
Belgium	Intracommunity transactions	Planned implementation: 2024 Every taxpayer is eligible to receive einvoice, large taxpayers shall issue invoice 2025 Every taxpayer need to be able to issue einvoice.
Bulgaria	Monthly reporting of all transaction regardless threshold: B2B, B2G, B2C. Domestic, intracommunity and extracomunitary. Sales and purchases.	In consideration - cooperated with EU.
Croatia	Monthly or quarterly reporting of all B2B and B2G domestic purchases.	Not in consideration yet.
Cyprus	Under consideration.	Under consideration.
Czech Republic	Monthly reporting of all transaction regardless threshold: B2B, B2G, B2C. Domestic, intracommunity. Sales and purchases.	Voluntarily
Denmark	SAF-T report upon request from Tax authority	2024 Taxable businesses will submit invoices electronically to the Tax authority. Businesses with turnover exceed 300.000DKK will exchange invoices electronically.
Estonia	Monthly or quarterly reporting of all B2B and B2G domestic sales and purchases.	Voluntarily
Finland	Intracommunity transactions. SAF-T report upon request from Tax authority.	Under consideration.
France	Intracommunity transactions	2024 Large companies, 2025 medium sized companies, 2026 all companies.
Germany	Intracommunity transactions.	Under consideration.

Greece	Wholesales transactions reported by ERP next day of occurrence. Companies with turnover less than 50k and less then 50 invoices a year can use dedicated webservice.	Voluntarily
Hungary	Einvoices are online reported to Tax authority	Implemented. Issued invoice is sent automatically from ERP to Tax authority. Tax authority resends it to the customer.
Ireland	Standardised VAT return	Not in consideration yet.
Italy	Einvoices are online reported to Tax authority	Implemented. Issued invoice is sent automatically from ERP to Tax authority. Tax authority resends it to the customer. Mandatory for companies with turnover over 65.000€.
Latvia	Monthly reporting of all transaction regardless threshold: B2B, B2G. Domestic, intracommunity. Sales and purchases.	2025 B2B and B2G
Lithuania	Monthly reporting of all transaction regardless threshold: B2B, B2G, B2C. Domestic, intracommunity and extracomunitary. Sales and purchases.	Voluntarily
Luxembourg	Intracommunity transactions.	2024-2030 under development.
Malta	Intracommunity transactions.	Under consideration.
Netherlands	VAT return	Voluntarily
Poland	Monthly reporting of all transaction regardless threshold: B2B, B2G, B2C. Domestic, intracommunity and extracomunitary. Sales and purchases.	Under development.
Portugal	Monthly reporting of all Issued invoices and simplified invoices regardless threshold: B2B, B2G, B2C. Domestic, intracommunity and extracomunitary. Sales.	Under development.

Romania	Under development.	Under development.
	Monthly reporting of all transaction regardless threshold: B2B, B2G, B2C. Domestic, intracommunity. Sales and purchases.	
Slovakia		Under development.
Slovenia	Intracommunity transactions.	Voluntarily
Spain	Einvoices are online reported to Tax authority	Implemented for all B2B.
Sweden	Under consideration.	Under consideration.

Source: Own processing based on local legislation studies and <https://ec.europa.eu/digital-building-blocks/wikis/display/DIGITAL/eInvoicing>

As shown in the Table 1, there are only 3 countries out of 27 countries currently required mandatory use of B2B invoice. There are 5 more countries which publicly announced or legally approved time framework for establishing mandatory use of B2B invoice.

Conclusion

Digitalization and automation of accounting starts with digital automatic B2B, B2G, G2B and B2C data exchange. Most of such data are standardised business correspondence such as invoices, orders, delivery notes, credit notes, and debit notes. There are less than half of the EU countries which either implemented or are in any phase of implementation of mandatory B2B invoice, despite of the mandatory B2G and G2G invoice for any EU public procurement. Even though, there is lack of one centralised standardised solution or attitude for the entire EU. Each country develops own system with own specific requirements applying EU directives. Such EU attitude makes no sense as differences in invoice systems and requirements among EU countries place obstacles for free trade which does not comply with declared EU policy of free move of goods. Based on the results shown in this paper, we suggest to start some EU initiative which would unify invoice attempts in each EU country in order to make cross-border supplies of goods and services bureaucracy burden free.

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THE NORTHERN ROUTE OF THE IRON SILK ROAD¹

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Abstract: The goal of the article is to introduce the railway links that constitute the Northern route of the Iron Silk Road (ISR) within China's Belt and Road Initiative (BRI). After an overview of its position in the BRI, the focus will shift to the definitions of this route. Following on from that, the risks and drawbacks of this route will be presented. The main methods used were the study and analysis of internet sources, mainly online portals of professional journals and internet pages of relevant media pertaining to rail transport. The conclusion is that the Northern route of the ISR will have to overcome several difficulties in its further development as a viable option for cargo transport along the BRI in Eurasia, such as deficiencies in railway infrastructure, political problems between the EU and China, and, as seen most recently, the reliance on Russia as a transit country.

Keywords: Belt and Road Initiative, China, connectivity, Iron Silk Road, rail transport, transportation infrastructure

JEL: F15, R40

Introduction

With the rise of China as an economic superpower, the country has been deepening its economic links with all corners of the globe. To this end, it unveiled the Belt and Road Initiative (BRI, formerly One Belt One Road, or OBOR) in 2013.² This initiative, often informally called the New Silk Road, originally aimed to connect China with its major economic partners in Europe through the interior of Eurasia, but has since expanded to include other regions of the world. The BRI is made up of a sea-based component, the Maritime Silk Road (MSR), and a land-based component, the Silk Road Economic Belt (SREB), with the SREB being further subdivided into six corridors. The principal method to bring the SREB to fruition is by building transportation infrastructure in the countries along the SREB corridors. Among this infrastructure, special attention is given to railways, to the point that railway connections along the BRI are emphasized as constituting an "Iron Silk Road" (ISR), to be treated separately from the other forms of transport infrastructure. The aim of this article is thus to present the ISR, its routes and the obstacle facing its development.

The main methods used were the study and analysis of internet sources, mainly online portals of professional journals and internet pages of relevant media pertaining to rail transport.

While railways have a role to play in each of the six SREB corridors, they are especially important in the larger, continent-spanning corridors of the New Eurasian Land Bridge (NELB, connecting China and Europe through Kazakhstan and Russia), the China – Mongolia – Russia Economic Corridor (both seen as two prongs of the "Northern" route or corridor,^{3,4} which has long been dominant) and the China – Central Asia – West Asia Economic Corridor. This last corridor is divided into a dynamically developing "Middle

¹ This text was created as part of the project of the Scientific Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic: VEGA # 1/0732/21 "The 'New Normal' and the Changing Position of the PRC in the World Economy."

² VIEHE, A. – GUNASEKARAN, A. – DOWNING, H. (2015): Understanding China's Belt and Road Initiative.

³ HARTRODT (2022): New offer: Iron Silk Road through Turkey.

⁴ ZHAO, C. (2023): Kazakhstan Railways to work together with Shandong Port on New Silk Road.

Corridor” (especially thanks to the efforts of Turkey) and a so-far underdeveloped (if not hypothetical) “Southern” route of corridor. The reasons why railways are given so much attention is their viability compared to the dominant method of moving goods today, i.e. container ships – while ships can take up to 30-55 days to travel between Europe and China, depending on the destinations, trains can make the journey in 10-18 days. However, this is balanced by the ability of ships to transport much more cargo in a single trip – more than 20 000 intermodal or ISO containers, compared to c. 80 containers per train.^{5,6} Rail transport is thus logically more suited to non-bulk cargo which must be shipped quickly, whether due to the nature of the cargo or because of the just-in-time strategies of many companies. It can therefore also serve smaller markets than can be sustained by container ships.

1 Defining the Northern Route

The Northern route traces its roots back to the Trans-Siberian Railway of the late nineteenth and early twentieth century. As such, it was for a long time the only transcontinental rail route available, and even today it remains the principal route for rail transport thanks to its better developed infrastructure as well as the fact that the majority of the Northern route, whether along the NELB or the “old” land bridge of the Trans-Siberian Railroad, consists of long stretches of uninterrupted track passing through the vast territories of Russia, Mongolia, Kazakhstan, Belarus and Ukraine with relatively few stops at border crossings for customs checks and duty payments, and without the need to stop at all to adapt to different track gauges (since all these mentioned countries use the Soviet-style 1 520 mm broad gauge). Stopping for customs duties has been reduced even more since Russia, Belarus and Kazakhstan entered into a customs union (the Eurasian Customs Union) in 2010.⁷ Seeing as the China – Mongolia – Russia Economic Corridor is largely coterminous with the original land bridge based on the Trans-Siberian Railway, it is the “New” Eurasian Land Bridge which is promoted by China as its major contribution to the Northern route within the Iron Silk Road, and one of the flagship projects of the BRI in general.⁸

The Northern Corridor of the Iron Silk Road spans around 10 000 km,⁹ with the inexactitude being a consequence of the vagueness of the precise routes falling under the corridor, which is the case with many BRI projects, as noted above. Specifically, there is no consensus on where the end points of the corridors lie, with various sources offering different suggestions, resulting in differing estimates of the corridor’s total length. This is not necessarily vagueness by design however, as the corridors can be interpreted simply as groupings of specific routes traversing specific regions or sharing a specific railway for portions of their run, rather than as strictly defined routes in and of themselves with precisely determined end points. The starting points for the various sub-routes constituting the Northern route from the point of view of China (specifically Chinese manufacturing and exporting companies) are located in such metropolises of Central and Western China as Changsha, Chengdu, Chongqing and Xi’an.¹⁰ All of these are megacities with over ten million inhabitants and (unofficially but popularly) classified as “new first tier cities” (among fifteen such cities in total) which are seen as the principal hubs of commercial activity for the future as well as attractors of population growth, especially young skilled professionals.¹¹ On the

⁵ SEKHNIASHVILI, A. (2017): The Iron Silk Road’s Centerpiece.

⁶ VISSER-MEIJER, S. (2023): New Silk Road – to and from China by train.

⁷ ROMANO, G. – TAUBE, M. (2022): ‘Germany’s China City’: Iron Silk Road Terminal of Duisburg.

⁸ KENDERDINE, T. – BUCSKY, P. (2020): Rail Freight Use on China’s Iron Silk Road Underdelivers.

⁹ VISSER-MEIJER, S. (2023): New Silk Road – to and from China by train.

¹⁰ YAKU, F. – UTSUNOMIYA, S. – TABETA, S. (2021): Pandemic turns 'Iron Silk Road' into China-Europe trade artery.

¹¹ HU, Y. (2017): China's 'new' first-tier cities compete to attract talent.

opposite side of the continent, the most frequently cited terminus of the Northern route is the German city of Duisburg,¹² which is the largest inland port in Europe.¹³ Among the other mentioned end points are Hamburg¹⁴ and St. Petersburg,¹⁵ both important port cities where the freight can be unloaded on to ships for the next leg of their journey to their final destination, showcasing the intermodal nature of the BRI.

2 Problems Facing the Northern Route

Of course, the Northern route has its drawbacks as well. The principal long-term issue is a lack of investment into the aging Soviet-era railway infrastructure, which is not maintained to the level it needs to be to fulfill its potential as a BRI transport route.¹⁶ This can however also be an opportunity for investment by Chinese or other companies under the aegis of the BRI and its financing schemes. Another problem is the fact that the Soviet-era railways were oriented towards Moscow, which may result in inefficient routes and bottlenecks. Furthermore, the railway network in Northwest Europe is under heavy strain due to demand for railway capacity in these countries, resulting in backlogs, since national railway companies and authorities generally give priority to passenger trains over freight trains. Yet another issue are the lengthy customs checks at the external borders of countries in the Schengen area, especially the border between Poland and Belarus, which is the principal route of entry into the EU along both the new and old land bridge. Other issues are strictly political such as the EU's criticism of China in handling unrest in Xinjiang and Hong Kong, the resulting reciprocal sanctions on certain officials which froze negotiations on the Comprehensive Agreement on Investment (CAI) and the opposition of the EU towards China's assertion of sovereignty over much of the South China Sea. A final problem is the continued reliance of the corridors on subsidies from the government of China,¹⁷ leading to questions whether the routes will be profitable and economically sustainable in the long-term.

However, the major drawback of the Northern route is the irreplaceable role of Russia. This has only become a critical issue since the Russian invasion of Ukraine in February 2022, but as of the time of writing of this article (May 2023) its resolution is not on the horizon. The problem of course cannot be alleviated since Russia cannot be bypassed while using this corridor, which demonstrates the danger of placing too much physical and marketing capital in one partner. As of the time of writing of this article the EU has imposed ten packages of sanctions against Russian, with an eleventh package being negotiated. These sanctions ban the export and transport of certain commodities and products through Russia and Belarus,¹⁸ and create obstacles to the insurance of those goods that can still be transported. This has led to a decrease in the utilization of the Northern route.¹⁹ These developments have not merely affected companies trading and transporting cargo along this route – the hopes of Łódź of becoming a logistical hub and a gateway to Europe for China have been dashed, at least for the time being.²⁰ But the war in Ukraine and the resulting sanction on Russia have also affected the BRI in a less direct manner, by diminishing consumer confidence and increasing the price of energy commodities, which drives up the cost of manufacturing and transporting goods and decreases

¹² YAKU, F. – UTSUNOMIYA, S. – TABETA, S. (2021): Pandemic turns 'Iron Silk Road' into China-Europe trade artery.

¹³ ROMANO, G. – TAUBE, M. (2022): 'Germany's China City': Iron Silk Road Terminal of Duisburg.

¹⁴ YAKU, F. – UTSUNOMIYA, S. – TABETA, S. (2021): Pandemic turns 'Iron Silk Road' into China-Europe trade artery.

¹⁵ BRINZA, A. (2022): Putin's War Has Killed China's Eurasian Railway Dreams.

¹⁶ KHANNA, P. (2012): The new Silk Road is made of iron—and stretches from Scotland to Singapore.

¹⁷ KENDERDINE, T. – BUCSKY, P. (2020): Rail Freight Use on China's Iron Silk Road Underdelivers.

¹⁸ BRINZA, A. (2022): Putin's War Has Killed China's Eurasian Railway Dreams.

¹⁹ VISSER-MEIJER, S. (2023): New Silk Road – to and from China by train.

²⁰ BRINZA, A. (2022): Putin's War Has Killed China's Eurasian Railway Dreams.

the purchasing power of potential customers.²¹ It must be said that such a situation is not entirely new – transport of food and agricultural products from several EU member states by the two corridors of the Northern route through Russia was banned by the Russian government in 2014, as a counter-sanction to previous sanctions imposed by the EU on the country due to its activities in Crimea and Eastern Ukraine.²² The ongoing war has of course brought these problems to a much higher level, prompting a shift in attention away from this route toward the Middle Corridor as an alternative railway link between Europe and China.²³

Conclusion

The Iron Silk Road is an increasingly important component of the Belt and Road Initiative, due primarily to the advantage of rail based cargo transport over sea-based transport by container ship, taking roughly only one third of the time needed by maritime transport. The ISR itself is divided into several routes or corridors, of which the Northern route is currently dominant. This route leads from China through Russia to Europe by way of either Mongolia (the China–Mongolia–Russia Economic Corridor) or Kazakhstan (the New Eurasian Land Bridge). The dominance of the Northern route has been assured by its historical head start over other alternative railway routes and the uninterrupted stretch of soviet broad-gauge railroads reducing the need for stops due to track gauge changes. The route itself is not one single railway link, but rather a collection of such rail links connecting economically important cities in Europe and China.

However, there remain several drawbacks that prevent this route from reaching its full potential. Among them is the poor state and neglect of railway infrastructure in post-soviet countries, an unfavorable orientation of the railway network for China's purposes, political problems between the EU and China as well as a continued reliance on Chinese governmental subsidies for these railway links instead of them proving that they can stand on their own. But the biggest problem which came to light over the previous year was the undue reliance on Russia as a transit country. Since the war between Russia and Ukraine fully erupted in February last year, rail transit over the Northern route has diminished because of sanctions imposed on Russia by the EU. It remains to be seen whether this will become a more permanent obstacle to the development of this route, prompting a reorientation of railway transport to the Middle Corridor or other alternative rail links, or whether economic interests will win out over political rivalry once the conflict in Ukraine is settled.

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²¹ BRINZA, A. (2022): Putin's War Has Killed China's Eurasian Railway Dreams.

²² TAVSAN, S. (2017): 'Iron silk road' threatens to sidetrack Russia.

²³ HARTRODT (2022): New offer: Iron Silk Road through Turkey.

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A CRITICAL APPROACH TO THE DEPOLITICIZATION OF GOOD GOVERNANCE¹

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Abstract: Good governance has become one of the dominant discourses of the global politics in the 1990s. Since then it has been used as a crucial benchmark evaluating governance in many countries around the world. This paper analyzes the good governance discourse's depoliticizing tendencies. These are achieved through a technocratic and neoliberal understanding of governance. At the same time good governance presents itself as simply good and thereby contributes to the lack of discursive clarity when it comes to good governance. The method of analysis is the study of secondary sources and the result is a critical intervention into the current debate on good governance.

Introduction

The main argument of this paper is that the good governance discourse is commonly understood to be dealing with politics, but by representing government as a mere administrative institution, this discourse disregards the political processes related to power differences that are an inherent part of politics. At the same time the “good” in the good governance discourse more often than not refers to neoliberal policies and thereby suppresses regulatory or redistributive policies as a possible content of what good governance might mean.

One can decipher the administrative, technocratic, non-political understanding of governance already in the main documents on good governance, but first it might be useful to distinguish between the minimalist or procedural and strong or participatory democratic traditions. The former goes back to theorists of democratic elitism such as Weber and Schumpeter and leads to “valorisation of multi-party competition and elections as ends in themselves.”² The latter refers to Rousseau or John Stuart Mill for whom “participation is valued in its own right.”³

The aim of this paper is to through an analysis of secondary sources the way good governance discourse depoliticizes unequal relations of power. In the first section this is shown as the good governance is represented as a technocratic and neoliberal form of governance. The second section shows this in greater detail within particular discourses of the so called development cooperation.

1 Depoliticization through technocratic and neoliberal understanding of governance

Three World Bank^{4 5 6} reports from the turn of the century follow the minimalist tradition. Citizen participation in these reports “is welcomed as a tool to achieve a more effective state

¹ This work was supported by the Slovak Research and Development Agency under the contract No. APVV-19-0314.

² ABRAHAMSEN, RITA (2000): *Disciplining Democracy*, p. 68.

³ *Ibid*, p. 73.

⁴ WORLD BANK (1997): *World Development Report 1997: The State in a Changing World*.

⁵ WORLD BANK (2000): *World Development Report 2000/2001: Attacking Poverty*.

⁶ WORLD BANK (2002): *World Development Report 2002: Building Institutions for Markets*.

and subsequently more growth – not as a right in itself.”⁷ Hout makes a similar claim with regard to a discussion paper on governance from 1991:⁸ “The Bank steered clear of the politics of the development process and stressed the technocratic aspects of governance.”⁹ Such a perspective is dominant, but it is not always the case and for example in the 2001 secretary-general report to the UN General Assembly focused on the foundations of the republican and socialist democratic traditions rather than “institutional factors and modalities of government.”¹⁰

Nonetheless “[t]he dominant understanding of (good) governance in policy circles fails to recognise the essentially political character of governance issues, which relate to existing power relations in society,”¹¹ it is still understood in predominantly technocratic terms seeking to ensure efficiency in public administration and public finance management, rule of law, decentralisation and regulation of corporate life, including competition laws and anti-corruption watchdogs, etc.¹² It is represented as a prerequisite for the effectiveness of development aid that includes the strengthening of governing institutions as capacity building.

It is not only the documents that define good governance in such an apolitical way, but the already mentioned governance indices contain indicators that confirm this understanding as well. Hout demonstrates that the “World Bank’s approach to governance issue has remained quite technocratic and a-political” by the fact that four of six indicators from World Bank Operations Policy and Country Services such as the quality of budgetary and financial management or the quality of public administration are “highly technically and administratively oriented”¹³. Two indicators that are related to the functioning of the political system (property rights and rule-based governance, and transparency, accountability and corruption in the public sector) actually “stay away from the political process” having a “bias [...] toward business and economic activities rather than the functioning of political system.”¹⁴ Simply put, “political aspects such as the accessibility of decision-making to marginalized groups and possible distortion of interest representation in the political system, are not addressed.”¹⁵

Erkkilä and Piironen analyze the World Governance Indicator from the World Bank and they conclude that out of six indicators, only one - “voice and accountability – measures clearly democratic aspects of governance, however this indicator is “more or less overwhelmed by the economic dimensions of governance.”¹⁶ Four criteria out of the six “treat governance as an instrument for ensuring functioning markets.”¹⁷

In their latest research these authors revisit the same research question with new data and confirm the findings.¹⁸ However, there is a growing awareness of some of the problems related to governance indices and OECD offers a space for politicization as it criticizes the aggregation of the data that may lead to a loss of conceptual precision. Yet, there is not a

⁷ DEMMERS, J. – JILBERTO, A. E. F. – HOGENBOOM, B. (2004): Good Governance and democracy in a world of neoliberal regimes, p. 8.

⁸ WORLD BANK (1991): Managing Development: The Governance Dimension. A Discussion Paper.

⁹ HOUT, W. (2009): Development and governance: An uneasy relationship, p. 40

¹⁰ ZANOTTI, L. (2005): Governmentalizing the Post-Cold War International Regime: The UN Debate on Democratization and Good Governance, p. 475.

¹¹ HOUT W. (2010): Governance and Development: changing EU policies, p. 3.

¹² Ibid, p. 2.

¹³ Ibid, p. 42.

¹⁴ Ibid.

¹⁵ Ibid, p. 43.

¹⁶ ERKKILÄ, T. – PIIRONEN, O. (2009): Politics and Numbers. The Iron Cage of Governance Indices, p. 138.

¹⁷ Ibid, 139.

¹⁸ ERKKILÄ, T. – PIIRONEN, O. (2014): (De)politicizing good governance: the World Bank Institute, the OECD and the politics of governance indicators.

substantial change and “OECD’s alternative ranking does not provide a real alternative, but celebrates the previous understanding of good governance with yet another set of numbers.”¹⁹

The awareness of the problem that good governance might be depoliticizing unequal power relations led to serious attempts to change the existing situation in the World Bank and in the British and the Dutch “development” cooperation apparatuses. In DFID the reason for introducing the Drivers of Change (DoC) framework was the feeling in DFID that “technically sound programmes, supported in country by individual champions of reform or change” may not be sufficient for donor agencies to bring about change²⁰. The DoC was supposed to analyze economic, political and social context and their agents, structural features and institutions. Similarly, the Dutch Strategic Governance and Corruption Analysis (SGACA) was based on the aim that a “‘more political conception of good governance’ should be applied.”²¹

However, there was a problem with putting the new political approach into practice in DFID and “SGACA appears to have had a similar fate as did the Drivers of Change approach.”²² The DoC “did not provide operational conclusions”²³. Even though the DFID staff found the analyses useful “the approach did not provide them with solutions to the dilemmas they faced in their day-to-day work and the analyses played a limited role in the revision of country strategies.”²⁴

2 Good governance, depoliticization and “development”

The main problem was the practical nature of the “development” work and the continuous pressure to keep on moving money. In the Dutch case the main problem with SGACA was the fear in the MFA’s regional departments “that the analysis of the political economic reality of partner countries would damage their relationships with governments.”²⁵ The staff at the embassy criticized SGACA “as an imposition by headquarters in The Hague which interfered with their normal way of doing development business.”²⁶ Simply put, the people working at “development” agencies have a common understanding of the way how to do “development” and this understanding “leads to a rather instrumental approach to development programmes and projects, which tends to pay little attention to political struggles and power relations.”²⁷ They just have to do “development”, which is an apolitical matter as it implies “managing and implementing programmes and projects and disbursing funds to partner organisations [...] in order to obtain results”²⁸. Will Hout therefore argues that the emphasis on “doing development” and understanding it as an expert rather than political matter will not lead to a political approach.

He also deals with a reform in the World Bank that was based on a self-assessment pointing at problems with a technocratic approach. However, “the bottom line of the problem-driven approach is that reform proposals should be ‘feasible’. Rather than advocating an all-encompassing governance reform, ‘good enough governance’ is to be the focus of development

¹⁹ Ibid, p. 357.

²⁰ DoC in HOUT, W. (2012): *The Anti-Politics of Development: donor agencies and the political economy of governance*.

²¹ HOUT, W. (2012): *The Anti-Politics of Development: donor agencies and the political economy of governance*, p. 411.

²² Ibid.

²³ Ibid, p. 410.

²⁴ Ibid.

²⁵ Ibid, p. 413.

²⁶ Ibid.

²⁷ Ibid, p. 415.

²⁸ Ibid, p. 418.

agencies.”²⁹ The changes in the Bank thus had largely “instrumental character”³⁰ and their aim was to minimize political risk in the implementation of policy reform.

In sum, even when higher echelons of the development apparatus realize that political economy is crucial for “development”, the problem with depoliticization persists. The apolitical nature of the development business at lower echelons of the apparatus halts the efforts coming from the top.

Whereas an apolitical perspective on governance is a problem, probably the most common critical representation of good governance refers to this approach as a continuation of the free market policies from the previous era of the structural adjustment programs. Gathii in his article even explicitly “use[s] the terms good governance, neo-liberalism and structural adjustment interchangeably.”³¹ The problem with good governance is not only that it promotes a depoliticizing approach to democracy, but “whereas the [good governance] concept is explicitly presented as non-political and non-ideological, it strongly favors economic liberalisation.”³² According to Schmitz the World Bank and OECD consensus lies in “anchoring of political conditionalities within the good-governance regime to orthodox economic conditionality and the fundamentals of ‘market-friendly’ development.”³³

Abrahamsen analyzes the argumentation in the discourse that goes from a seemingly neutral and positively connoted concept to a policy with clear normative orientation. It is the “conflation of destatisation with democratisation [that] is an essential characteristic of the good governance discourse”³⁴. In the World Bank’s discourse, the state is constructed as the Western invention that is foreign to and imposed upon the indigenous societies in the global South. Thereby the interventionist states becomes represented as an enemy of the people responsible for their poverty. On the other hand, African societies are represented as natural entrepreneurs with the history of this entrepreneurship going back to the caravan trade routes.³⁵

Furthermore, the World Bank represents “democracy and economic liberalism as the two sides of the same coin.”³⁶ Liberalization leads to decentralization of the state and power and this enables the emergence of civil society that keeps the state in check and makes sure that liberal democracy thrives. Among other things, this means that property rights are upheld, which in turn leads to an increase of investments that secures economic growth and “development”. Thus whereas bad governance simply means state intervention, good governance puts together democracy and economic liberalism.

The problem with such a romanticizing perspective on civil society is the forgetting that non-state actors might not be as liberal or emancipatory as one might wish, the latest actions undertaken by Boko Haram being yet another case in point. The binary opposition between the state and the civil society makes the state look like the realm of power and exploitation and the civil society and the market as the realms of freedom. Therefore any reduction of the state means an expansion of democracy and liberty.

More importantly, the potential problem that “economic inequalities generated by capitalist competition may undermine political equality and the functioning of democracy is

²⁹ Ibid, p. 415-416.

³⁰ Ibid.

³¹ GATHII, J. T. (1999): Representations of Africa in Good Governance Discourse: Policing and Containing Dissidence to Neo-Liberalism, p. 66.

³² DEMMERS, J. – J. A. E. FERNÁNDEZ – HOGENBOOM, B. (2004): Good Governance and democracy in a world of neoliberal regimes, p. 2.

³³ SCHMITZ, G. J. (1995): Democratization and Demystification: Deconstructing “Governance” as Development Paradigm, p. 71.

³⁴ ABRAHAMSEN, R. (2000): Disciplining Democracy. Development Discourse and Good Governance in Africa, p. 51.

³⁵ Ibid, p. 50.

³⁶ Ibid, p. 51.

rendered inconceivable by the fusion of the concepts.”³⁷ In other words, the way power is conceived in the good governance discourse “has the effect of obscuring the coercive and oppressive relationships associated with capitalism.”³⁸ These unequal relations of power (and wealth) caused by capitalism are thereby depoliticized.

Simply put “good governance discourse serves to construct economic liberalism as a force for democracy”³⁹ rather than a potential force of oppression.

Szeftel makes a similar argument with regard to the state and corruption. The discourse makes a link between the two. Corruption is to be found in trade restrictions, subsidies, regulations of exports, multiple exchange rates, low civil service wages, etc. Rent-seeking and corruption are likely to lower the amount of investment and therefore economic growth and “development”. As all these corrupting practices are to be found in the state administration, the implication is clear: “the alternatives to corruption and rent-seeking are the same, namely, deregulation, less state and more market”⁴⁰. The logic is very simple – more state equals more opportunities for corruption, equals more corruption, equals less investment, less growth and less “development”, therefore in reverse, less state equals less corruption, equals more investment, more growth and more “development”.

It might be worth noting that there is a contradictory evidence with regard to whether donors actually follow the good governance indices or not. According to Dollar and Levin,⁴¹ there is a positive relationship between aid agencies’ allocations and a measure of sound institutions and policies. According to Andersen, Hansen and Markussen⁴² WB IDA lending policy between 1993 and 2000 was influenced by US political interests. Hout offers a similar result for the Dutch aid: “developing countries with more market-friendly policies stand a much better chance of being selected for a structural aid relationship by the Dutch government.”⁴³ “Two governance variables [...] (political rights and civil liberties) do not help to discriminate between the countries which were selected for Dutch structural development assistance and those which were not.”⁴⁴ Of equal importance might be that more corrupted countries were chosen as well.⁴⁵

Further empirical evidence shows that the EU did not promote ownership of adopted policies and practices in ACP countries,⁴⁶ in relation to NEPAD the EU ended up supporting personalized power structures,⁴⁷ the technocratic approach prevailed in relation to Mediterranean countries⁴⁸ and this approach led to a weakening of state institutions in Southeastern Europe as well.⁴⁹

Finally, the good governance discourse is also related to participation, but within this discourse participation becomes an “outcome of technical interventions aimed at optimizing

³⁷ Ibid, p. 52.

³⁸ Ibid, p. 57.

³⁹ Ibid, p. 56.

⁴⁰ SZEFTTEL, M. (1998): *Misunderstanding African Politics: Corruption and the Governance Agenda*, p. 225.

⁴¹ DOLLAR, D. – LEVIN, V. (2004): *The Increasing Selectivity of Foreign Aid, 1984-2002*. World Bank Policy Research Working Paper.

⁴² ANDERSEN, T. B. – HANSEN, H. – MARKUSSEN, T. (2006): *US politics and World Bank IDA-lending*.

⁴³ HOUT, WIL (2002): *Good Governance and Aid: Selectivity Criteria in Development Assistance*, p. 521.

⁴⁴ Ibid, p. 519.

⁴⁵ Ibid, p. 521.

⁴⁶ SLOCUM-BRADLEY, N. – BRADLEY, A. (2010): *Is the EU’s Governance “Good”? An assessment of EU governance in its partnership with ACP states*.

⁴⁷ TAYLOR, I.(2010): *Governance and Relations between the European Union and Africa: the case of NEPAD*.

⁴⁸ KNIO, K. (2010): *Investigating the Two Faces of Governance: the case of the Euro-Mediterranean Development Bank*.

⁴⁹ CHANDLER, D. (2010): *The EU and Southeastern Europe: the rise of post-liberal governance*.

state institutions and promoting capillary institutionalization of social processes.”⁵⁰ From the perspective of good governance, governmental processes are to be changed in such a way as to enable institutionalization of participation through standardized techniques. Local practices are to be reorganized in order to make their administration easier.⁵¹

Conclusion

In sum, the good governance discourse depoliticizes unequal power relations by representing governance as a technocratic non-political issue that just needs to be improved to bring about “development”. This representation of governance is to be found in the main policy documents as well as in the indicators that make up the international indices. Recognition of this problem led to attempts to include political economy in the donors’ governance analyses. The apolitical nature of “development” work connected to simply moving money and obtaining results caused failure of these attempts. Empirical case studies from various regions also show that the EU still favors interventions based on a non-political understanding of good governance. Of equal importance is that even though the good governance definitions seem neutral, they favor neoliberal policies by conflating destatization with democratization. Less state becomes equated with less corruption, less oppression and more democracy.

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⁵¹ Ibid.

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ON SOME ISSUES OF MIGRATION IN THE REPUBLIC OF MOLDOVA¹

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Abstract: Migration is a vast phenomenon for the Republic of Moldova. Labour migration is a very important part of the current economy. European Union in general and Romania are very important for Moldavian labour force migration. We find that the financial aspect of push/pull factors are becoming only stronger over time. The flow of remittances from those working abroad is not leading to a decrease in wage differentials. We find that there are no signs of average wage convergence in producing sectors of Moldovan economy with Romanian wages. Also, the ever-strengthening push/pull factors (for example income) from the EU nations will sustain the emigration trend from Moldova, and due to low demographic indicators, the Republic of Moldova is on a course of depopulation crisis.

Keywords: Moldova, Romania, European union, average wages, remittances, labour migration.

JEL: F22, F24, F66

Introduction

The modern Republic of Moldova origins its independence from 1991 and as a post-communist state in Eastern Europe went through a process of transition from central planned to market economy. The planned economy, due to its intrinsic characteristic, created entire industries in the post-communist economies based on other than earnings criterions. The process of transition changed the structure of producing sectors away from manufacturing to service and agrarian production (also agrarian production and wine industry² has undergone a simplification³ in its added value structure of produced goods)⁴. This shifted the demand for labour from producing sectors into services. These rapid shifts and transformations occurred in a relatively short period and resulted in a shift of demand for labour in the economy.

¹ This paper was created within the Migration Governance and Asylum Crises (MAGYC) project that has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No. 822806.

² MOVILEANU, V. – BURBULEA, R. (2022): Promotion and Development of Wine Tourism In the Republic of Moldova, pp. 213-221.

³ GORTON, M. – WHITE, J. – CHERNYSHOVA, S. – SKRIPNIK, A. – VINICHENKO, T. – DUMITRASCO, M. – SOLTAN, G. (2003): The reconfiguration of post-Soviet food industries: evidence from Ukraine and Moldova, p. 409.

⁴ The decrease in manufacturing, the closure of large industrial enterprises and the decline in agriculture. To some degree it's possible to illustrate the state of the decline comparing the production levels in some of the most competitive sectors which are often regarded as comparative advantages of Moldova: agriculture and mainly wineries and fruits. In the year 1989 Moldova produced 3326 thousand tons of grains (4 t/ha) in 2022 it produced 1784,4 thousand tons and 600 thousand tons in separatist Transnistria. Grapes 1037 thousand tons in 1989 and 531 thousand tons in 2022. Fruits and berries 1176 thousand tons in 1989 and 611 thousand tons in 2022.

Sources: National Bureau of Statistic of Moldova (2023): Statistical databank.

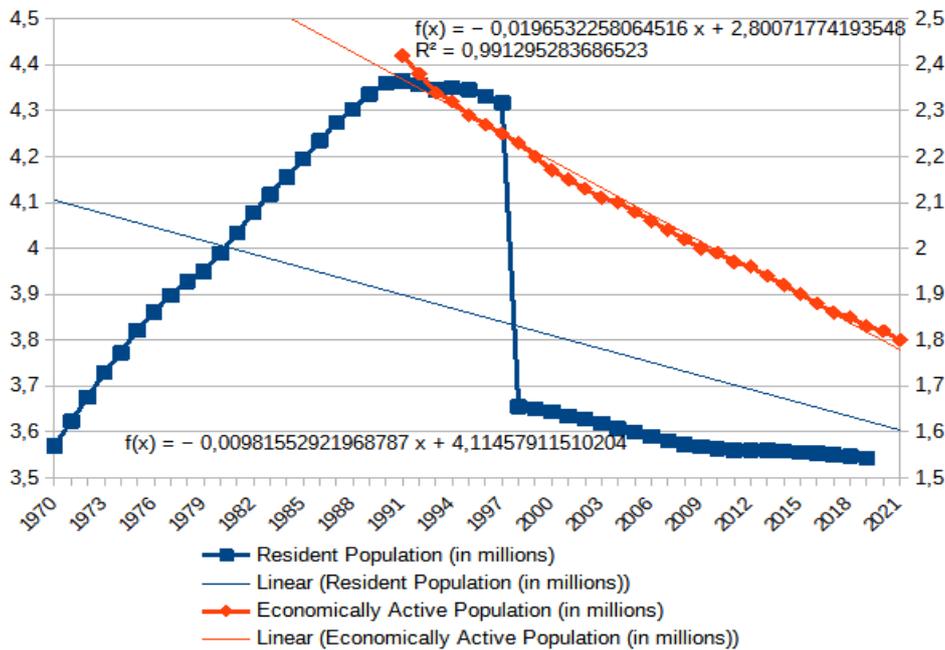
Statistical yearbook of the USSR. (1991): Narodnoje choziajstvo SSSR v 1990 g, p. 513.

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1 Background and literature review

After the independence Moldova became subject to the intensification of the division of labour in Europe which, among other, over time opened more opportunities for labour migration. Higher demand for labour outside Moldova drove a large portion of economically active population to other countries. The estimates differ on the labour migration and remittances numbers, but all agree that it is very considerable. Le Héron and Yol⁵ use the 20% of GDP number from the National Bureau of Statistic of Moldova. The UN IOM⁶ in its report operates with the 1,159 mil. Moldovan emigrants abroad, as of 2020 but mentions a correct remark that due to dual citizenship and other factors these estimates could vary from source to source.

Figure 1: Total resident population in Moldova (1970–2019, left y-axes) and Economically active population (1991–2022, right y-axis)



Note: Data do not take into consideration the Transnistrian republic, the drop in 1998 is a statistical phenomenon due to separatist conflict.

Source: National Bureau of Statistic of Moldova. (2023): Statistical databank.

It can be stated with certainty that the demographic trend is declining (Fig. 1). Population is in decline with a steady outflow of labour and as a result we see that the economically active population is declining in a linear trend by about 2 % each year ($R^2 = 0,99$) with no sign of plateauing (from 2,4 to about 1,8 million see Fig. 1).

Since independence the Republic of Moldova focused on main milestones of its development in overcoming the declining standard of living and preserving the integrity of the state and its very existence. The synergy of all these problems affects the political and economic solutions of the ruling elites. Internal problems are multiplied and intensified by the processes of globalization, competition between world powers and various international organizations.

⁵ LE HÉRON, E. – YOL, N. (2019): The macroeconomic effects of migrants' remittances in Moldova: a stock–flow consistent model, pp. 31-54.

⁶ United Nations. (2021): IOM GMDAC Migration Data Survey Report for MOLDOVA, p. 8.

Figure 2: Map of The Republic of Moldova and the unrecognized Pridnestrovian Moldavian Republic



Source: United Nations. (2021): Extended Migration Profile of Transnistria, p. 12.

The existence of an unrecognized state on the territory of the Republic of Moldova, which is called the Transnistria (officially Pridnestrovian Moldavian Republic), complicates the economic, political and international situation of the “whole” of Moldova, which since its inception has chosen military neutrality as a concept of development. To be consistent we should mention that the population trend in Transnistria is similar and declining. UN IOM⁷ reports that around 185 thousand residents left Transnistria between 2004 and 2015. The Transnistrian sources report current population is around 458 thousand⁸, in comparison in 2000 it was 651 thousand also points to roughly the same numbers as UN IOM report at around 200 thousand migrants from the Transnistrian region. To sum up UN IOM in its report is referring to some 1,156 million migrants from Moldova and 200 thousand from Transnistria.

Most recent research on Moldova is mainly focused on migration⁹ and remittances¹⁰ and geopolitical¹¹ issues. Comprehensive work has been conducted by international organizations together with the Republic of Moldova regularly publish extensive publications about Moldova for example such organizations as: World Bank¹² and IMF¹³. These organizations point out that the economy in Moldova is not on a sustainable trajectory. The young generation is leaving the country and as the families reunite abroad this will inevitably lead to a decrease in remittances in the future.

⁷ United Nations (2021): Extended Migration Profile of Transnistria, p. 6.

⁸ Ministry of Economic Development of PMR (2023): Statistical data.

⁹ WAILER, J. – VANORE, M. – GASSMANN, F. – SIEGEL, M. (2017): Does it matter where the children are? The well-being of elderly people ‘left behind’ by migrant children in Moldova, pp. 607-632.

¹⁰ LE HÉRON, E. – YOL, N. (2019): The macroeconomic effects of migrants’ remittances in Moldova: a stock-flow consistent model, pp. 31-54.

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¹² World Bank (2020): Changing the Development Paradigm in Moldova.

¹³ IMF (2023): Republic of Moldova: Poverty Reduction Strategy and Growth Strategy.

2 Setting up the problem

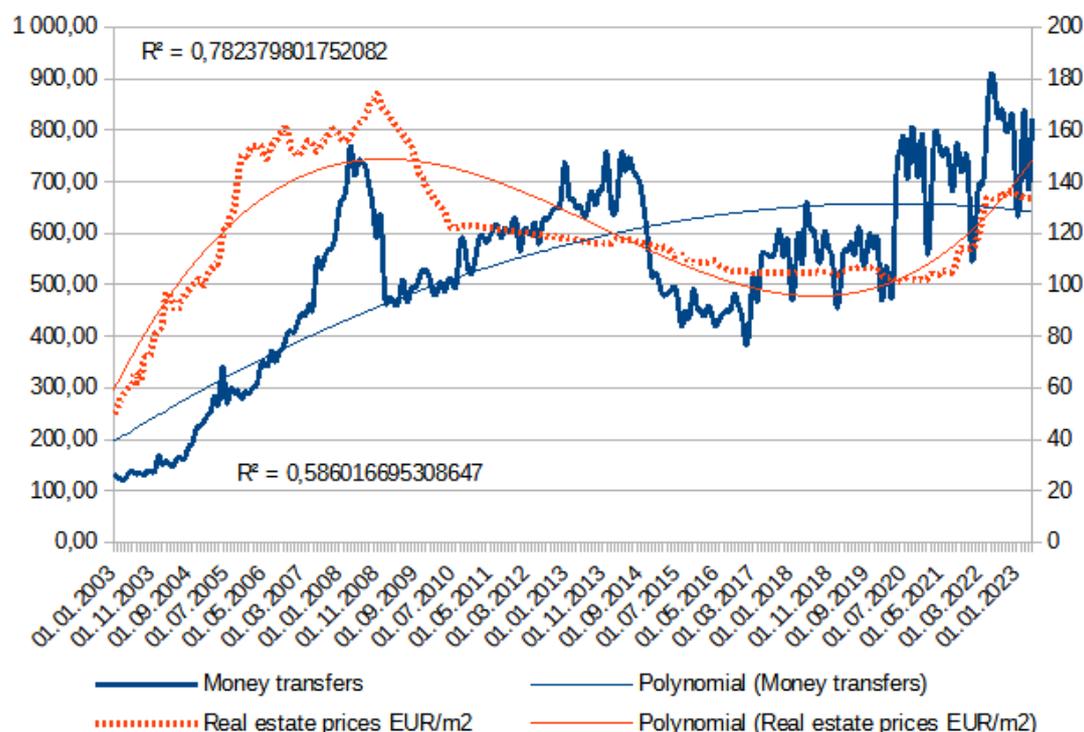
The structure of employment shows that 22 % are employed in agriculture and 17,5 % in industry and the rest in sectors like public administration and services. Moldova is not in a demographic boom (for the last 20 years) to afford a long-term migration outflow so the main question for the study is: When will the emigration trend reverse? To answer this question, we are going to utilize the classical view on the matter of push and pull factors. Harris and Todaro (1970)¹⁴ argue that the differences in marginal productivity are driving the labour migration. Countries of the European Union which are the main targets of Moldovan labour migration have a higher marginal productivity and respectively higher wages. We will not take in consideration other factors beyond the income aspect. Amongst other factors that describe how the households perceive migration as a strategy for diversification of the future sources of income (these and other behavioural factors are not the scope of this study). Behavioural aspects such as the perceptions of the households about the future of Moldova and the perceptions of perspectives for their children is out of scope of current study.

In the case of Moldova, the natality is in decline, so emigration leads to net outflow of labour which reduces the supply inside the country. To see stagnation or maybe a reverse in the emigration trend first we need to see an increase in wages in producing sectors of the economy. The increase in wages should be compared to the trends in wages in the main countries of Moldovan immigration. This is the bare minimum requirement for us to evaluate the future development. In Moldova we identify two main contradictory tendencies: decline in labour supply which should lead to wage inflation and the same labour shortage is a significant barrier to potential investors which could bring new better paid jobs.

From the standpoint of classical economics average wages in producing and exporting sectors of the economy should not differ significantly in order to influence the earnings aspect of the push/pull factors (everything else being equal). If we take on the idea of labour migration being due to differences in income, opportunities and living conditions, then it is true to say that remittances, which brings new purchasing power to the home country, are decreasing the differences in income. This new money spurs the demand for products made outside (imports of goods) also for luxury items increasing the standard of living and increasing the prices for locals. This increased standard of living is available for families of those working abroad or the elites and encourages others to migrate. This phenomenon is in essence very similar in its mechanics to the “Dutch disease” when the deindustrialisation accrues due to new purchasing power entering the system from exporting commodities, which leads to labour inflation and a decrease in traditional sectors. Local production becomes too expensive and sectors of entertainment and luxury for those working abroad and the elites emerge. What will happen when the families of migrants reunite in the countries of immigration? This will lead to a decrease in remittances over time. The declining population will lead to a reduction of spending and budget revenues. The high standard of living due to remittances will no longer be possible to sustain and the new poverty will drive more population to emigrate. The deficit of labour decreases the demand for real estate and a degradation in infrastructure in the regions pushes the population to migrate abroad or to the capital city Chisinau (remittances are also often invested in real estate see Figure 3).

¹⁴ HARRIS, J. R. – TODARO, M. P. (1970): Migration, Unemployment and Development: A Two-Sector Analysis, pp. 126–142.

Figure 3: Monthly inflow of remittances to the Republic of Moldova in mil. USD (left y-axis) and Data on monthly average real estate prices in Eur/m2 (right y-axis)



Source: Central Bank of Moldova. (2023): Report: Money Transfers from Abroad in Favor of Individuals (gross basis).

Processed by the author based on the data collected from the monthly studies published by the real estate broker "LARA" Real estate agency LARA. (2023): Valoarea medie pe piață a unui m2 a apartamentelor în mun.

The Figure 3 shows how the monthly money transfers (millions USD) of the workers abroad and the real estate prices in Chisinau are in almost perfect correlation ($0,96658$, $t(243) = 58,7744$, with two-tailed p -value $0,0000$). What is the main concern for the future is that this economic model is unsustainable in the long run. The amount of construction in the capital city is increasing but with ever decreasing population the trend of rising prices is clearly unsustainable.

3 Results

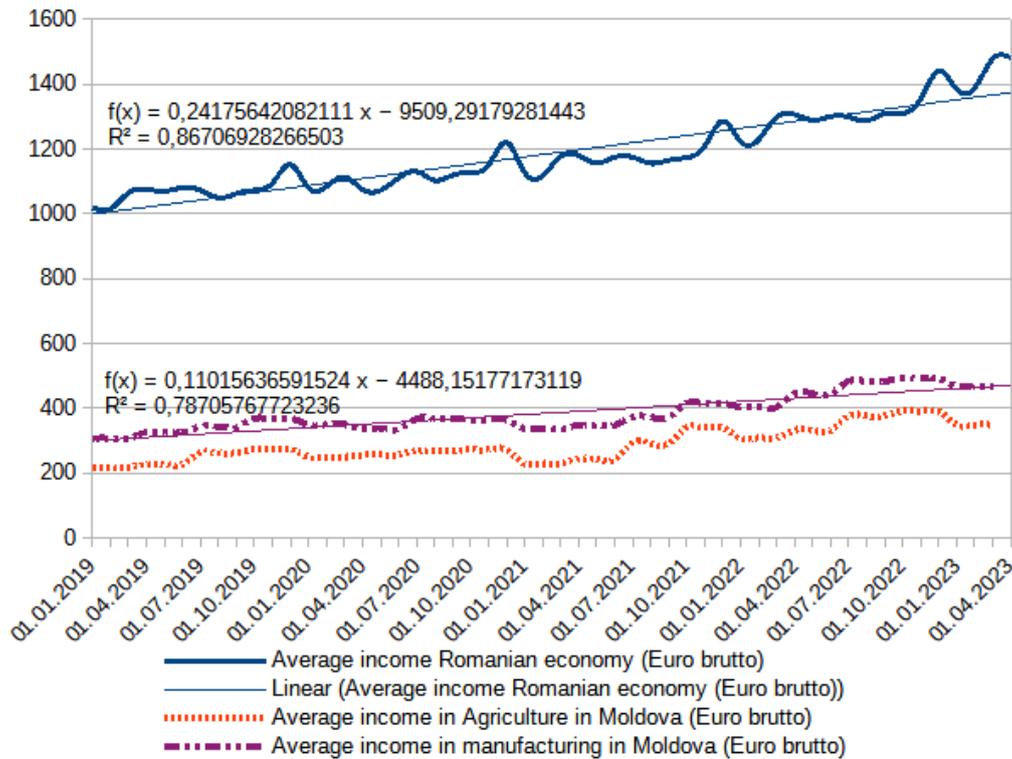
To fulfil the aims we compare the trends in earnings in Moldova and a selected country of EU. We compare the dynamics of wages in agricultural sector and industry of the Republic of Moldova to one of the main targets of Moldovan emigration. We choose agriculture and manufacturing because they have the most exporting potential (agriculture is a comparative advantage of Moldova due to the fertile land and manufacturing has a high marginal productivity). One of the most obvious comparison partners is Romania, due to distance, relatively uncomplicated integration process, language, cultural proximity and that every fourth¹⁵ Moldovan has Romanian citizenship. It is widely known that Moldovans are migrating for work in Romania¹⁶. Also, Romania is amongst the less wealthy nations in EU, so it could be possible for Moldova to “catch up” and the findings on the income differences could be

¹⁵ TVR Moldova (2023): Unul din patru basarabeni are cetățenia română (One in four Bessarabians has Romanian citizenship).

¹⁶ Radio Free Europe (2022): De ce pleacă peste hotare absolvenții de la Medicină (Why medical graduates go abroad).

generalised to the whole EU. Because, if one of the least wealthy nation of the EU has a strong push/pull income factor so do the rest of the wealthier nations like Italy for example.

Figure 4: Monthly gross average earnings in Romania and Moldova in Euro



Source: National Bureau of Statistic of Moldova. (2023): Statistical databank.
National Institute of Statistics Romania. (2023): Earnings - since 1991, the monthly series. 2023.

There is another part that should be mentioned – the average-income paradox¹⁷ of migration, which point at a situation when the sending and receiving country loose the average income due to migration. For example, medical personal¹⁸ (is earning in Moldova above average), leaving Moldova for jobs in Romania which earn a below average income, but the world gains as a whole. Our assumptions are that to reverse the emigration trend is at least required to see some convergence of earnings between such neighbouring countries as Moldova and Romania. Of course, we realise our limitations and that human migration is a much more complicated phenomenon, still the bare minimum requirement for reduction of push-pull factors is to see an easing of the earnings differentials. Other assumptions which should be mentioned are that in Moldova has a significant part of informal economic activity that alter the real income. The reported share of informal economy is approximately 24 % of GDP.¹⁹ Informal economic activities, which allow for example to produce some goods and services, that effectively increase the standard of living but are not included by the state statistics (example: having some home production of eggs or wine or providing other services for subsistence consumption or for cash). Let's assume that the state estimates of informal economy are

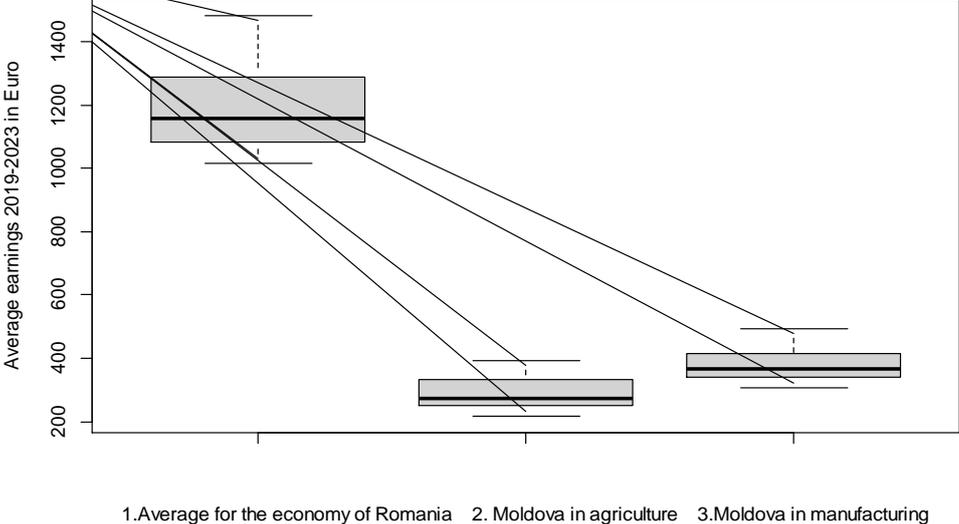
¹⁷ LINDERT, P. (1986): International economics, p. 538.

¹⁸ Radio Free Europe (2022): De ce pleacă peste hotare absolvenții de la Medicină. (Why medical graduates go abroad).

¹⁹ UNDP (2021): Centrul Analitic Independent „Expert Grup”. Fenomenul economiei și ocupării informale în contextul pandemiei Covid-19. (The phenomenon of economy and informal employment in the context of the Covid-19 pandemic).

accurate we will incorporate this understanding in the interpretation of the results on average wages in the agricultural sector by the estimated amount.

Figure 5 Monthly gross average earnings in Romania and Moldova 2019-2023 in Euro



Source: author’s R-studio Boxplot representation of the variability of wages in Romania and Moldova

Figure 4 shows the linear trend applied to the data of monthly average gross wages in Romania and Moldova from 2019 to 2023. It could be seen that statistically the income differentials are even widening. The rising slope of average monthly wages in Romania is increasing twice as fast as in producing sectors of Moldova which together account to 40 % of the total employment. Also Figure 5 shows how distant are the medians of the observations. Even if we take into consideration that about third of income could be hidden in the informal economy it would still not even reach 500 Euro per month and this is only halfway to the lowest point of the boxplot for Romanian observations at around 1000 Euro.

Instead of conclusion

So, the wage differentials are significant between EU and Moldova, and we can argue that there are strong income push/pull factors for migration. Which is worse is that the slope of the trend of the wages is steeper in Romania which allows us to forecast that it will exacerbate the emigration from Moldova and will promote the depopulation trend of Moldova even more.

One could argue that in a perfect world where only economic benefit are weighted, it is good thing for the world economy as whole. In addition, these consequences have positive effect on the development of the world economy and globalization in general (movement of factors of production, better marginal productivity, higher income). The other side comes from a political perspective. EU is benefiting from the productivity of Moldovan workers but will not be able to gain in popularity in an engulfed in poverty Moldova. The demographics is also shifting the electoral preferences. The key is the understanding that at Moldovans working abroad are working in the environment of much higher productivity and capital intensity. These workers are creating additional demand for capital and real estate abroad and much of their consumption stays outside Moldova. So from a pure economical standpoint Moldova has no viable option, for now, to withhold its productive population and the depopulation trend will continue leading to more migration of young people, reduction of rural infrastructure,

decreasing of rural standards of living (medical care, education), new rural poverty and state insolvency at the end of this process.

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CALIBRATION OF A CONVERGENCE MODEL OF INTEREST RATES USING THE GREY WOLF OPTIMIZATION ALGORITHM¹

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Abstract: We calibrate a convergence interest rate model by considering an optimization problem with two objective functions – one referring to the Eurozone data and the other one referring to a country, whose interest rates are assumed to be influenced by the Eurozone. We use monthly data for 3-months and 10-years interest rates from the time period 2011-2020 in the Eurozone and the Czech Republic. We employ a metaheuristic grey wolf algorithm for optimization. For the considered model, we also derive a scalarization and show that it can be simplified into a sequence of easier optimization problems. Therefore, we are able not only to obtain the calibration results, but also to test the performance of the metaheuristic algorithm. Its results are very precise, which makes it a suitable candidate for calibration of more complicated models.

Keywords: interest rates, convergence model, calibration, bicriteria optimization, grey wolf algorithm

JEL: E43, C13, C61

Introduction

In this paper we consider two criteria, when calibrating an interest rate model. The model under consideration models interest rates in the Eurozone and the interest rates in a country, whose rates (in what follows, we use the common terminology and call them domestic rates) are influenced by euro interest rates. Parameters entering the model for the euro rates also enter the model for the domestic rates. Therefore, our aim to estimate the parameters, so that the corresponding rates given by the model fit both domestic and euro rates, leads to an optimization problem with two objective functions.

There are various approaches to solving multicriteria optimization problems.² Usually, we are looking for Pareto optimal solutions – parameters, for which it is not possible to find another vector of parameters, such that none of the objective functions has a worse value and at least one of the objective functions has a better value. We use a metaheuristic algorithm to solve our optimization problem. In general, computation of the interest rates in the short rate models can be computationally intensive, the closed form solutions are available only in specific cases, otherwise numerical methods need to be used. Metaheuristic optimization algorithms typically do not require derivatives on the objective function and they avoid local optima, which makes them useful in optimization of complicated objective functions. This motivates our choice to use an algorithm from this class to calibrate the interest rate model which we study.

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² EHRGOTT, M. (2005): Multicriteria optimization.

The particular model which we calibrate enables us to use the scalarization method for solving multicriteria optimization problems. This approach transforms the problem with multiple objectives into a one-objective problem by assigning weights to objectives. For a particular value of the weight, we simplify our scalarized problem into a series of one-dimensional optimization problems, which are easy to solve by any standard method. Therefore, besides obtaining the results of the calibration of the model, we are able to assess the accuracy of the metaheuristic algorithm.

The considerations given above lead to the following two objectives of our paper: Firstly, to determine Pareto optimal values of parameters on a convergence model of interest rates using a metaheuristic algorithm. Secondly, to assess the accuracy of the estimates by transforming the optimization problem to a simpler form, which makes it possible to use a deterministic optimization algorithm.

1 Convergence model of interest rates

We use short rates models to model interest rates in the Eurozone and in a country with interest rates influenced by euro rates. In general, short rate models are formulated in terms of stochastic differential equations which are used to describe the random evolution of the instantaneous interest rates (so called short rate, which gives the name to this class of the models). After specification of so-called market price of risk, the bond prices are solutions of a partial differential equation. The bond prices allow us to compute the interest rates with different maturities, i.e. the term structure of interest rates³. We consider a special class of models which firstly model European interest rates using a separate short rate model. Secondly, they formulate a short rate model for interest rates in another country, so that the stochastic evolution of the short rate depends also on the current level of the Euro short rate. As a consequence, also the term structures are influenced by the Euro rates. Since it is assumed that the interest rates converge to Euro rates, these models are referred to as convergence models of interest rates.⁴

Classical one-factor models, which can be used to model the European interest rates, are Vasicek model⁵, Cox-Ingersoll-Ross⁶ model (both with explicit formulae for bond prices) and their generalization by Chan, Karolyi, Longstaff and Sanders⁷ (known as the CKLS model, which lacks the analytical tractability). However, also new models appear in the literature, such a model describing cyclical fluctuations of the interest rates⁸. The first convergence model of interest rates has been proposed by Corzo and Schwartz⁹, based on Vasicek model. It has been generalized to Cox-Ingersoll-Ross¹⁰ and CKLS¹¹ settings. Another possible approach to ensure

³ KWOK, Y. K. (2008). Mathematical models of financial derivatives, pp. 381-440.

⁴ BUČKOVÁ, Z. – STEHLÍKOVÁ, B. – ŠEVČOVIČ, D. (2017): Numerical and analytical methods for bond pricing in short rate convergence models of interest rates, pp. 93-148.

⁵ VASICEK, O. (1977): An equilibrium characterization of the term structure, pp. 177-188.

⁶ COX, J. C. – INGERSOLL, J. E. – ROSS, S. A. (1985): An intertemporal general equilibrium model of asset prices, pp.363-384.

⁷ CHAN, K. C. – KAROLYI, G. A. – LONGSTAFF, F. A. – SANDERS, A. B. (1992): An empirical comparison of alternative models of the short-term interest rate, pp. 1209-1227.

⁸ MORENO M. – PLATANIA, F. (2015): A cyclical square-root model for the term structure of interest rates, pp. 109-121.

⁹ CORZO, T. S. – SCHWARZ, E. S. (2000): Convergence within the EU: Evidence from interest rates, p. 243-266.

¹⁰ STEHLÍKOVÁ, B. (2021): New Approximations to Bond Prices in the Cox–Ingersoll–Ross Convergence Model with Dynamic Correlation. Mathematics, p. 1469.

¹¹ ZÍKOVÁ, Z. – STEHLÍKOVÁ, B. (2012): Convergence model of interest rates of CKLS type, pp. 567-586.

convergence of domestic interest rate to the European rate is a use of a Brownian bridge in continuous¹² or discrete¹³ setting.

In order to take negative interest rates into account, we consider the convergence model by Corzo and Schwartz¹⁴. In particular, the equations for the European short rate r_e and the domestic short rate r_d read as

$$dr_e = c(d - r_e) dt + \sigma_e dw_1, dr_d = (a + b(r_e - r_d)) dt + \sigma_d dw_2, \quad (1)$$

where the euro rate is reverting to the long-term mean d and the domestic rate is reverting to the euro rate with a possible difference determined by a . The parameters c, d (denoting the speed of mean reversion) and volatilities σ_d, σ_e are assumed to be positive. In general, the Wiener processes w_1, w_2 can be correlated, but we assume that the correlation is equal to zero. This simplifies the expressions for the bond prices and although the correlation is important for the probability distribution of the interest rates, for typical values of parameters it has a much less pronounced effect on the term structures of interest rates.¹⁵

The formulae for the Euro interest rates and domestic interest rates computed from bond prices with maturity τ years, assuming constant European and domestic market prices of risk λ_e, λ_d , are given by

$$R_e = \frac{b_1 G_1(b_2) + \sigma_e^2 G_2(b_2) + G_3(b_2) r_e}{-\tau} \quad (2)$$

and

$$R_d = \frac{a_1 F_1(a_2) + b_1 F_2(a_2, b_2) + \sigma_d^2 F_3(a_2) + \sigma_e^2 F_4(a_2, b_2) + F_5(a_2) r_d + F_6(a_2, b_2) r_e}{-\tau} \quad (3)$$

respectively. The parameters a_1, a_2, b_1, b_2 are transformed from the original set of parameters, while the volatilities σ_d, σ_e remain unchanged. We note that after this transformation the number of parameters is decreased by two. The expressions for the functions F_i, G_i can be written from the expressions for the bond prices.¹⁶ For the explanation of our calibration algorithm it suffices to note, which parameters each of them depends on.

2 Data and objective functions of calibration

We use monthly data collected by OECD. We take short-term rates as a proxy for the short rate and try to fit the long-term interest rates using the formulae from the model under consideration. Short-term interest rates are the rates at which short-term borrowings are effected between financial institutions or the rate at which short-term government paper is issued or traded in the market. Typically they are based on three-month money market rates.¹⁷ Long-term

¹² AJEVSKIS, V. – VITOLA, K. (2010): A convergence model of the term structure of interest rates, pp. 727-747.

¹³ AEVSKIY, V. – CHETVERIKOV, V. (2016): A discrete time model of convergence for the term structure of interest rates in the case of entering a monetary union, pp. 2333-2340.

¹⁴ CORZO, T. S. – SCHWARZ, E. S. (2000): Convergence within the EU: Evidence from interest rates, pp. 243-266.

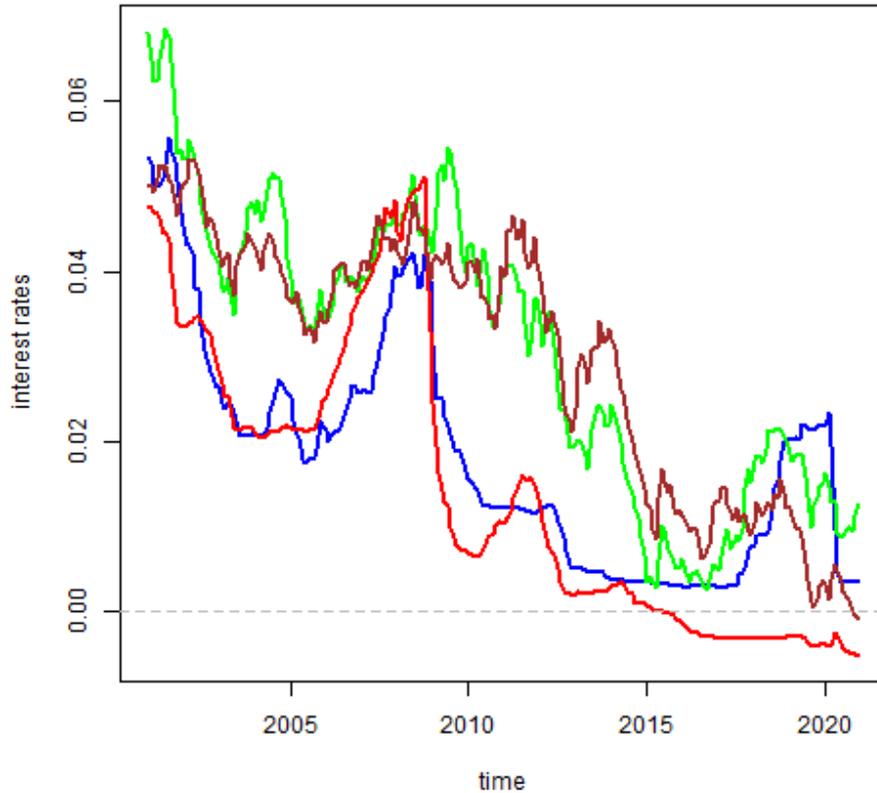
¹⁵ GIROVÁ, Z. – STEHLÍKOVÁ, B. (2018): Effect of correlation on bond prices in short rate models of interest rates. *Mathematica Moravica*, pp. 89-101.

¹⁶ CORZO, T. S. – SCHWARZ, E. S. (2000): Convergence within the EU: Evidence from interest rates, pp. 243-266.

¹⁷ OECD (2023): Short-term interest rates (indicator).

interest rates refer to government bonds maturing in ten years. They are implied by the prices at which the government bonds are traded on financial markets.¹⁸ We use the data from the Euro Area (as the euro rate from the convergence model) and we have chosen the data from the Czech Republic for our analysis as the rates from the country whose interest rates are influenced by the euro rates. The data are quoted in percentages, therefore we divide them by 100.¹⁹ We use the data from January 2011 to December 2020, i.e. 10 years of monthly data. Their evolution is shown in Figure 1.

Figure 1: Short rate and long rate in the Euro Area and the Czech Republic



Red line: Euro Area short rate, blue line: Czech Republic short rate, brown: Euro Area long rate, green: Czech Republic long rate. Data source: OECD.

Two objective functions, which we minimize, are given as a sum of squared differences between the observed long rates and the interest rates given by the model by equations (2) and (3) for $\tau = 10$. Denoting the actual value of the long rates observed on the i -th day in the Euro Area and the Czech Republic by $R_{ei}^{real}, R_{di}^{real}$ respectively, and the observed short rates by r_{ei}, r_{di} , we obtain the bicriteria optimization problem, which consists of minimizing

$$H_1 = \frac{1}{100} \sum_{i=1}^n (b_1 G_1 + \sigma_e^2 G_2 + G_3 r_{ei} + 10 R_{ei}^{real})^2 \quad (4)$$

and

¹⁸ OECD (2023): Long-term interest rates (indicator).

¹⁹ Short rate models use the interest rates in this format, this property is used in the derivation of the partial differential equation for the bond prices, cf. (Kwok, 2008).

$$H_2 = \frac{1}{100} \sum_{i=1}^n (a_1 F_1 + b_1 F_2 + \sigma_d^2 F_3 + \sigma_e^2 F_4 + F_5 r_{di} + F_6 r_{ei} + 10 R_{di}^{real})^2. \quad (5)$$

The optimization is with respect to parameters $a_1, a_2, b_1, b_2, \sigma_1, \sigma_2$.

3 Bicriteria calibration of convergence models

As indicated in the introduction, we use a metaheuristic algorithm in our calibration. The metaheuristic algorithms are usually based on physical phenomena, behaviour of animals, or evolutionary concepts. They include state-of-the-art metaheuristics, such as genetic algorithms,²⁰ particle swarm optimization²¹ or ant colony optimization.²² Also, novel approaches are emerging, for example social spider optimization,²³ symbiotic organisms search,²⁴ whale optimization algorithms²⁵ and numerous others. The survey papers review the metaheuristic algorithms according to their novelty,²⁶ concept which they are based on²⁷ or focusing on algorithms used in a certain area of applications.²⁸

We use a grey wolf metaheuristic algorithm to solve the bicriteria optimization problem arising from calibration of the selected interest rate model. The original grey wolf algorithm²⁹ was proposed for optimization problems with one objective function. It is inspired by grey wolves (*canis lupus*) and mimics their leadership hierarchy and hunting mechanism – surrounding, hunting and attacking. Its modification³⁰ solves optimization problems with multiple objective functions. The grey wolf algorithm has been used in various fields, such as photonics,³¹ energetics,³² wireless sensor networks³³, wind power modelling.³⁴ In conjunction with support vector regression it was applied to the stock selection problem³⁵, and with fuzzy neural classifier it was a part of an algorithm for prediction of financial crisis.³⁶

²⁰ GOLDBERG, D. E. (1989): Genetic algorithms in search, optimization and machine learning.

²¹ WEI, Y. – QIQIANG, L. (2004): Survey on particle swarm optimization algorithm, pp. 87-94.

²² DORIGO, M. – BIRATTARI, M. – STUTZLE, T. (2006): Ant colony optimization, pp. 28-39.

²³ CUEVAS, E. – CIENFUEGOS, M. – ZALDÍVAR, D. – PÉREZ-CISNEROS, M. (2013): A swarm optimization algorithm inspired in the behavior of the social-spider, pp. 6374-6384.

²⁴ CHENG, M. Y. – PRAYOGO, D. (2014): Symbiotic organisms search: a new metaheuristic optimization algorithm, pp. 98-112.

²⁵ MIRJALILI, S. – LEWIS, A. (2016): The whale optimization algorithm, pp. 51-67.

²⁶ DOKEROGLU, T. – SEVINC, E. – KUCUKYILMAZ, T. – COSAR, A. (2019): A survey on new generation metaheuristic algorithms, 106040.

²⁷ GHAREHCHOPOGH, F. S. (2023): Quantum-inspired metaheuristic algorithms: comprehensive survey and classification, pp. 5479-5543.

²⁸ KAUR, S. – KUMAR, Y. – KOUL, A. – KUMAR KAMBOJ, S. (2023): A systematic review on metaheuristic optimization techniques for feature selections in disease diagnosis: open issues and challenges, pp. 1863-1895.

²⁹ MIRJALILI, S. – MIRJALILI, S. M. – LEWIS, A. (2014): Grey Wolf Optimizer, pp. 46-61.

³⁰ MIRJALILI, S. – SAREMI, S. – MIRJALILI, S. M. – COELHO, L. D. S. (2016): Multi-objective grey wolf optimizer: a novel algorithm for multi-criterion optimization, pp. 106-119.

³¹ CHAMAN-MOTLAGH, A. (2015): Superdefect photonic crystal filter optimization using grey wolf optimizer, pp. 2355-2358.

³² EL-FERGANY, A. A. – HASANIEN, H. M. (2015): Single and multi-objective optimal power flow using grey wolf optimizer and differential evolution algorithms, pp.1548-1559.

³³ AL-ABOODY, N. A. – AL-RAWESHIDY, H. S. (2016): Grey wolf optimization-based energy-efficient routing protocol for heterogeneous wireless sensor networks, pp. 101-107.

³⁴ WEI, D. – WANG, J. – LI, Z. – WANG, R. (2021): Wind power curve modeling with hybrid copula and grey wolf optimization, pp. 265-276.

³⁵ LIU, M. – LUO, K. – ZHANG, J. – CHEN, S. (2021): A stock selection algorithm hybridizing grey wolf optimizer and support vector regression, 115078.

³⁶ SANKHWAR, S. – GUPTA, D. – RAMYA, K. C. – SHEEBA RANI, S. – SHANKAR, K. – LAKSHMANAPRABU, S. K. (2020): Improved grey wolf optimization-based feature subset selection with fuzzy neural classifier for financial crisis prediction, pp. 101-110.

The metaheuristic optimization algorithms are searching the admissible values of the parameters in a specified random way. It is therefore useful to obtain additional information, which can be used for specification of possible values of the parameter, in order to avoid the search in the area, where no Pareto optimal solutions are present. We note a property of convergence models, which can be useful to achieve this: The parameters of the model can be decomposed into those that enter only the computation of the domestic interest rates (we denote them as *domestic parameters*) and those that enter the computation of both the domestic and the Eurozone interest rates (we denote then as *common parameters*). Recall that the definition of the Pareto optimal point requires that it is not possible to obtain a better fit of the domestic rates by a change in domestic parameters, while keeping the common parameters unchanged (and therefore keeping the fit of the euro rates). Therefore, whenever possible, we should compute the optimal domestic parameters for the given set of common parameters, instead of doing a search in the parameter space by the metaheuristic algorithm. Then, the computation of the objective functions for the bicriteria optimization goes as follows:

- Input: common parameters.
- Evaluation of the euro objective function, using the input parameters.
- Computation of the optimal domestic parameters, subject to the values given in the input.
- Evaluation of the domestic objective function, using the input parameters and optimal domestic parameters.
- Output: value of the euro and domestic objective functions.

In the case of the convergence model by Corzo and Schwarz, which we use, it means finding the optimal values of the domestic parameters a_1, a_2, σ_d^2 , which minimize the function (5) for fixed values of the common parameters b_1, b_2, σ_e^2 .

Let us fix the value of the parameter a_2 . Then, the first order conditions – setting the partial derivatives of (5) with respect to a_1, σ_d^2 equal to zero – lead to the same equation. Therefore the optimal parameter values are not uniquely determined, but we are able to compute the optimal objective value of (5) for the given a_2 in a closed form as $\frac{1}{100} \sum_{i=1}^n (z_i - \bar{z})^2$, where the auxiliary variable z_i is computed from the data and the remaining parameters as $z_i = b_1 F_2(a_2, b_2) + \sigma_e^2 F_4(a_2, b_2) + F_5(a_2) r_{di} + F_6(a_2, b_2) r_{ei} + 10 R_{di}^{real}$. It means that for any given a_2 we have the optimal value of the objective function (5). In order to minimize it, it suffices to optimize it with respect to a_2 , while taking the optimal value derived above. This is only a one-dimensional optimization problem.

We implemented this procedure and used the grey wolf optimization algorithm³⁷ to find Pareto optimal values of the parameters b_1, b_2, σ_e . We present the results in Section 5, where they will be compared with the results of the scalarization approach to bicriteria optimization.

4 Scalarization of the bicriteria calibration problem

A common approach to minimizing two objective functions consists of minimizing a weighted sum of the objective functions. We note that this is computationally more difficult, compared to the optimization we proposed in the previous sections, where we compute optimal domestic parameters for the given values of the common parameters. There, the number of parameters being estimated is the number of domestic parameters. In the case of the scalarization approach, the number of parameters is the total number of domestic and common

³⁷ In order to make the results reproducible, we provide the values of the parameters used in the grey wolf algorithm, see (Mirjalili et al., 2016) for details: 1000 wolves, 10 iterations, $\alpha = 0.1, \beta = 4, \gamma = 2, nGrid = 10$. The range for the parameters was $b_1 \in (-0.5, 0.5), b_2 \in (-0.1, 0), \sigma_e \in (0, 0.1)$.

parameters. However, the special form of the formula for the interest rates in the Corzo-Schwartz model will allow us to simplify also this scalarization problem.

We consider the new objective function, formed from (4) and (5):

$$H = H_2 + \lambda H_1, \quad (6)$$

where λ is a positive parameter. We solve the problem for a range of values of λ .

Let us fix the values of λ, a_2, b_2 . We compute the partial derivatives of (6) with respect to $a_1, b_1, \sigma_d^2, \sigma_e^2$. Similarly as in the previous section, this does not lead to unique optimal point, but we obtain the optimal value of the objective function, shared by all the optimal solutions. It can be expressed as

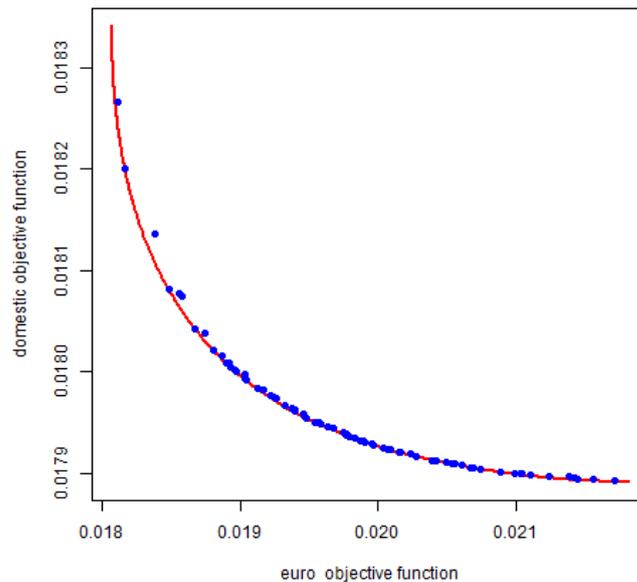
$$H = \frac{1}{100} \sum_{i=1}^n (x_i - \bar{x})^2 + \lambda \frac{1}{100} \sum_{i=1}^n (y_i - \bar{y})^2, \quad (7)$$

where $x_i = F_5(a_2)r_{di} + F_6(a_2, b_2)r_{ei} + 10 R_{di}^{real}$ and $y_i = G_3(b_2)r_{ei} + 10 R_{ei}^{real}$. We note that the parameter a_2 appears only in the first sum in (7), which can further simplify the optimization. For the given value of the weight λ we therefore proceed as follows: For the given value of b_2 we compute the optimal value of a_2 , which minimizes the term $\sum_{i=1}^n (x_i - \bar{x})^2$. Substituting it into (7) gives the minimal value of (7) that is possible to achieve for the given b_2 . Therefore we need to minimize these values with respect to b_2 . Optimization problem (7) can be therefore turned into a sequence of one-dimensional optimization problems.

5 Results and discussion

Figure 2 shows the results of the calibration using both the random search in the parameters space by the grey wolf algorithm and the results of the scalarization approach for a large range of the weights λ . The scalarization is, in general, a high-dimensional problem. In our particular case, we were able to simplify it into a series of computationally simple problems and therefore it can serve as a benchmark to assess the accuracy of the grey wolf algorithm. As we can see, the accuracy is very good.

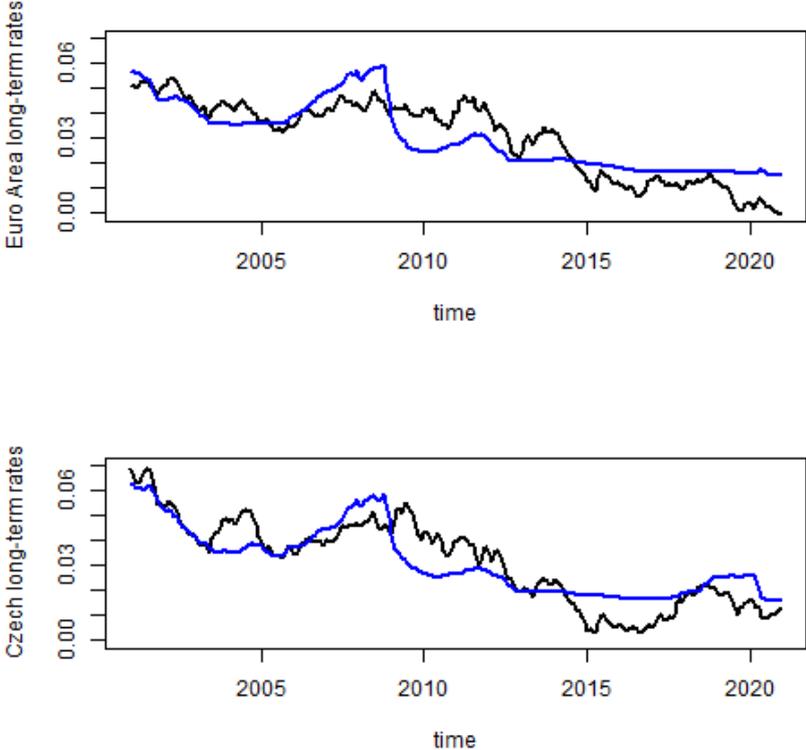
Figure 2: Values of the objective functions achieved by the grey wolf algorithm (blue) and scalarization (red)



Source: Own computations in R programming language

Comparison of the real and fitted values is shown in Figure 3, Here, the fitted values correspond to the case of $\lambda = 1$ (i.e., the same weight was given to Czech and Euro Area interest rates), but they show a typical behaviour also for the other values. While at the beginning the fit is good, in the later rates the fitted values are too “averaging” the real interest rates.

Figure 3: Observed (black) and fitted (blue) long-term rates



Source: Own computations in R programming language

There might be different reasons for this, but we expect it to be a consequence of change in the parameters of the model. The model assumes that the euro short rate is mean-reverting. It means that the euro short rates should converge to a certain long-term limit. Because of this property, it would not be able to capture the recent sharp increase in the interest rates, which does not show such a convergence, nor can it be seen as a consequence of a random error term. Therefore, we did not use the most current data from the recent years. However, it is also possible that there was a change also during the two decades which we used in our analysis. If the model is correct, the discrete observations of the euro short-term rates follow an autoregressive process of the first order. Gombay’s test for detection of change points in autoregressive processes,³⁸ as implemented in *funtimes* R package,³⁹ detects significant changes in all of the parameters: mean, variance and autoregressive coefficient. The estimated change points are located at October 2008 (mean), July 2009 (variance) and December 2011 (autoregressive coefficient). Together with the evolution of the short rate they are depicted in Figure 4.

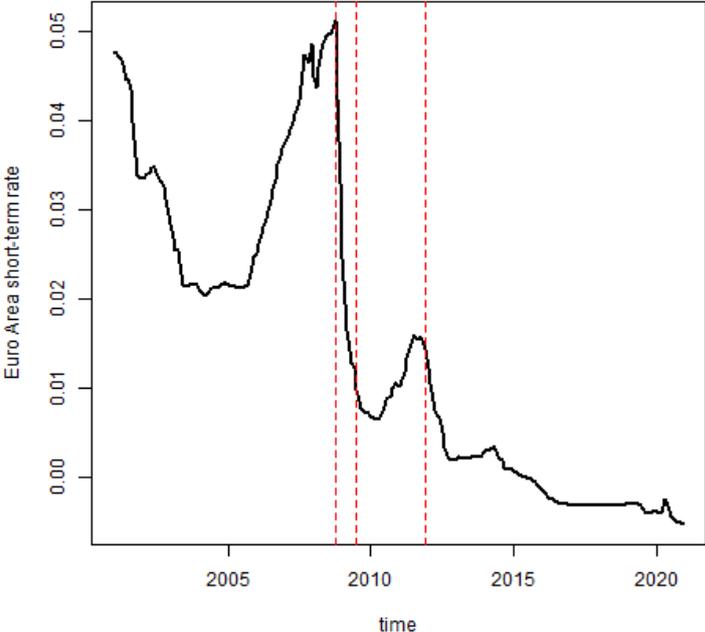
Secondly, it follows from the equation (2) that for a particular maturity, the interest rate is a linear function of the short rate. It follows that a plot of the long-term rates versus short-term rates should be showing a relationship close to linear. Construction of such a plot in Figure

³⁸ GOMBAY, E. (2008): Change detection in autoregressive time series, pp. 451-464.
³⁹ LYUNCHICH, V. – GEL, Y. R. – VISHWAKARMA, S. (2023): *funtimes*: Functions for Time Series Analysis.

5 clearly shows that it is not the case. Also, it shows that in certain time periods the linearity relationship is rather strong.

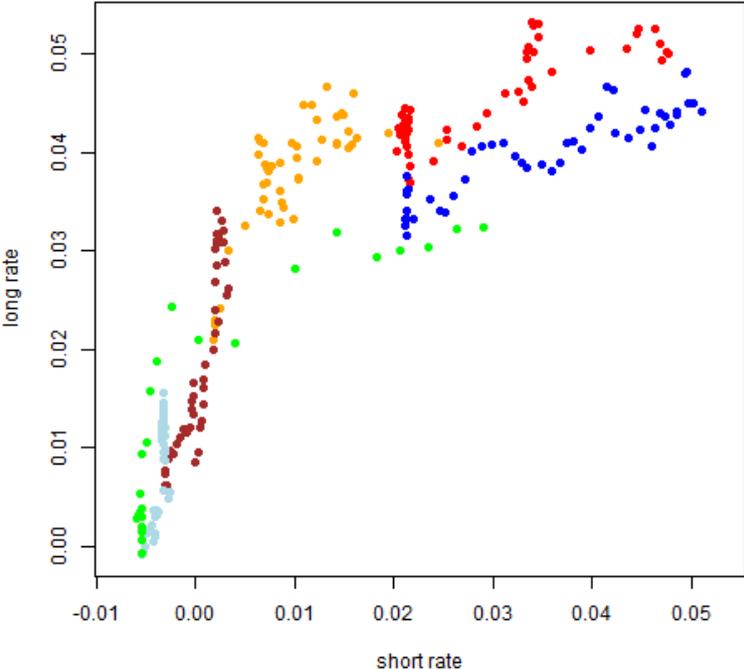
Naturally, it is also possible that in order to fit the data better, another model is necessary.

Figure 4: Euro short-term rates and detected change points in parameters of the autoregressive process



Source: Own computations in R programming language

Figure 5: Short-term and long-term euro rates



Source: Own computations. For illustration, periods of four years are selected. Red: January 2001-December 2004, blue: January 2005-December 2008, orange: January 2009-December 2012, brown: January 2013-December 2016, lightblue: January 2017-December 2020, green: January 2021-March 2023.

Conclusion

The aim of this paper was twofold: Firstly, it was a calibration of the Corzo-Schwartz convergence model to two sets of interest rates: in the Eurozone and in a country, whose interest rates are likely to be influenced by the Eurozone rates. Secondly, it was an assessment of the grey wolf metaheuristic optimization technique, when applied to a bicriteria optimization problem arising in calibration of convergence models. The accuracy of the method turns out to be very high, which makes it a promising method to use also in the cases, when the scalarization (used as a benchmark in this case) would be computationally difficult. The need for more complicated models, when this would be the case, is likely, since the quality of the fit, obtained from the model, should be improved. Another possible path of research consists of investigating the change points and segmentation of the data, so that in each time period another model or another set of parameters are used.

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SELECTED ECONOMIC ASPECTS OF THE INTEGRATION OF MIGRANTS

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Abstract: Paper focused on selected aspects of the integration of migrants, specifically economic aspects. The aim of the paper are the economic aspects of the integration of migrants, which determine successful and effective integration and are influenced by the correct setting of public migration and integration policies. The first part provides an overview of scientific research and the view of experts on the economic aspects of the integration of migrants. The second part of the paper focuses on specific economic aspects of integration, which determine the effectiveness of the set integration policies and the subsequent success of integration.

Keywords: integration, economic aspects, migrants

JEL: F22

Introduction

Successful integration is essential not only for incoming foreign migration, but equally for the receiving autochthonous society. Scientists mostly point to the economic benefits that flow from migration, but also to the well-being of migrants and the security, stability, social harmony and prosperity of the society of the receiving state. Experts and organizations working with migrants understand that the term "integration" is perceived differently depending on the country and context. In order for the integration policy to be successful, we consider it important that mutual adaptation between the host society and migrants and their dialogue is based on common values. Successful integration is determined by various economic, political and cultural aspects, where all aspects are interconnected and are influenced by each other.

Our paper will focus on selected aspects that influence the integration of migrants and define the success of the given integration. Since our text is limited in scope to an adequate conference paper, we will focus on selected economic aspects of migrant integration.

Economic aspects (along with the cultural ones) are considered by experts to be crucial for harmonious coexistence between members of non-ethnic minorities and the majority. Of the Slovak experts, it was Divinsky who emphasized that economic factors are important pull factors for international migration. From the point of view of this paper, it is also important to draw attention to the publication by Divinsky, who in 2008, together with Zuzana Bargerová, presented the first monograph to the professional public, which, in addition to the migration process, also addressed the issues of migrant integration. In this publication, a shift from research on international migration to the integration of foreigners into the society of the destination state of migration was noted. Research on integration policy was thus emphasized as an equal object of interest in a whole range of different sub-researches on international migration.

Since migrants from different countries speak different languages, have different cultural backgrounds, the clash between migrant cultures and the culture of the native society can be potentially costly in the economic and social spheres. According to Danzer, these costs include business transactions such as translation of official documents, knowledge of local business customs/rules of conduct, and open social conflicts. More indirect costs result in higher

unemployment rates among immigrants and, consequently, worse school results for their offspring. Decades of experience with immigration have convinced most companies and especially experts that these costs can be reduced by integrating migrants into the native society.¹

For decades, economists have been interested in the economic consequences of immigrants in terms of their earnings.² In the 21st century, economists analyze political and social dimensions of integration, such as language skills, citizenship or self-identification, in addition to wages.³ In clarifying how migrant integration is related to economic costs, we first focus on the language spoken in the migrant's household as a measure of integration. Knowing the language of the host country is crucial for any kind of day-to-day interaction. Therefore, it is not surprising that experts in their research point to an advantage in the labor market for migrants who know the language of the host country.⁴

Economic benefits or costs can be analyzed in different forms. One area of research focuses on the labor market performance of immigrants. The unemployment rate of immigrants can be seen as a measure of the economic costs of integration.

The degree of integration affects economic benefits or costs and requires analyzing this relationship at the individual level.

Among the previous economic aspects of the integration of migrants, we could also include mediation of positions on the labor market and the related vocational training, unemployment benefits and other benefits typical of the socio-economic area, such as insurance, accommodation. Those are directly related to employment itself and subsequent life in host country.⁵

The aim of the paper is to point out the economic aspects of the integration of migrants, which determine successful and effective integration and are influenced by the correct setting of public migration and integration policies. The first part of the paper provides an overview of scientific research and the view of experts on the economic aspects of the integration of migrants. The second part focuses on specific economic aspects of integration, which determine the effectiveness of the set integration policies and the subsequent success of integration. The mentioned part of the paper approaches access to the labor market, education and accommodation as an integral part of economic aspects that are interconnected and affect each other.

1 Literature review

When examining the issue of the integration of migrants into the autochthonous society, the professional literature defines several models of integration policies, namely the assimilation model, the ethnic-exclusivist model, the model of multiculturalism, the model of civic integration and others. According to Joanin, the two most important approaches to integration in the second half of the 20th century included the model of assimilation and

¹ DANZER, A. M. (2011): Economic Benefits of Facilitating the Integration of Immigrants, p. 14.

² CHISWICK, B. R. (1978): The Effect of Americanization on the Earnings of Foreign-Born Men, pp. 897-921.

³ BAUER, T. – EPSTEIN, G. S. – GANG, I. N. (2005): Enclaves, Language, and the Location Choice of Migrants, pp. 649-662.; BISIN, A. – PATACCHINI, E. – VERDIER, T. – ZENOU, Y. (2008): Are Muslim Immigrants Different in Terms of Cultural Integration? Pp. 445-456; DUSTMANN, C. – BENTOLILA, S. – FAINI, R. (1994): Return Migration: The European Experience, pp. 213-250.; DUSTMANN, C. (1996): The social assimilation of immigrants, pp. 37-54; MANNING, A. – ROY, S. (2010): Culture Clash or Culture Club? National Identity in Britain, pp. 72-100.

⁴ DUSTMANN, C. – FABBRI, F. (2003): Language Proficiency and Labour Market Performance of Immigrants in the UK, pp. 695-717; DUSTMANN, C. – van SOEST, A. (2002): Language and the Earnings of Immigrants, pp. 473-492.

⁵ PENNINX, R. (2004): Integration of migrants. Economic, social, cultural and political dimensions.

multiculturalism.⁶ Currently, on the contrary, in the approach to integration in European countries, we observe a departure from the two above-mentioned models and, on the contrary, an inclination towards civil integration or secular liberalism.⁷

The assimilation model is based on the equal status of migrants in the destination state of migration, but under the condition of adopting the cultural patterns of the receiving society. By assimilation we understand a process of several levels.

According to Faist, the first level is represented by acculturation (cultural assimilation), which means taking over the language, norms and ideals of the receiving society by migrants. Under the second level we understand social integration, otherwise also called structural assimilation. This is the participation of migrants in the institutions of the receiving country. The third level is represented by identification (identification assimilation) as the migrants' sense of belonging to the receiving society.⁸ According to Štefančík, the first and second levels are decisive, as they represent the pillar of effective integration of migrants with the receiving or autochthonous society. Mastering the language, accepting the legal system of the receiving country and the values of the receiving society are among the most important factors of the assimilation model.⁹

Sociologists rely on four main criteria to assess immigrant assimilation: socioeconomic status, geographic distribution, language proficiency, and intermarriage. William A.V. Clark defines the assimilation of immigrants in the United States as "a way of understanding the social dynamics of American society and that it is a process that occurs spontaneously and often unintentionally during the interaction between majority and minority groups."¹⁰

A study by Bleakley and Chin in 2010 found that people who arrived in the destination country before the age of nine tended to acquire the language as well as members of the native society. The study also noted the sociocultural effects of assimilation and that children of immigrants who adapt through integration or assimilation are received more positively than children who adapt through marginalization or separation.¹¹

Different humanities define multiculturalism in different ways. Based on the assumption that members of different cultures can coexist in peace, multiculturalism expresses the view that society can be enriched by preserving, respecting, and even promoting cultural diversity.¹² The model of multiculturalism represents the opposite of the assimilation model, specifically in not creating pressure on migrants to adopt the cultural patterns of the receiving society. According to Stýskalíková, multiculturalism responds to different cultures by recognizing and equality of ethnic minorities.¹³ Multiculturalism represents the coexistence of several cultures, it is an effort for the harmonious coexistence of several nationalities or minorities with different cultural backgrounds.

Proponents of multiculturalism argue that it is necessary for people to retain certain features of their traditional cultures. On the other hand, opponents of multiculturalism claim

⁶ JOANIN, P. (2017): Models of Integration in Europe.

⁷ De LEEUW, M. – van WICHELEN, S. (2012): Civilizing migrants: Integration, culture and citizenship, pp. 196-197.

⁸ FAIST, T. (2004): Staatsbürgerschaft und Integration in Deutschland: Assimilation, Transstaatlichkeit und kultureller Pluralismus, pp. 84-85.

⁹ ŠTEFANČÍK, R. – LENČ, J. (2012): Mladí migranti v slovenskej spoločnosti. Medzinárodná migrácia, moslimovia, štát a verejná mienka.

¹⁰ CLARK, W. A.V. (2003): Immigrants and the American Dream, pp. 164-167.

¹¹ BLEAKLEY, H. – CHIN, A. (2010): Age at Arrival, English Proficiency, and Social Assimilation among US Immigrants, pp. 165-192.

¹² LONGLEY, R. (2020): What Is Multiculturalism? Definition, Theories, and Examples.

¹³ STÝSKALÍKOVÁ, V. (2005): Der Einfluss des EU-Beitrittes auf die tschechische Integrations- und Migrationspolitik, pp. 137-156.

that multiculturalism itself threatens social order by reducing national identity and the influence of the majority culture.

According to the pluralist model, there can be a heterogeneous society in which people coexist but retain some of the unique characteristics of their traditional culture. In multiculturalism, there is no need for people to give up their cultural heritage in order to be considered members of the major society. On the other hand, cultural differences fostered by multiculturalism can divide society and lead to prejudice and discrimination.¹⁴

The model of civic integration combines elements of multiculturalism and assimilation. On the one hand, the mentioned model does not deny cultural diversity and the diversity of minorities, on the other hand, it calls for the observance of basic values. A visible element is the uniform language. Civic integration is based on three pillars: voluntariness in the sense of not forcing the cultural identity of the autochthonous society and also the voluntariness of immigration, reciprocity in the sense of acceptance by the immigrant of all obligations arising from the laws of the receiving country and, last but not least, individuality in the sense that the immigrant is accepted as an individual.¹⁵

As Joppke and Fitzgerald state in their studies, integration itself is no longer left only to the labor market or education, but attempts to come under conscious, coordinated control by the state. In this regard, civic integration equals the rise of government intervention and management, and integration begins to move beyond national intervention to the local level. Integration of immigrants and immigration policy are no longer two separate policies, but are beginning to be linked.^{16,17}

Currently, we can see that Marc de Leeuw and Sonja van Wichelen see the new discourse on migrant integration as reaffirming the institution of secular liberalism in such a way that migrants are "recognizable" and "tolerable" citizens. They define secular liberalism as a complex social, political, economic and cultural self-referential framework. The connection between migration and globalization is key to understanding current changes in thinking about multiculturalism, integration and citizenship. According to the above-mentioned authors, European states are reviving their national identity, but at the same time they are working together to revive secular liberalism in a globalized way.¹⁸

2 Economic aspects of integration of migrants

Labour market integration is the main prerequisite for a high-quality life of migrants, which can also eliminate their marginalization or even social exclusion. It is important to utilize the skills that migrants bring to the destination countries. However, the cultural factors of migration are equally important, because cultural differences can lead to conflicts between migrants and the native society in the absence of integration processes.

The integration of migrants in the market is given importance by academics, experts and scientists who study international migration and the integration of migrants across disciplines. It was about the importance of properly set integration policies by the state, anti-discrimination of persons who apply for a job position due to their migrant background from the employers themselves, or last but not least, the subsequent atmosphere at the workplace. The last mentioned plays a key role in whether the employed migrant stays at the workplace and will

¹⁴ JONAS, M. (2007): The downside of diversity.

¹⁵ BARŠOVÁ, A. – BARŠA, P. (2005): Přistěhovalectví a liberální stát, p. 80.

¹⁶ FITZGERALD, D. S. – COOK-MARTÍN, D. (2014): Culling the Masses: The Democratic Origins of Racist Immigration Policy in the Americas.

¹⁷ JOOPKE, CH. (2017): Civic integration in Western Europe: three debates. In: West European Politics, pp. 1153-1176.

¹⁸ De LEEUW, M. – van WICHELEN, S. (2012): Civilizing migrants: Integration, culture and citizenship, pp. 196-197.

benefit not only the employer, but also the state as an economic force. Also as Sparreboom and Tarvid mentioned in their study the incidence of overeducation at the national level is found to be higher for immigrants than for natives in European countries.¹⁹

According to Bolečková, the activities of the Slovak integration policy should be focused mainly on the area of employment and access to the labor market. But accommodation, education, social security, health care, the integration of foreigners into the autochthonous society or the eventual acquisition of state citizenship should not stand on the sidelines of the government's interests in the formation integration policy.²⁰ Mipex in its research referred: „Labour market integration happens over time and depends on the general policies, context, immigrants' skills and reason for migration.”²¹ Whether migrants find a job in a host country depends on their skills and the economic and social situation at the time. The well-developed policies can make the labour market fairer for working immigrants by helping them to secure the same types of stable quality jobs as non-immigrants. According to European Commission: „The inclusion of migrants in the labour market is key to ensure their effective integration into the host societies, this entails fully using their skills and realizing their economic potential. They can contribute to addressing skills shortages in certain sectors at all skills levels. Ensuring that migrants learn the language, get their educational and professional skills validated/recognized and receive adequate training is essential for their overall integration and positive economic impact in the receiving societies.”²²

Many scientific studies refer to the links between labour market mobility policies and outcomes. Labour market mobility policies are effective to help working immigrants to gain skills and education, careers and public acceptance. Under effective-developed policies, immigrants are more likely to improve their language and professional skills in the host country. They can use them effectively to secure better jobs. Labour market mobility policies help shape public opinion and the public can see immigrants as an economic opportunity and not as a competition or threat.²³

Wage gaps between migrants and native workers are sign of lack of labour market integration of migrants. ILO in its study point out that it is important to monitor labour market integration and the economic contribution that migrants can make; such as employment rates, wages and skills mismatch rates.²⁴ Migrants often face multiple obstacles when they try to find a job, such as: „insufficient skills and experience (language barriers, low levels of education or training and lack of local work experience); unrecognized qualifications; difficulties navigating host-country labour markets (including poor information about how to look for jobs or present themselves); and formal and informal obstacles to employment (such as legal restrictions on working, employer discrimination, family responsibilities, health problems or unresolved housing issues.”²⁵

The security of accommodation influence on better labour integration of migrants. Accommodation is an important part of the integration process on the labor market, because of the feeling of security from a roof over your head during the period of the employment contract. IHRB pointed out that employers should provide adequate and decent living conditions for labour migrants: „*The quality of workers' living environment has a major effect on their physical and psychological well-being. The provision of decent housing is an important sign that businesses respect and value their employees and is shown to enhance productivity. Many*

¹⁹ SPARREBOOM, T. – TARVID, A. (2017): Skills mismatch of natives and immigrants in Europe.

²⁰ BOLEČEKOVÁ, M. (2010): Migračná politika.

²¹ MIPEX (2020): Labour Market mobility.

²² European Commission (2023): Integration in the labour market.

²³ MIPEX (2020): Labour Market mobility.

²⁴ ILO (2015): Global Wage Report 2014/15: Wages and income inequality.

²⁵ ILO (2018): Labour Market Integration Of Immigrants.

*businesses report that new workers settle into their roles much faster when they live in decent and dignified accommodation. Conversely, poor housing conditions can lead to workers becoming demotivated and unwell, with obvious implications for their ability to perform their work effectively.*²⁶ World health organization pointed out, that: „Poor housing conditions and uses may provide weak defenses against death, disease, and injury or even increase vulnerability to them. Adequate and appropriate housing conditions, on the other hand, not only protect people against health hazards but also help to promote robust physical health, economic productivity, psychological well-being and social vigor.”²⁷

Access to education is a basic human right and is necessary to achieve sustainable development, but also to solve inequalities within society. Education helps to improve social cohesion by facilitating the socio-economic integration of migrants. In addition, access to education and lifelong learning opportunities can help ensure that migrants acquire the skills needed to successfully integrate into the labor market.²⁸ Experts point to the importance of the integration of children of migrants, which plays a key role in their social inclusion and the inclusion of their families and positively affects their further educational experience. An important element of integration into the school system is teachers' knowledge of how to work with children with migration experience and a qualitatively developed policy that will include an effective approach in education.²⁹ As Mipex mentioned on its research: „Well-developed targeted policies not only help academically, for vulnerable groups on different education tracks, leading to higher education from one generation to the next. These policies have various positive academic effects on the children in need who are eligible to benefit. But also targeted policies help out socially, for all students, with or without immigrant backgrounds, to all feel safe and at home at school. Under more developed policies, immigrant pupils develop a similar sense of pride, safety and belonging at school as their non-immigrant peers.”³⁰

Conclusion

Successful integration is important not only for incoming foreign migration, but equally for the receiving autochthonous society. Experts and organizations working with migrants understand that the term "integration" is perceived differently depending on the country and context. In order for the integration policy to be successful, we consider it important that mutual adaptation between the host society and migrants and their dialogue is based on common values. Successful integration is determined by various economic, political and cultural aspects, where all aspects are interconnected and are influenced by each other. Our paper focused on economic aspects, such as labour market, education and accommodation.

The aim of the paper was to point out the economic aspects of the integration of migrants, which determine successful and effective integration and are influenced by the correct setting of public migration and integration policies. The first part of the paper provided an overview of scientific research and the view of experts on the economic aspects of the integration of migrants. The second part focused on specific economic aspects of integration, which determine the effectiveness of the set integration policies and the subsequent success of integration.

The mentioned part of the paper approaches access to the labor market, education and accommodation as an integral part of economic aspects that are interconnected and affect each other. Labour market mobility policies are effective to help working immigrants to gain skills and education, careers and public acceptance. Education helps to improve social cohesion by

²⁶ IHRB (2019): Migrant Worker Accommodation.

²⁷ WHO (1989): Health principles of housing. Geneva: World Health Organization.

²⁸ IOM (2021): Integrating Migration into Education Interventions. Brusel: IOM, p. 3.

²⁹ SACRAMENTO, R. B. (2015): Migrant Education and Community Inclusion: Examples of Good Practice.

³⁰ MIPEX (2023): Education.

facilitating the socio-economic integration of migrants. In addition, access to education and lifelong learning opportunities can help ensure that migrants acquire the skills needed to successfully integrate into the labor market. The last but not least, the security of accommodation influence on better labour integration of migrants.

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SINO-RUSSIAN ECONOMIC COOPERATION IN THE AFTERMATH OF UKRAINIAN CRISIS¹

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Abstract: Relations between two big neighbors, China and Russia, have so far been developing rather smoothly at all levels. Since the 1990s, the countries have followed a path of rapprochement bypassing potential tensions and clashes of interests and strengthening mutual cooperation. The year 2014 marked a new level of cooperation between the two countries, with Russia drifting further away from its Western neighbors. The Ukrainian crisis of February 2022, which has become a factor of change for many spheres of international cooperation, has also had an inevitable impact on Sino-Russian relations. The aim of this paper is to define the Sino-Russian economic cooperation in the aftermath of Ukrainian crisis. Our research is based on the recent literature and should answer the research question of whether Russia and China are getting closer and in particular, in which areas of the economy.

Keywords: Sino-Russian economic cooperation, Ukrainian Crisis

JEL: B22, E22, F51, FP33

Introduction

Russia and China, both important actors in the global economy, share a border stretching more than four thousand kilometers, as well as certain economic and geopolitical interests and concerns. Relations with the neighbor have become an important part of foreign policy for both countries, and a significant factor for the international economy.

Having received a boost first in the early 1990s, then in the 2000s, and in the late 2010s, as Russia, faced with challenges in the West, turning more and more towards cooperation with new partners from Asia, the Sino-Russian relations came to a potential peak in February 2022. However, Russia's conflict with Ukraine in February 2022 has become a major game changer for several areas of international cooperation around the world. While it may be too early to draw any clear-cut conclusions, as the it would be appropriate to take a closer look at the development, current state and potential future of Sino-Russian relations

It may be too early to draw any clear-cut conclusions, as the outcome of the conflict in Ukraine remains rather unpredictable. However, the current dynamics of economic relations between China and Russia can be characterized by a sharp increase in mutual trade and a clear policy aimed at attracting Chinese investment led by the Russian Federation, on the one hand, and a growing disparity between the two countries, with Russia increasingly concentrating on exporting natural resources and China increasingly dictating the terms of natural resource imports and becoming even more important as an almost unique supplier of essential goods, such as machinery, equipment and electronics, to its increasingly economically isolated neighbor on the other hand.

The aim of this paper is to define the Sino-Russian economic cooperation in the aftermath of Ukrainian crisis. Our research is based on the recent literature and should answer the research question of whether Russia and China are getting closer and in particular, in which areas of the economy.

¹ Project VEGA no. 1/0732/21 „New normal" and the changing position of the PRC in the world economy (2021-2023).

1 Literature Review

Sino-Russian relations have attracted the interest of a number of researchers, and their various aspects, as well as their global characteristics and perspectives are often analyzed. For example, Guihai Guan² provides a comprehensive analysis of the development of relations between China and Russia after the break-up of the Soviet Union. The author emphasizes the success of the pragmatic approach to the development of the relations between the two countries, as well as the stability of the mutually beneficial exchange, which is built on a sufficiently high level of political trust.

Yulia Shokhina³ focuses in her publication on the development of the Sino-Russian economic relations based on the example of the volume of trade, investment, and coupling of the EAEU and SREB (Silk Road Economic Belt), but also analyses the success of Sino-Russian relations with a focus on mutual trade, investment, and, in particular cooperation in Central Asia within the EAEU and BRI (Belt and Road Initiative). Gemueva⁴ also states in her publication on trade and economic relations between Russia and China, the successes of economic cooperation, but points to the inequalities that exist between the two economies, and notes the problems associated with the correct measurement of investment exchange. Alla Dmitrieva⁵, in her article on the key aspects of international investment cooperation between Russia and China, also points to problems in Sino-Russian relations concerning investment exchange, which are largely related to the lack of a stable investment climate in Russia.

Such analyses gain a new perspective today, when the conflict in Ukraine has had an important impact on all areas of international relations, particularly on Russia. Bobo Lo⁶, in the article on the Sino-Russian Partnership supports the idea that Sino-Russian relations are quite stable due to a pragmatic approach and a notably smooth cooperation in the field of geopolitical interests, and considers them potentially resilient to current political challenges. Lukonin and Vakharushin⁷ also point to the stability of relations, but in the area of economic cooperation and investment exchange, emphasizing the context of sanctions against Russia. The authors, however, underline the growing “asymmetric interdependence” of Sino-Russian relations noted by Alexander Gabuev⁸ in his article “Friends With Benefits? Russian-Chinese Relations after the Ukraine Crisis” back in 2016, which has intensified under the pressure of sanctions in 2022-2023.

2 Sino-Russian relations

The relationship between China and Russia has a peculiarity: its dynamics have been fairly linear and consistent over a long period of time. Indeed, since the 1990s cooperation in most areas has been on the rise, and, unlike relations with other major global players, has not undergone significant declines despite changing circumstances.⁹ The development of both political and economic relations between the two countries has gone rather smoothly through several stages of gradual rapprochement.

A significant step in this direction was taken in 2004, when common border was established between Russia and China, allowing cooperation to develop both economically and

² GUAN, G. (2022): Thirty years of China–Russia strategic relations: Achievements, characteristics and prospects.

³ SHOKHINA, Y. (2023): The Development of Russian-Chinese Economic Relations in 21st Century on the Example of Trade Turnover, Investment and Conjugation of EAEU and SREB Projects.

⁴ GEMUEVA, K. (2021): Trade and economic relations between Russia and China: Potential for a qualitative shift.

⁵ DMITRIEVA, A. (2016): Key aspects of the international investment cooperation of Russia in the context of the expanding Russian-Chinese economic cooperation.

⁶ LO, B. (2023): The Sino-Russian Partnership Assumptions, Myths and Realities.

⁷ LUKONIN, S. – VAKHARUSHIN, I. (2023): Russian-Chinese Trade and Economic Cooperation amid Anti-Russian Sanctions.

⁸ GABUEV, A. (2016): Friends with benefits? Russian-Chinese Relations After the Ukraine Crisis.

⁹ GUAN, G. (2022): Thirty years of China–Russia strategic relations: Achievements, characteristics and prospects.

politically without any threat of potential territorial disputes.¹⁰ Mutual trade between China and Russia continues to grow, and in 2010 China became Russia's number one trading partner and has maintained its leading position ever since.¹¹

Sino-Russian relations reached a new level in 2014, when Russia, faced with Western sanctions, turned even more towards Asia and China in particular, viewing it as a major strategic partner. To accelerate the transformation of the direction of foreign economic interactions, Russia introduced a number of facilitation measures, lowering barriers to investment from China.

In 2014, the Intergovernmental Russian-Chinese Commission on Investment Cooperation (CIC) was also established, which created an institutional basis to promote investment between the two countries.¹² Although 2015 saw a decline in trade between Russia and China due to the geopolitical events of 2014, the impact of 2014 on strengthening Sino-Russian relations was significant, thanks to which cooperation on projects such as natural gas pipeline construction and cross-border infrastructure improvement intensified¹³. In addition, cooperation in defense area has been stimulated, as Russia, previously cautious about sharing its military expertise by selling the top-end equipment to China, was forced to abandon its concerns following the deterioration in relations with the EU.

Cooperation between the two countries also runs through their interests in Central Asia. In 2015, China agreed to align its SREB project, part of the China-driven BRI with the EAEU.¹⁴ Although the EAEU and the BRI are a potential source of competition for influence over the Central Asian regions between Russia and China, the countries are taking a cautious approach, and so far, there have been no intense clashes in the region. In contrast, in 2019, an agreement on trade cooperation between the EAEU and China was signed, which identified eight priority areas for cooperation, including trade, entrepreneurship, economic growth, business climate improvement and other areas.¹⁵ This declared the intentions of both countries to strengthen cooperation in these areas.

So far, the two countries have been quite successful in avoiding conflict in potentially contentious areas, such as the spread of influence in Central Asia, or Russia's special military operation in Ukraine, by adopting a pragmatic and calculated approach in building mutually beneficial relations. This has led to an overall increase in trade. Between 2010 and 2021, mutual trade between China and Russia more than doubled¹⁶. In particular, increased cooperation has touched such sectors as nuclear energy, oil and gas, metallurgy, agriculture and transport infrastructure.

At its peak, Sino-Russian cooperation has been impacted by the events of February 2022, when the entry of Russian military forces into Ukraine caused significant changes and upheavals in the global economic, political, logistical and other established systems. Although the long-term effects on China-Russia relations are still unclear, it is possible to analyze the current situation in economic relations between the two countries.

¹⁰ LO, B. (2023): The Sino-Russian Partnership Assumptions, Myths and Realities.

¹¹ BRIZITSKAYA, A. (2023): The investment cooperation between Russia and China: Problems and directions of development.

¹² LUKONIN, S. – VAKHARUSHIN, I. (2023): Russian-Chinese Trade and Economic Cooperation amid Anti-Russian Sanctions.

¹³ GABUEV, A. (2016): Friends with benefits? Russian-Chinese Relations After the Ukraine Crisis.

¹⁴ LO, B. (2023): The Sino-Russian Partnership Assumptions, Myths and Realities.

¹⁵ SHOKHINA, Y. (2023): The Development of Russian-Chinese Economic Relations in 21st Century on the Example of Trade Turnover, Investment and Conjugation of EAEU and SREB Projects.

¹⁶ LUKONIN, S. – VAKHARUSHIN, I. (2023): Russian-Chinese Trade and Economic Cooperation amid Anti-Russian Sanctions.

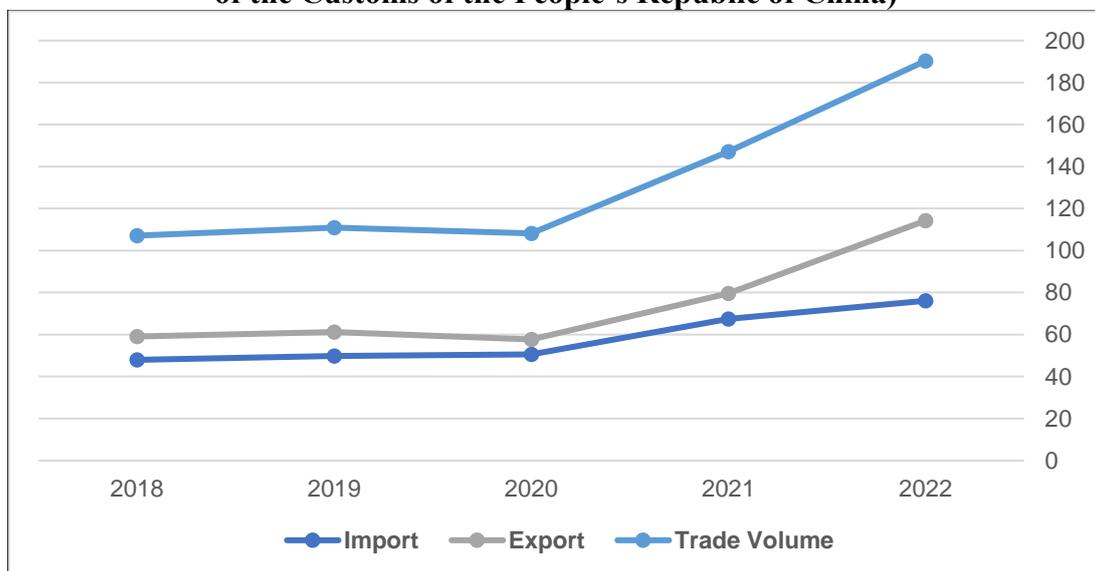
3 Economic cooperation on the rise

Since the conflict in Ukraine, Sino-Russian trade has faced a number of challenges, including several sets of sanctions, as well as the need to rebuild ruined logistics routes and build new ways of money transfer. China has taken a pragmatic approach to the actions of Russia, adopting a neutral position. Several large Chinese companies have stopped doing business with Russia, and Chinese banks have become more reluctant to provide financing to Russian companies, but overall economic cooperation between the countries has continued, with Chinese companies benefitting from the market share left by European and US companies in Russia, and the latter turning even more to its Asian partner as a supplier of goods such as machinery and equipment, which became less available due to sanctions, and a major buyer of natural resources.

As a result, the value of mutual trade between China and Russia, which had shown some slowdown since 2018 due to a number of problems, including the COVID-19 pandemic, increased by 29% in 2022 compared to 2021, reaching a record high of USD 190 billion (see Figure 1).

Russian exports to China showed the sharpest trend, rising by 43% compared to 2021. This growth is mainly due to exports of resources, primarily oil and gas, as well as metals. Energy remains number one area of cooperation between Russia and China in terms of foreign trade. Oil and gas exports from Russia to China are already on the rise; exchanges in this sector on the Russian side are being encouraged by the restrictions on sales of energy resources to the EU. As a result, China has become an even more significant importer in this sector. On the Chinese side, this significant increase in the value of imports of natural resources from Russia is probably the result of a combination of two factors: growing demand from Chinese companies and rising prices on the key Russia's energy resources, namely, oil and gas.¹⁷

Figure 1. Russia: Trade with China, USD bn, (General Administration of the Customs of the People's Republic of China)



Source: General Administration of the Customs of the People's Republic of China (2023): Customs Statistics.

Imports from China to Russia have also shown a positive trend. They increased by 13% and mainly reflect the replacement of European and US providers of consumer goods and equipment by Chinese companies.

¹⁷ LUKONIN, S. – VAKHARUSHIN, I. (2023): Russian-Chinese Trade and Economic Cooperation amid Anti-Russian Sanctions.

It can be noted that imports of Chinese goods into Russia have already shown a significant increase in 2021: they rose by 34%, probably reflecting deferred demand for consumer goods and industrial equipment, which could not be met in 2020 due to the intense restrictions imposed by China on its companies and population during the COVID-19 pandemic.¹⁸

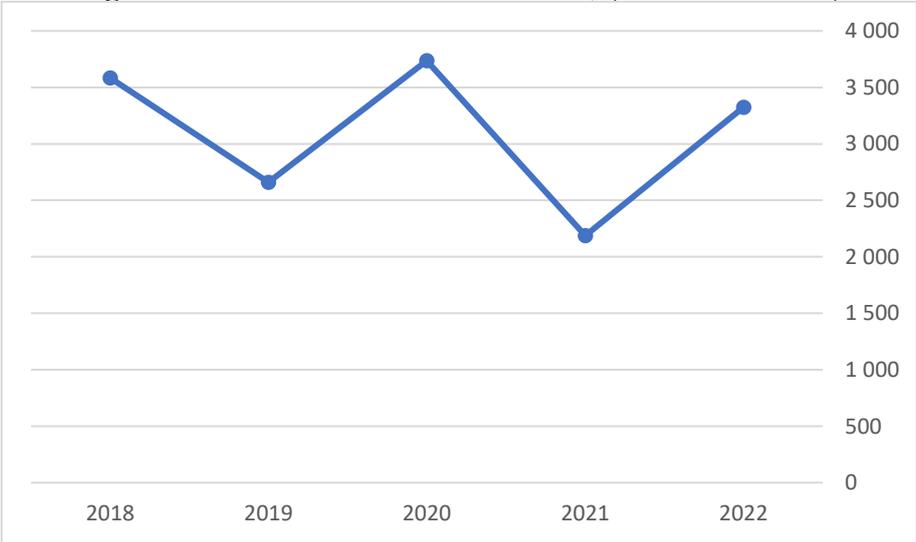
4 Investment activity

Investment activity between Russia and China is rather difficult to assess, due to its complex structure and a number of different methods used by different statistical institutions to measure it. Sino-Russian investment cooperation is characterized by diverse sources of capital, which are difficult to aggregate. Firstly, a significant amount of investment goes through offshore companies, which are not accounted for by Russian statistical services. In addition, a large part of Chinese investments passes through Hong-Kong, so both investments coming from China and investments coming from Hong-Kong need to be considered. Other factors, such as investments coming from small businesses through offshore informal transactions, are also difficult to estimate and are not account for by Russian statistical services¹⁹.

According to the RAUIE (Russian-Asian Union of Industrialists and Entrepreneurs), total investment from China into Russia over the last 20-25 years is about USD 55 billion, which means that China is number three investor into Russia after Germany and the US. However, even if we look at the foreign direct investment statistics provided by Russian national statistical services, we can see a positive trend following the downturn, which reached the level of investment during the COVID-19 pandemic (see

Figure 2). According to the most conservative estimates, which do not take into account either offshore activities or investment from Hong-Kong, FDI from China to Russia increased from USD 2,188 million at the beginning of 2021 to USD 3,323 million at the beginning of 2022.

Figure 2. FDI from China into Russia, (Bank of Russia.)



Source: Bank of Russia (2023): External Sector Statistics.

¹⁸ LUKONIN, S. – VAKHARUSHIN, I. (2023): Russian-Chinese Trade and Economic Cooperation amid Anti-Russian Sanctions.

¹⁹ GEMUEVA, K. (2021): Trade and economic relations between Russia and China: Potential for a qualitative shift.

In terms of priority sectors for Chinese investors in Russia, the oil and gas industry is number one investment sector, which receives the most financial flows from China. According to the RAUIE (Russian-Asian Union of Industrialists and Entrepreneurs), other priority sectors are the following:

Agricultural sector, which is in active development. China has recently removed the restrictions on Russian wheat; pork and lamb are also among the notable segments, as well as colaseed, soybean, sunflower, flax, corn, clover, oats, and barley. Chinese investors are likely to invest into production of these agricultural products in Russia, in order to then export them to the Chinese market;

Non-ferrous metals, including zinc, tin, various ferroalloys, copper, gold, which are in high demand in the Chinese market. Consumption of steel, nickel, aluminum, palladium is likely to remain high, requiring significant capital inflows;

Transport infrastructure, as a major trading player such as China needs trade routes, especially when many traditional trade routes have been disrupted, which would ensure a steady goods flow. Since sea and air transport is expensive and disrupted, rail and road transportation routes are in high demand, so transport infrastructure projects are among the priorities;

Petrochemistry, closely related to the oil and gas industry, as China actively consumes petrochemical products: from fuel oil and bitumen to polyethylene and polypropylene²⁰.

Other areas attractive to Chinese investment in Russia include real estate, healthcare, logistics and transport.²¹

As for the largest Chinese investment projects, the following can be highlighted. Yamal LNG, the largest investment project in Russia in the past 5 years, was implemented jointly with several Chinese companies. CNPC owns 20% of the shares, 9.9% - the Silk Road Fund. In order to enter the project, the companies had to raise financing, which was provided by a syndicate of Chinese banks led by the State Development Bank of China. The total investment amounted to about USD 20 billion. The deal was closed in 2014-2015.

Sibur, also linked to a major investment project, deals with the largest company in the Russian petrochemical industry. Sinopec bought 10% share in the holding company for USD 1,338 billion in 2015. After 2016, the Silk Road Fund also bought a share of 10%.

The implementation of Zapsibneftekhim, a major USD 9.5 billion investment project in Tobolsk, required a significant amount of financing, which was provided by Chinese banks raised by Sinopec and the Silk Road Fund. Sinopec also participated in Sibur's 25% + 1 offer for a synthetic rubber production plant, which produces mainly for the Chinese market.

Arctic LNG-2 is a natural gas extraction and LNG production plant owned by Novatek, with 10% shares acquired by CNOOC and CNODC, CNPC's subsidiaries. The investment by these companies is estimated to be around USD 25 USD billion.

JSC Udmurtneft has been one of the first major Chinese investment projects in oil and gas industry in Russia. 99.49% of shares of Udmurtneft were acquired by Sinopec in 2006 for USD 3.5 billion. However, Sinopec sold a 51% share to Rosneft, for USD 1.75 billion. At the time, such deals helped Sinopec enter the Russian market and gain Rosneft as a business partner.

20% of JSC Verkhnechonskneftegaz, a major oil and gas project owned by Rosneft, was bought in 2017 by Beijing Gas Group Company Limited for USD 1.1 billion as part of China's strategy to replace coal energy with gas.

Other notable investment projects include Baltic Pearl (real estate, USD 1 billion invested), Great Wall (automotive industry, USD 500 million), Huaming Park (USD 300 million), Voentorg building (real estate, USD 172 million), Russia Forest Products (wood processing, RUB 12 billion).

²⁰ Russian-Asian Union of Industrialists and Entrepreneurs, (2022).

²¹ LUKONIN, S. – VAKHARUSHIN, I. (2023): Russian-Chinese Trade and Economic Cooperation amid Anti-Russian Sanctions.

As we see, even if cooperation in agriculture, transport infrastructure, real estate and other sectors exists and can gain a strong momentum, the main Chinese investment projects are mainly concentrated around the oil and gas, and petrochemical sectors. As many Western partners sell their shares in Russian oil, gas, and petrochemical companies, Chinese investors may be interested in acquiring them.²²

Thus, it can be noted that both China and Russia have a number of reasons to be interested in increasing mutual trade and investment. For Russia, China now represents a major and one of the few remaining markets for its abundant energy and other natural resources, which cannot be now exported to the EU. China is also an indispensable source of machinery, which is no longer supplied by Russia's Western partners. For China, which consumes huge amounts of energy and is in process of reducing coal consumption, Russia is an important source of oil and gas²³. Thus, the economic partnership remains strong despite international challenges.

However, the perception of the state of Sino-Russian relations as experiencing an unprecedented rise and strengthening has its limits, and the cooperation between the two countries has its problems.

5 Limits of the friendship

First of all, the Sino-Russian partnership is currently more disproportionate than ever before. While Russia is under pressure from Western sanctions and a ban on oil and gas imports, China has taken a position of strength, by conducting tough price negotiations.²⁴ In the long term, this could undermine trade relations between the two countries.

At the same time, also in the context of sanctions, China has become virtually the only major supplier of machinery, equipment, and spare parts to Russia. Furthermore, despite Russia's 43% growth in exports to China, Russia is still not among its largest trading partners. Indeed, China is deeply integrated into the global trading system, and therefore other countries, such as Vietnam, Malaysia, and Brazil import more to China than Russia.²⁵ The fact that China has been Russia's number one trading partner for many years underlines the disproportionate nature of economic relations between the two countries.

Already existing problems, such as unstable tax laws, the ruble exchange rate, the quality of production in most industries, the language barrier, the lack of infrastructure and transport routes, are exacerbated by Russia's unstable investment climate due to its unstable geopolitical position. It is very difficult to make any predictions about future economic development of Russia, which may discourage Chinese investors²⁶.

Even if they do not stop China from cooperating with Russia, Western sanctions are also a problem. China has not officially joined the sanctions against Russia, but, being deeply integrated into the global economy, many of its multinational companies, which cautiously cooperate with Russia, are concerned about sanctions^{27,28}. Chinese banks are less likely to provide investments in such circumstances²⁹. Indeed, following Russia's conflict with Ukraine, the Asian Infrastructure Investment Bank, of which China is one of the largest shareholders, and

²² Russian-Asian Union of Industrialists and Entrepreneurs, (2023).

²³ LUKONIN, S. – VAKHARUSHIN, I. (2023): Russian-Chinese Trade and Economic Cooperation amid Anti-Russian Sanctions.

²⁴ LO, B. (2023): The Sino-Russian Partnership Assumptions, Myths and Realities.

²⁵ LUKONIN, S. – VAKHARUSHIN, I. (2023): Russian-Chinese Trade and Economic Cooperation amid Anti-Russian Sanctions.

²⁶ DMITRIEVA, A. (2016): Key aspects of the international investment cooperation of Russia in the context of the expanding Russian-Chinese economic cooperation.

²⁷ LUKONIN, S. – VAKHARUSHIN, I. (2023): Russian-Chinese Trade and Economic Cooperation amid Anti-Russian Sanctions.

²⁸ GABUEV, A. (2016): Friends with benefits? Russian-Chinese Relations After the Ukraine Crisis.

²⁹ (Korostnikov et al., 2018) KOROSTNIKOV, M. et al. (2018, October 24): The new Chinese bias.

the New Development Bank have announced that they will suspend new loans to Russia. Several major national banks of China have refused to finance imports from Russia. Some private companies have also suspended their cooperation with the country. However, the scale of these measures is still difficult to assess³⁰.

It can be noted, that due to the close relationship with Russia, which peaked at the end of February 2022, China has suffered significant reputational damage, an issue that is not limited to the geopolitical spheres, but also has an impact on other areas, such as the economic growth of the country, which is a major player in the global trading system.³¹

Conclusion

Sino-Russian relations, which have followed a relatively smooth development path since the 1990s, now have to face the consequences of Russia's conflict with Ukraine. It may be too early to draw any definite conclusions, but it can be noted that economic cooperation, both in terms of mutual trade and investment between the two countries is on the rise. This shows that China has once again taken a pragmatic approach to its geopolitical and economic choices: it has decided to take advantage of the inflow of relatively cheap energy resources from Russia, as well as the opportunities in its market left by a large number of Western companies.

Russia also sees China as an important contributor to its economy, particularly in the context of sanctions. Since both countries tend to take a pragmatic approach and have economic benefits from cooperation, it is likely that their economic partnership could be further strengthened. However, it is important to note that the Sino-Russian economic partnership already faced certain problems in the past, and sanctions imposed on Russia have created additional problems and further intensified the existing ones.

For the time being, China seems to maintain a neutral stance towards Russia on the geopolitical level, and is interested in developing economic relations. Although some Chinese banks have followed the sanctions, as well as a number of companies, overall economic cooperation is on the rise. The conflict in Ukraine may even become an important factor for closer ties between China and Russia even closer, as in 2014; however, much will depend on its duration and outcome.

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THE IMPACT OF THE COVID-19 OUTBREAK ON THE SHANGHAI STOCK EXCHANGE COMPOSITE INDEX¹

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Abstract: The COVID-19 outbreak started as a health crisis, but very quickly it evolved into an economic, financial, and social crisis as well. The aim of this paper is to examine the impact of the COVID-19 outbreak on the Chinese stock market, by analyzing the performance of the Shanghai Stock Exchange Composite Index at the beginning of the pandemic. Furthermore, the performance of the Dow Jones Industrial Average (DJIA) and FTSE 100 indexes was analyzed in order to determine if the COVID-19 impact was more disastrous for the Chinese stock market or the US and UK markets. The results implicate that even though the outbreak started in China, the DJIA and FTSE 100 suffered significantly greater losses than the SSE Composite Index during the examined period. The drawn lessons from the COVID-19 pandemic and its impact on the global stock markets are a valuable tool for investors, market regulators, financial institutions, and policymakers for the improvement of their response when the next crisis occurs

Keywords: COVID-19, Shanghai Stock Exchange, DJIA Index, FTSE 100 Index, lockdown

JEL: E44, G01, G12

Introduction

The first official COVID-19 case was reported on 31 December 2019 in Wuhan, China, and as of 18 May 2023, there was a total of 688.621.757 confirmed cases with 6.876.798 deaths.² Even though many health experts had been warning that another pandemic is just a question of time, the world did start to worry even when the coronavirus began to spread across China and other Asian countries. When China on 23 January 2020 imposed a strict lockdown for more than 10 million people in Wuhan, the global community was shocked by this extreme step still believing that this new virus will stay the regional Chinese problem. Until the middle of February, more than 200 cities imposed similar restrictions which slowed down the spread of COVID-19 in China, but the virus rapidly spread around the world and on 11 March 2020, World Health Organization (WHO) declared the coronavirus a global pandemic.

The pandemic did not cause only a global health crisis, but it also triggered global economic, financial, and social crises. The negative consequences for the global economy were massive because the outbreak and lockdown measures started in China, the second-biggest economy in the world and the world manufacturing center. During the lockdown, reduced production and the shutdown of many factories in China disrupted global supply chains and led to a dramatic decline in economic activity. For the first time since 1990 (when China started to publish quarterly data) China's Gross Domestic Product (GDP) recorded a negative

¹ Project VEGA no. 1/0732/21 „New normal" and the changing position of the PRC in the world economy (2021-2023)

² WORLD HEALTH ORGANIZATION (2023): WHO Timeline - COVID-19.

growth rate of 6.8% in the first quarter of 2020.³ But China was not the only one suffering the economic losses. Worldwide introduced lockdowns, social distancing measures, and travel bans pushed the GDP growth of the largest economies into negative territory.

The negative consequences of the introduced measures on the global economy have deteriorated investors' expectations of companies' future earnings, which led to panic selling across the stock markets. Besides obvious economic and financial losses, the reason for the unprecedented negative stock market response was the fact that investors were taken over by feelings of great uncertainty, anxiety, and fear of the new deadly virus. During the first half of 2020, the prices and the volatility in the stock markets were strongly influenced by COVID-19-related news and data. The focus of this paper is on the performance of the Shanghai Stock Exchange Composite Index during the COVID-19 outbreak and a comparison with the performance of the DJIA and FTSE 100 during the same period.

Literature review

China's experience with COVID-19 very quickly attracted the attention of many scholars because China is the second largest economy in the world and it is the first country to experience a COVID-19 outbreak. Both scholarly and popular sources followed the coronavirus pandemic development and analyzed its health, economic, financial, political, and social impact. The Chinese stock market was the first one to experience an immensely negative reaction to the fear and uncertainty caused by the pandemic and the strict measures related to it.

The study by Liu⁴ found that the COVID-19 outbreak had increased investors' fear of uncertainty, while general sentiment sank during the pandemic according to Baig⁵. Negative COVID-19 pandemic-related news triggered a collapse in the Chinese stock markets.⁶ The results of the study by Davis⁷ show that leading Chinese newspapers attributed all larger daily moves on Shanghai Stock Exchange in the period between 2 January and 30 April 2020 to the pandemic-related news. From 1990 till the COVID-19 outbreak, leading Chinese newspapers did not attribute any single such move to the pandemic or other infectious diseases news. Similar findings were confirmed by Baker⁸, none of the previous infectious disease outbreaks news (including the Spanish Flu) had such a deteriorating impact on the stock markets as COVID-19-related news. Bermingham⁹ found that the pandemic had a general negative impact on the stock prices listed on Shanghai Stock Exchange (SSE), Shenzhen Stock Exchange (SZSE), and ChiNext. Though, sectors such as telecommunications, healthcare, and IT not only helped to fight the pandemic but also gained positive returns despite lockdown and social distancing measures.¹⁰ Sectors that suffered the most because of pandemic-induced measures are the transportation, retail, tourism, energy, and real estate sector.¹¹ The study by Wang and Yu¹² also shows positive returns for the medical and food industries and negative returns for the energy and public utility industries.

³ CROSSLEY, G. – YAO, K. (2020): Hobbled by coronavirus, China's first-quarter GDP shrinks for first time on record.

⁴ LIU, H. et al. (2020): The COVID-19 Outbreak and Affected Countries Stock Markets Response.

⁵ BAIG, A. S. et al. (2021): Deaths, panic, lockdowns and US equity markets: The case of COVID-19 pandemic

⁶ AVALOS, F. - ZAKRAIŠEK, E: (2020). Covid-19 and SARS: what do stock markets tell us?

⁷ DAVIS, S. J. et al. (2021): Stock Prices and Economic Activity in the Time of Coronavirus

⁸ BAKER, S. R. et al. (2020): The Unprecedented Stock Market Impact of COVID-19.

⁹ BERMINGHAM, F. – WANG, O. (2020): Coronavirus: China's economy suffers dramatic collapse in January, February in warning to rest of world.

¹⁰ LIEW, V. K. (2021): Impact of Wuhan Lockdown in Early Stage of COVID-19 Outbreak on Sector Returns in Chinese Stock Market.

¹¹ HUANG (2020).

¹² WANG, H. - YU, Z. (2022): Chinese Stock Market's Reaction to COVID-19 in the Short and Long Run.

This paper extends the existing literature on the COVID-19 pandemic and its impact on certain stock markets and reveals if the COVID-19 outbreak had an equally negative impact on all examined markets.

Data and methods

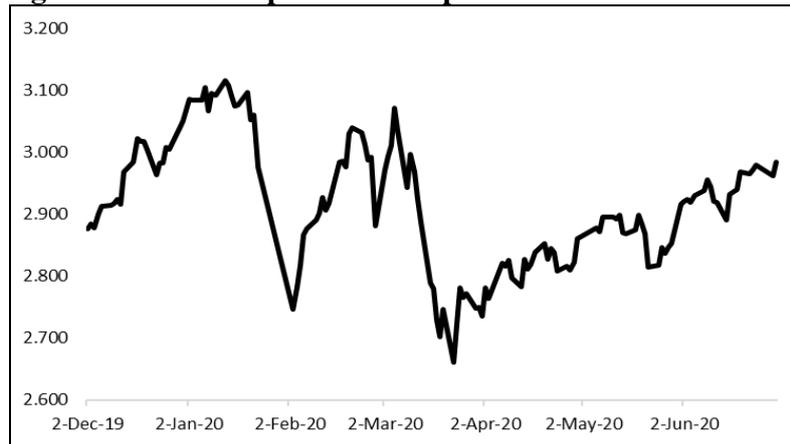
In this paper, we examined the movement of the Shanghai Stock Exchange Composite Index (SSE Index), the benchmark of the Shanghai Stock Exchange which is the third biggest stock market in the world, after the New York Stock Exchange and the NASDAQ. SSE Composite Index includes all stocks, A class (quoted in yuan and available only to domestic investors) and B class (quoted in USD and available to domestic and international investors). The studied dataset comprehends a period between 1 December 2019 and 30 June 2020, which covers the early stage of the pandemic and the global outbreak period when the worldwide lockdown measures were introduced. To compare the timing and the magnitude of the stock markets' reaction we also gathered the data on Dow Jones Industrial Average (DJIA), as a proxy for the US market, and FTSE 100, as a proxy for the UK market for the same period. The data on all indices were downloaded from Investing.com, a global financial website offering market quotes. The most relevant COVID-19 information was obtained from the World Health Organization (WHO), the Center for Disease Control and Prevention (CDC), and popular sources that covered the pandemic development.

As with any other study, this study has certain limitations. The analysis focused only on the chosen three stock markets and each of them was represented only by one index. Also, each index consists of a certain number of sectors that could be analyzed separately. This study examined the period at the beginning of the pandemic but other stages of the pandemic had a different impact on the stock markets. All mentioned limitations are a direction for future research.

Results

The first significant day loss (2.75%) for the SSE Composite Index was on 23 January 2020, when China imposed a strict lockdown for 11 million people in Wuhan. Due to the Chinese Spring Festival Holidays, the Shanghai Stock Exchange was closed until 3 February when it reopened and recorded the biggest daily slump of 7.72% in the examined period. During March 2020, SSE Composite Index experienced the second round of correction amid fear of global crisis, rising unemployment, and supply chain disruption. Until 23 March 2020, the value of the SSE Composite Index dropped by 15% from its peak value on 13 January 2020.

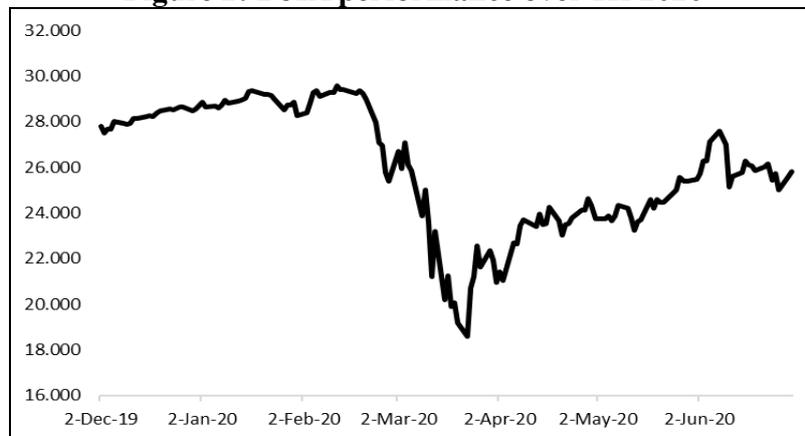
Figure 1: SSE Composite Index performance over 1H 2020



Note: Author's illustration.
Source: www.investing.com

The Dow Jones Industrial Average (DJIA) hit its all-time high time value on 12 February 2020, but already in the next few days, the sentiment turned into negative territory. During March DJIA experienced some of the greatest daily losses in history (16 March -12.93%, 12 March -9.99%, 9 March -7.79%, 18 March -6.3%). In less than 6 weeks (the lowest point was reached on 23 March) DJIA collapsed by almost 40%. After hitting the bottom, the market started to recover encouraged by quick and generous support from the government and the central bank.

Figure 2: DJIA performance over 1H 2020



Note: Author's illustration.
Source: www.investing.com

The UK main index FTSE 100 responded in a very similar pattern as DJIA. At the beginning of 2020, it climbed to its all-time high value of 7,674.56 on 17 January but the panic started in the second half of February. The massive correction culminated in March when FTSE 100, same as DJIA, experienced some of the greatest daily losses in history (12 March -10.87%, 9 March -7.69%, 27 March -5.25%, 18 March -4.05%). By 23 March, the index plummeted 35% from its all-time high value recorded in January 2020.

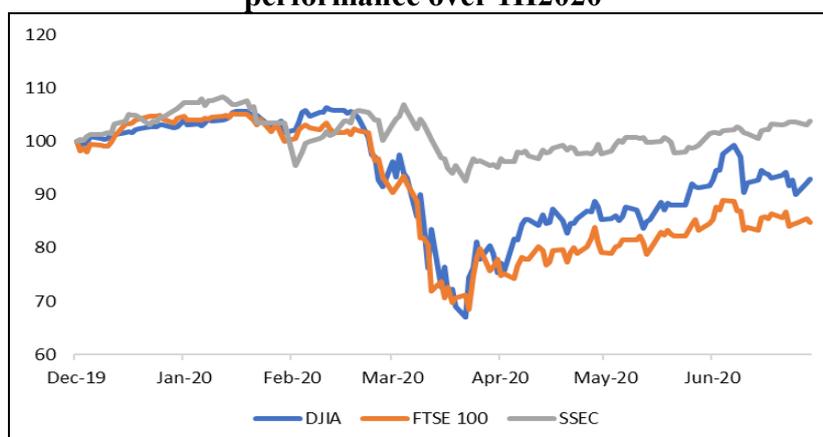
Figure 3: FTSE 100 performance over 1H 2020



Note: Author's illustration.
Source: www.investing.com

Figures 1, 2, and 3 show that the COVID-19 outbreak had a negative impact on all three examined indexes, but the DJIA and FTSE 100 experienced significantly greater decline than the SSE Composite Index (Figure 4). Over the examined period the volatility climbed to the record levels, which is more emphasized in the US and UK markets.

Figure 4: Comparison of the SSE Composite Index, DJIA, and FTSE performance over 1H2020



Note: Author's illustration.
Source: www.investing.com

Discussion

The aim of this study was to examine how did Chinese stock market react to the COVID-19 outbreak and the measures related to it. The Shanghai Stock Exchange Composite Index was taken as a proxy for the Chinese stock market and for comparison reasons, we analyzed the Dow Jones Industrial Average (DJIA) and FTSE 100 as proxies for the Western markets.

Even though the first COVID-19 case was reported in Wuhan at the end of December 2019 and spread from there to the other Chinese provinces during the first week of January, the first serious negative reaction of the SSE Composite Index was on 23 January, when the government imposed a strict lockdown in Wuhan and other cities in the Hubei province. Over the next days, the Shanghai Stock Exchange was closed due to the Spring Festival Holiday which was extended to 2 February as a measure to contain the outbreak. When the market

reopened on 3 February, panicked investors rushed to sell the stock across all sectors bringing the SSE Composite Index down by 7.72%, the biggest daily decline during the examined period. While the virus continued to spread globally, the number of new cases in China started to decline, and the trading on the SSE became less volatile with signs of slow recovery. The optimism did not last long, the high contagiousness and rapid spread of the virus forced worldwide authorities to impose strict lockdown and social distancing measures. Amid fear of the virus, and its health, social, economic, and financial consequences the global stock markets crashed in March 2020. China, as one of the key players in the global economy, could not ignore what was happening in the global stock markets and the SSE Composite Index was again under selling pressure. After the correction in March, the index lost 15% of its value from its peak in January. Despite the negative performance during the first quarter of 2020, the SSE Composite Index ended the year with a gain of 12.5%.

The COVID-19 outbreak did start in China, but it hit the rest of the world harder than China itself. China shocked the world with a swift introduction of a strict lockdown for millions of people, but the measure worked and only in a few weeks China managed to slow down the spread of the virus. During March, the epicenter of the pandemic quickly moved to the United States and Europe which had devastating effects on their health systems, economy, and consequently on the stock markets' performance. The data from our study show that the US and UK stock markets did not anticipate the health crisis in China until the second half of February, even though the virus already spread globally. The DJIA and FTSE100 started to respond negatively to the COVID-19 news only at the end of February, but the catastrophic correction followed in the next weeks. Nationwide lockdowns and social distancing measures increased uncertainty and panic among investors which led to historic losses during March 2020. After triggering multiple circuit breakers (temporary measures that halt trading to curb panic-selling on the stock markets), the DJIA collapsed and by 23 March it lost nearly 40 % of its value from the all-time high level in February. FTSE100 hit the bottom on the same day, dropping 35% from its all-time high level in January.

Our analysis suggests that the negative impact of the COVID-19 outbreak on the SSE Composite Index was moderate compared to the impact on the DJIA and FTSE100. There are a few potential explanations for a such different response. First, at the beginning of the pandemic, the rest of the world believed or hoped that the new deadly virus will remain a Chinese regional issue. Even though the virus already circulated for 2 months, the economies and stock markets seemed unprepared for the new health crisis, and the delayed reaction turned into a sudden collapse. Second, the investors' structure in these markets differs significantly. Chinese stock market is dominated by individual investors who are less efficient and informed than better-informed and equipped institutional investors who dominate in the Western market. Additionally, A-class stocks on the SSE are available only to domestic investors while such practice does not exist in the Western markets. And third, Chinese economic growth was already in the pre-pandemic 2019 the weakest one in 20 years while European and US central banks through their interventions strived to preserve the economic growth of their economies.

Conclusion

The aim of this study was to give an insight into how the COVID-19 outbreak impacted the performance of the SSE Composite Index and to make a comparison with the performance of the DJIA and FTSE 100 during the same period. The findings show that the pandemic outbreak had an overall negative impact on the examined indexes, but the magnitude of the impact differs significantly. As the outbreak started in China, the decline of the SSE Composite Index started already in January and at the beginning of February, which was followed by a few weeks of careful recovery. The virus spread rapidly over the world

and the global markets, including the US and UK, could not ignore anymore the existence of the virus. Extreme levels of uncertainty, fear, and panic that overwhelmed investors caused unprecedented losses in the stock markets during March 2020. The crash of the global stock markets pushed the SSE Composite Index again into negative territory, but its response was rather modest compared to the meltdown of the DJIA and FTSE 100. After the indexes reached their bottom, the markets calmed down and started to recover due to immediate and generous government and central banks' support, followed by vaccine development. Understanding how the COVID-19 outbreak impacted the stock markets and indexes can improve investors', financial regulators', and policymakers' response to another similar crisis in the future.

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Abstract: The objective of this paper is to explore the available avenues for mitigating cyber risks by means of cyber risk insurance. The research primarily concentrates on delineating the diverse categories of cyber threats, employing the methodology advocated by the European Agency for Cybersecurity. Furthermore, the escalation of cyber risk stemming from the Covid-19 pandemic and the conflict in Ukraine is examined through an analysis of the FBI Internet Crime Report. The culmination of this investigation underscores the mounting significance of cyber security as the fundamental cornerstone of a flourishing digital economy.

Keywords: cyber risks, cyber insurance, cyber security

JEL: G22

Introduction

Cyber risk is a significant and timely subject intricately linked to the expansion of the digital economy and the advancements in Industry 4.0 technologies. The heightened reliance on digital data and information in business operations exposes entities to increased vulnerabilities to cyber threats. These threats jeopardize the confidentiality, availability, and integrity of digital information, thereby imperiling businesses and organizations operating within the digital economy. Moreover, it is essential to recognize the escalating repercussions of cyber risks. These encompass not only potential data and information losses but also the perils of reputational harm, supply chain disruption, and consequential financial setbacks. Safeguarding digital data and information presents an immediate challenge for businesses, necessitating their proactive response. Enterprises must prepare themselves for an upsurge in cyber attacks, with cyber risk insurance expected to become an indispensable component of risk management strategies for digital economy enterprises in the foreseeable future.

This paper focuses on the issue of cyber risk and insurance options for mitigating this type of risk. The objective of this paper is to characterize the most current types of cyber risks and also explore the current trends in cyber risk insurance. The final section of the paper is dedicated to examining the development of cyber risk in relation to the Covid-19 pandemic and the ongoing armed conflict in Ukraine.

1 Cyber risk

Since the emergence of the Fourth Industrial Revolution, commonly referred to as Industry 4.0, the global economy has undergone a transformation from a traditional economy based on fundamental production factors to a digital economy. The concept of a digital economy encompasses the combination of mobile technologies, internet connectivity, and the

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utilization of cloud applications for data storage². Businesses operating in the digital economy leverage advanced robotics technologies in automated manufacturing processes, and managerial decision-making is based on the analysis of large volumes of data (big data)³. However, the advent of the digital economy not only brings advantages in terms of new opportunities for development and innovation utilization but also creates a space for the emergence of new, significant, and previously unknown threats⁴. Data and digital information currently represent a source of competitive advantage for businesses but also a source of serious risks. Digital information is exposed to the loss of confidentiality, availability, and integrity⁵. Events that jeopardize digital data and information are referred to as cyber threats, which give rise to cyber risk⁶.

When defining cyber risk, it is crucial to acknowledge that cyber risk does not encompass all the risks to which digital data and information may be exposed. Cyber risk represents the risk specifically arising from cyber threats⁷. Cyber risk can be characterized as the potential for financial loss or damage to reputation resulting from the failure of IT systems⁸. In 2022, the European Union Agency for Cybersecurity (ENISA) compiled a list of the eight most current cyber threats⁹:

1. Ransomware¹⁰ - it represents a type of attack where attackers prevent access to data and demand a ransom for restoring access. In 2022, such attacks were the primary cyber threat. These attacks are continuously becoming more sophisticated, and the ransom demands are increasing. The average ransom payment more than doubled between 2019 and 2020 (from 71,000 euros to 150,000 euros).

2. Malware¹¹ - it is a type of malicious software (viruses, worms, trojans, spyware). Malware attacks started to increase with the end of the Covid-19 pandemic, related to the return of work-life to offices. During the first half of 2022, there were more malware attacks recorded than in the previous four years.

3. Social engineering threats¹² - attackers attempt to exploit human error to gain access to digital information and data. The most common attack of this kind is phishing (email) or smishing (SMS). Nearly 60% of digital security breaches in Europe are caused by social engineering elements.

4. Data breach threats¹³ - these represent attacks aimed at data sources with the goal of gaining unauthorized access to data for subsequent misuse.

5. Data access restriction threats¹⁴ - the objective of this type of attack is to prevent users from accessing data or services. It is one of the fastest-growing cyber threats, currently being utilized in the Russian-Ukrainian cyber warfare, but the number of such attacks increased

² VAN ARK, B. (2016): The productivity paradox of the new digital economy, p. 3.

³ SHAW, S. - ROWLAND, Z. - MACHOVA, V. (2021): Internet of Things smart devices, sustainable industrial big data, and artificial intelligence-based decision-making algorithms in cyber-physical system-based manufacturing, pp. 106-116.

⁴ EVANS, P. C. - ANNUNZIATA, M. (2012): Industrial internet: Pushing the boundaries, pp. 488-508.

⁵ SAMONAS, S. - COSS, D. (2014): The CIA strikes back: Redefining confidentiality, integrity and availability in security, pp. 21-45.

⁶ LALLIE, H. S. et. al. (2021): Cyber security in the age of COVID-19: A timeline and analysis of cyber-crime and cyber-attacks during the pandemic.

⁷ LEE, I. (2021): Cybersecurity: Risk management framework and investment cost analysis, pp. 659-671.

⁸ NYGARD, K. E. et. al. (2021): Dimensions of cybersecurity risk management, pp. 369-395.

⁹ European Cyber Security Agency. (2022): ENISA Threat Landscape 2022

¹⁰ European Cyber Security Agency. (2022): ENISA Threat Landscape 2022, p. 43.

¹¹ European Cyber Security Agency. (2022): ENISA Threat Landscape 2022, p. 49.

¹² European Cyber Security Agency. (2022): ENISA Threat Landscape 2022, p. 54.

¹³ European Cyber Security Agency. (2022): ENISA Threat Landscape 2022, p. 63.

¹⁴ European Cyber Security Agency. (2022): ENISA Threat Landscape 2022, p. 69.

already during the Covid-19 pandemic when vaccination registration websites, for example, became targets of such attacks.

6. Internet availability threats¹⁵ - it involves the physical takeover and destruction of internet infrastructure.

7. Disinformation/misinformation¹⁶ - the use of social media to spread false information. Deepfake technology is utilized, allowing the creation of fake audios, videos, or images that are nearly indistinguishable from genuine ones.

8. Supply chain attacks¹⁷ - attacks targeting the relationships between organizations and suppliers. Organizations are increasingly vulnerable to such attacks due to complex systems and a large number of suppliers.

The broad nature of cyber threats means that an organization operating in any sector of the economy can be at risk. According to the European Union Agency for Cybersecurity (ENISA), the sectors most affected by cyber threats during the period from June 2021 to June 2022 were as follows:

Table 1: Sectors affected by cyber threats in 2021 and 2022.

<i>Sector of the economy</i>	<i>% number of recorded threats</i>
Public administration and state institutions	24
Digital service providers	13
General public	12,4
Services	11,8
Finance and banking	8,6
Healthcare	7,2

Source: own processing according to ENISA (<https://www.enisa.europa.eu/publications/enisa-threat-landscape-2022>).

The consequences of a cyber attack can be devastating for a business, rendering it unable to continue its operations. The most common consequences of hacker attacks include¹⁸:

- viruses or hacker attacks that can disrupt client transactions,
- damage or destruction of data,
- theft of intellectual property (know-how),
- loss of customers, suppliers, or key production data,
- liability to third parties, including associated fines, costs, and damages,
- damage to reputation as a result of a cyber attack,
- loss of profit or income.

Cyber risk is undoubtedly one of the most pressing and dangerous risks for all types of organizations. Cyber risk is a crucial topic, especially in the field of workplace safety and information security¹⁹. One way to protect against this threat is through cyber risk insurance, which will be further discussed in the following chapter of this paper.

¹⁵ European Cyber Security Agency. (2022): ENISA Threat Landscape 2022, p. 78.

¹⁶ European Cyber Security Agency. (2022): ENISA Threat Landscape 2022, p. 82.

¹⁷ European Cyber Security Agency. (2022): ENISA Threat Landscape 2022, p. 89.

¹⁸ KIMANI, K. - ODUOL, V. - LANGAT, K. (2019): Cyber security challenges for IoT-based smart grid networks, pp. 36-49.

¹⁹ STRUPCZEWSKI, G. (2021): Defining cyber risk.

2 Insurance of cyber risks

The cyber risk coverage market is a very fast growing market worldwide. The number of cyber attacks is constantly increasing and therefore it is very important especially for businesses (whether small, medium or large) to take out insurance to cover the threat of cyber attacks. We assume that in the future the number of attacks will be even higher with the development of new technologies such as ChatGPT, IoT (Internet of Things) and others.

The emergence of this type of insurance was driven by the rapid growth of electronic services, the internet, computer databases, and data sharing²⁰. Currently, the majority of residents in developed countries use smartphones with social media platforms (Facebook, Twitter, Google Plus) that serve as gateways to their personal data. Cloud services also provide a space for hackers attempting to gain access to stored data. The human factor poses a significant threat to businesses, as attacks targeting their employees are the most exploited and easiest to execute (e.g., phishing). In private companies, cost optimization and data recording enhancements are underway to support better managerial decision-making through Big Data analytics. This involves processing data into useful and comparable transparent outputs. Undoubtedly, such databases offer immense possibilities but also contain a vast amount of sensitive company-specific information, thus opening doors for hackers. Many insurance companies have also adapted to the emerging trend of digitization, expanding their portfolio of insurance products, particularly after the adoption of GDPR legislation²¹, to include cyber risk insurance.

The purpose of cyber risk insurance is to provide protection and mitigate damages after a company is attacked by hackers or an organized group of hackers that jeopardize the normal operations of the company. The scope of insurance coverage varies for each insurance company or insurance product. Generally, cyber risk insurance covers the following²²:

- business interruption costs caused by hacker attacks (data recovery, ransom payment, system restoration, payment for IT experts, etc.).
- Costs related to damage to reputation (legal defense in case of lawsuits from clients, business partners, and suppliers, prevention of damage to the reputation of an individual or the entire company, PR recommendations, etc.).

The insurance premium is determined by the level of security measures implemented by the company against hacker attacks, the nature of the company's activities, its geopolitical reach, and other factors.

An insurance event is an unforeseen event defined in the insurance policy, upon the occurrence of which the insurer is obliged to pay the insured amount to the policyholder. Examples of insurance events include a company being hacked or targeted by an organized group, loss of personal data, or the initiation of legal proceedings.

In 2020, EIOPA²³ issued a strategy focused on cyber risks in the European insurance market, considering the increasing digitization of the economy, with cyber risks becoming one of the most significant operational risks. The aim of this strategy is to establish appropriate practices for assessing and managing cyber risks and to introduce supervision that ensures the proper functioning of these practices. It also identifies suitable tools for assessing and mitigating the impact of cyber risks and addressing potential systemic threats. This strategy also contributes to a better understanding of contractual conditions and definitions between

²⁰ XU, B. et al. (2014): Ubiquitous data accessing method in IoT-based information system for emergency medical services, pp. 1578-1586.

²¹ AGARWAL, S. et al. (2018): Legislative compliance assessment: framework, model and GDPR instantiation, pp. 131-149.

²² ROMANOSKY, S., et al. (2017): Content analysis of cyber insurance policies: How do carriers write policies and price cyber risk? Available at SSRN 2929137, 2017.

²³ EIOPA (2020): Eiopa strategy on cyber underwriting.

policyholders and insurers and ensures an adequate level and quality of data on cyber incidents. Given that this strategy²⁴ was developed prior to the COVID-19 pandemic, a new three-year program strategy (2021-2023) was developed in 2021, emphasizing digital technologies and sustainable finance to ensure stable and high-quality customer protection supervision. Within this program, discussions are also held on digitalization and cyber risk insurance, emphasizing the implementation of certain supervisory procedures that would maximize the benefits of digitalization while maintaining the current level of protection for all consumers. EIOPA plans to make maximum efforts to support the development of a stable and reliable cyber insurance market that promotes the digital economy and enables the exchange of information on individual cyber attacks and cyber security.

3 The evolution of cyber risk

The evolution of cyber risk and threats is related to technological progress. The Covid-19 pandemic, as well as the current military conflict, certainly had a negative impact on the cyber security of organizations and businesses. The number of victims of cyber attacks has increased sharply since the period before 2019.

The following table compares the number of victims of cyberattacks in the US before the Covid-19 pandemic in 2019 and in the previous year 2022. The data comes from the FBI's Internet Crime Report²⁵. The last column of the table shows the comparison (percentage decrease/increase) of the two years. It is apparent that there has been a significant increase in the number of victims for most types of cyber attacks during and after pandemics. One of the biggest increases is recorded in phishing (162%), which is mainly the result of working from home, which employers had to resort to during the pandemic if they did not want to lose their profit. Phishing attacks are aimed at company employees. With their constant development, they are harder to recognize and are at the same time simple to implement but effective, which is why they are a very frequent choice of hackers. The most common form of phishing is sending fraudulent emails and messages to employees, whose clicking on a link in the message represents a quick path for hackers to information. With this type of attack, a hacker can access sensitive company data as well as personal data of clients, so companies should train their employees and point out the possible risks that phishing hides. Another enormous increase in the number of victims was recorded by investment fraud, which increased by 663%. The biggest decrease was recorded by virus attacks or malware, which nowadays are already considered outdated forms of cyber interest. It is obvious that nowadays the topic of cyber security as well as cyber risk insurance is very important for all companies.

Table 2: Comparison of the number of victims in 2019 and 2022

<i>Type of attack</i>	<i>Number of victims</i>		<i>% Difference</i>
	<i>2019</i>	<i>2022</i>	
Phishing (Vishing, Smishing, Pharming)	114 702	300 497	162
Personal Data Breach	38 218	58 859	54
Extortion	43 101	39 416	-9
Investment scams	3 999	30 529	663
Identity Theft	16 053	27 922	74

²⁴ EIOPA (2020): Eioipa strategy on cyber underwriting.

²⁵ Internet crime complaint center. (2022): Federal Berau of Investigation: Internet Crime report.

Credit Card/Check Fraud	14 378	22 985	60
Other	10 842	9 966	-8
Ransomware	2 047	2 385	17
Malware/Virus	2 373	762	-68

Source: own processing according to the FBI's Internet Crime Report (https://www.ic3.gov/Media/PDF/AnnualReport/2022_IC3Report.pdf).

In the coming years, a further increase in cyber attacks is expected, and it is not excluded that new types of these attacks will emerge, which will be even more serious for society than the ones that currently exist.

Cyber risk insurance is not widely spread in the Slovak market, despite trends in cyber security. Currently, this type of insurance is provided by only two insurance companies - Colonnade S.A.²⁶, a branch of an insurance company from another EU member state, and UNIQA pojišťovna, a.s.²⁷, a branch of an insurance company from another EU member state. However, neither of them is a Slovak insurance company. Prior to the pandemic, Slovak insurance companies also offered cyber risk insurance (such as ČSOB Poist'ovňa a.s. or Kooperativa poist'ovňa a.s., Vienna Insurance Group), but due to low demand for this product in our market, they were forced to stop selling these products.

Conclusion

Cyber risk insurance is a new and continuously evolving product in the global insurance market. Due to the development of digitalization processes and the adoption of the General Data Protection Regulation (GDPR), many insurers, including those in the Slovak market, have decided to create a separate product that provides coverage for cyber attacks, as traditional liability and property insurance did not cover this type of risk. Cyber risk is closely linked to reputation risk, which can be more significant for certain companies than the financial loss itself. Reputation risk involves the possibility of negative public response, public perception, or uncontrollable events that have an adverse impact on a company's reputation and consequently affect its value.

Insurance represents a form of risk diversification and mitigation for the policyholder, mitigating the impact of risks they face. Therefore, every company should consider obtaining cyber risk insurance in the present times, as it protects against threats such as loss of profits, damage to reputation, or loss of know-how. An appropriate example is an e-commerce website that may suffer a significant loss of profits due to cyber attacks, resulting in the inability to sell products for a certain period and reputational damage.

However, the fact remains that the majority of businesses underestimate this type of risk. They operate on insecure networks, lack proper defensive measures such as antivirus software, and so on. Consequently, it becomes very easy for attackers to breach the systems of such businesses, as they inadvertently attract them towards themselves.

During the Covid-19 pandemic, the number of cyber attacks increased significantly due to the fact that the most vulnerable points of companies, their employees, were working from home. This situation represents an increased risk for companies that are unable to control the network through which their employees perform their work. It is therefore important to use secure forms of connection (VPN) when working remotely. However, contrary to expectations

²⁶ Colonnade (2023): Všeobecné poisťné podmienky Pojištění Cyberplis VPP-CyberPlus.

²⁷ Uniqa (2023): Všeobecné poisťné podmienky Poistenie odpovednosti PP-DomovIn.

that the rising risk of cyber attacks would lead to an increase in the number of cyber risk insurance policies, the pandemic had the opposite effect. Even companies that had such insurance policies terminated them because they were unable to afford the premiums, considering it a luxury they could not afford during and after the pandemic.

Building resilience and cyber security remains the foundation of successful digitalization of the economy. While complete protection may never be achievable, every organization can limit the impact of cyber attacks in order to fully harness the benefits of modern technologies. Given the current development of the IT sector, we recommend that businesses combine new technologies with a culture of cyber security to enhance their resilience and preparedness against cyber attacks. It is important for them to invest in cyber security and leverage solutions offered by cyber risk insurance.

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THE IMPACT OF EUROSCEPTICISM IN THE CONTEXT OF EUROPEAN INTEGRATION

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Abstract: European integration is challenged by several factors, including Euroscepticism. The purpose of this article is to provide the impact of Euroscepticism on European integration from students' perspectives using quantitative design research. So, using the data gathered through the questionnaire method from the students at the Institute of Political Science at the University of Presov, a statistical analysis was conducted. The main goal of this study is to assess students' perspectives regarding Euroscepticism in the context of European integration. As a result, the students find themselves being anti-European on questions regarding some political issues. However, they generally see that employment opportunities grow as well as the quality of life.

Keywords: Euroscepticism, European integration, questionnaire, concept, methodology

JEL: F02, N44

Introduction

The definition of Euroscepticism and what it might include are still under discussion, even though the term has been used frequently recently in the media and at political events. Although the idea of Euroscepticism is not new, it has recently begun to influence mainstream European politics. Following the financial crisis in 2008, in particular, interest in this anti-EU tendency developed. Also, in regard to the migrant issue, or after the most prominent moment, which was Brexit, which resulted from the United Kingdom's exit from the European Union in 2016, interest in this issue also increased.

Based on these occurrences, the word "Euroscepticism" is being used more frequently in academic literature and the media, but its conceptualization is still challenging, and there are different ways to explore it. This concept's multidisciplinary character makes it possible to reflect on it in several fields, such as the study of public opinion, political parties, sociology, economics, or history.

The study deals with the theoretical explanation of basic terms, with a focus on the European Union and its place in European integration at the beginning. Euroscepticism as an important factor in European integration, with a brief overview of Euroscepticism in Slovakia, has also taken part in the theoretical part. All theoretical knowledge has been used for empirical research based on the perspective of Euroscepticism from the students at the Institute of Political Science at the University of Presov.

1 European Union and its place in European Integration

The European Union represents perhaps the most significant initiative for regional cohesion in history. It had 25 members in 2004, when it was initially founded by six nations. It has its roots in the post-World War II reconstruction of Western Europe made possible by the United States thanks to the Marshall Plan. Despite being based on international treaties, it has many characteristics of a constitutional system thanks to several factors, including an ideology

that combines federalism and integration, judicial interpretation, the development of political institutions, citizenship, and human rights, as well as the adoption of common policies.¹

The initial aims of European integration were intended to help restore Europe and bring wealth back to that continent while also preserving stability between France and Germany. The integration of economies for products and services, production inputs, and policymaking was intended to accomplish these goals.²

The European Union has a single institutional foundation that erases the legal gap between the supranational and intergovernmental spheres of European integration. The European Commission is often seen as standing in for the goals of supranational integration. The representation of all of Europe's citizens is the aim of the European Parliament. The European Court of Justice as well as the Court of First Instance constitute the Community courts. Their responsibility is to make sure that the law is followed in both the application and interpretation of the Treaty.³

Numerous European elites, who have a strong commitment to the European Union (EU) as a political enterprise, view the EU as an institutional tool for resolving issues that have in the past shattered peace, ruined prosperity, and/or otherwise proven to be insurmountable for national governments. They see it as an endeavor with roots in the European Enlightenment and a resounding "never again" to the destructive wars of the 20th century. While the Union has not yet been able to create a shared European identity, opportunity is on its side.⁴

2 Euroscepticism as an important factor in European integration

One of the most significant issues influencing European integration is "Euroscepticism", which has grown in importance since the United Kingdom left the Union through the Brexit process.⁵

It is first necessary to define the term "Euroscepticism" before examining its impact in Europe. The term "Euroscepticism" can be broken down into "euro," "sceptic," and "-ism." The Greek philosophical schools are where the word "sceptic" first appeared. So, skepticism can be characterized as uncertainty. When "euro" is used alongside it, the convention becomes the European Union or another idea of Europe. The suffix "ism" is tied to political issues and is usually used to denote ideologies.⁶

One of the most famous definitions and typologies of Euroscepticism is the one proposed by Paul Taggart, who was one of the first in 1998 to define it as: *"the idea of conditional or qualified opposition, as well as the idea of direct and unqualified opposition to European integration"*.⁷

There are two varieties of Euroscepticism. Political parties that believe their nations should leave the EU or whose policies toward the EU are equivalent to being against every aspect of European integration. As it is currently conceptualized, there are examples of hard Euroscepticism, which refers to a principled opposition to the EU and European integration, and soft Euroscepticism, which does not have a fundamental problem with European integration or being a member of the European Union. It also occurs when there is a perception that the

¹ COLOMER, J. M. (2016). *The European Empire*, p. 1.

² HIX, S. - HØYLAND, B. (2013). *Empowerment of the European Parliament*, pp. 171-189.

³ TAYLOR, P. G. (1991). *The European community and the state: Assumptions, theories and propositions*, pp. 109-125.

⁴ CHECKEL, J. T. - KATZENSTEIN, P. J. (eds.). (2009). *European identity*.

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⁶ ARATÓ, K. - KANIOK, P. (2009). *Euroscepticism and European Integration*.

⁷ TAGGART, P. A touchstone of dissent: Euroscepticism in contemporary Western European party systems. In: *European Journal of Political Research* 33, 1998, pp. 363-368.

national interest is currently at variance with the trajectory of the European Union or when there are worries about one or more policy areas.⁸

As part of the EU's Eastern enlargement in 2004 and 2007, ten new member countries from Eastern Europe, including Slovakia, joined and were integrated into its institutions and decision-making procedures. Many academics believe that this growth was the European Union's greatest foreign policy accomplishment. However, there is continued growth of Euroscepticism across Europe.⁹

According to P. Kopecky and C. Mudde, Euroscepticism is one of the few varieties of support against opposition to the EU. The researchers make a distinction between the EU as a set of organizations and processes and European integration as a goal. The concept is supported by Eurosceptics, but they disagree with how it is now implemented through treaties, laws, or organizations. Except for "Eurosceptics", there are also "Rejectors of the EU", who oppose the notion of European integration as a whole; "Euro-enthusiasts", who favour the idea and the reality; and "Euro-pragmatists", who oppose the idea of the European Union but support it in its actual form.¹⁰

In traditional definitions and typologies, the distribution of Eurosceptic attitudes is relatively wide, but a clear definition of the pro-European approach is absent. This fact was also pointed out by P. Kaniok, who chose a different approach in his research, and his typology also approximates a pro-European stance. P. Kaniok's typology approximates three types of attitudes towards integration, namely Euroscepticism, Eurogovernmentalism, and Europeanism.

He defines Euroscepticism as *"an idea that rejects the thought that there should be a transfer of political power in the space of the European continent from the nation-state to a transnational body in the intentions of the EU, which would perform the functions of the state and which would have the attributes of the state"*.¹¹ He further specifies that this is *"real opposition to European integration as a value"*.¹²

The concluding description that comes next also refers to Euroscepticism as an attitude. It is Chris Flood's typology, which categorizes Eurosceptics into six main categories:¹³

- Maximalist - extending integration as quickly and far as is practical in the direction of a given model's practical realization.
- Minimalist - accepting the current state of circumstances while attempting to prevent any further integration.
- Rejectionist - open rejection of integration and denial of participation.
- Reformist - approving the advancement of integration, subject to fixing any issues with what has previously been accomplished.
- Revisionist - desiring to step back in time, typically before an agreement's revision.
- Gradualist - adopting integration in advance as long as it happens slowly and gradually.

This typology is different from the ones mentioned above mainly because, in the previous typologies, the attitude could be classified under one type of attitude towards the EU, while in Flood's typology, one can display the characteristics of several of the above-mentioned

⁸ TAGGART, P. - SZCZERBIAK, A. (2002). The Party Politics of Euroscepticism in EU Member and Candidate States, pp. 1-45.

⁹ CIRTAUTAS, A. M. - SCHIMMELFENNIG, F. (2010). Europeanisation Before and After Accession: Conditionality, Legacies and Compliance, pp. 421-441.

¹⁰ KOPECKY, P. - MUDDE, C. (2002). The Two Sides of Euroscepticism Party Positions on European Integration in East Central Europe, pp. 297-326.

¹¹ KANIOK, P. (2006): Evropeanisté, eurogovernmentalisté a euroskeptici: reflexe euroskepticismu a jeho stranických projevů, p. 30.

¹² KANIOK, P. (2006): Evropeanisté, eurogovernmentalisté a euroskeptici: reflexe euroskepticismu a jeho stranických projevů, pp. 94-95.

¹³ FLOOD, Ch. - USHERWOOD, S. (2005): Positions, Dispositions, Transitions: A model of Group Alignment on EU Integration, p. 6.

attitudes. It is also worth mentioning the fact that the author avoided addressing Euroscepticism as a separate type in the typology.

Since healthcare is a national matter for the states, the EU only has a limited amount of authority in this area. The EU cannot respond in a coordinated, cohesive manner in some other sectors too, since they fall outside of its legislative purview, including corporate regulations, humanitarian assistance, and health management. Some political parties utilized this to support their viewpoint based on these EU flaws, even though they had previously been using rhetoric that was anti-EU.¹⁴

Two key concepts are inherently linked to integration itself. The process of "deepening" enables the EU to develop common policies and strategies (e.g., common agricultural policy, foreign and security policy, etc.) and "widening", which is the process of spatial expansion of the EU by increasing the number of member states. Both processes of deepening and widening are complexly interconnected, and thanks to the process of differentiation, together with growing competences with EU membership, European integration becomes less uniform. As a result of different historical and economic processes, the search for a balance between the processes of expansion and deepening is a natural part of the process of European integration.¹⁵

The European Union is characterized by a few contradictions. One of them is the simultaneous movement to centralize and decentralize contradictions. In addition, there are current trends not only in Euroscepticism but also in Europhobia.

There are movements of minority nationalism that emerged through Europhobia and state nationalism that emerged through Euroscepticism and xenophobia, as well as a tendency for areas and ethnoterritorial minorities to place less emphasis on sovereignty. Although all these terms are kinds of skepticism, xenophobia and Europhobia constitute the most intense displays, and even though they are all forms of skepticism, they do not all have the same meaning.¹⁶

3 Euroscepticism in Slovakia

Other researchers discuss the causes of Euroscepticism, focusing on institutional factors, such as distrust of European institutions; cultural factors, for instance, concerns about cultural identity; and economic factors, such as fear of economic and social expenses. Therefore, Euroscepticism has a variety of forms. Furthermore, and this is very important, the domestic political environment must be considered when discussing Euroscepticism.

Slovakia has always been a country with a strong pro-European perspective, both among elites and the general population. However, two different types of Euroscepticism have been visible since the 2012 elections. The SNS theory, which portrayed the EU as an enemy, was the first. Foreign analysts anticipated that this rhetoric would emerge much sooner, just after the admission of post-communist nations to the EU, and that it would somewhat mirror the division of the world into victors and losers in the revolution. The SaS party, for instance, exhibits a different side of Euroscepticism. Liberals in Slovakia and other opponents of European integration reject the negative connotation of the term "Euroscepticism." However, "*only a thin line separates constructive Euro-realism from mobilization through anti-EU resentments*".¹⁷

4 Methodology

First, the terms "Euroscepticism" and "European integration" and their relationship have been briefly discussed within the context of the study. Considering recent advancements and

¹⁴ SAMADASHVILI, S. (2020): A brave, post-COVID-19 Europe.

¹⁵ DOSTÁL, P. (2010): Multi-Speed European Union: Differentiated Integration and Spatial Development.

¹⁶ OLSSON, A. (2009). Euroscepticism Revisited - Regional Interest Representation in Brussels and the Link to Citizen Attitudes towards European Integration, pp. 1-44.

¹⁷ GYARFÁŠOVÁ, O. (2014): Euroskepticizmus má veľa podôb.

the literature evaluation, the questionnaire survey has been chosen. Students at the Institute of Political Science at the University of Presov were asked to complete the questionnaire. The reason for choosing such a sample was due to their greater interest in European Union issues and their greater relevance to contemporary international concerns.

In this regard, the following research question has been proposed:

What are university students' perspectives regarding Euroscepticism in the context of European integration?

The type of *quantitative analysis* used is the research approach, since it is most frequent in the social sciences for gathering a large sample of data. To achieve broad acceptance, the research questions have been made as general as possible. The research findings will determine whether any of the established variables that are intended to quantify the degree of Euroscepticism were successfully identified.

This study aims to demonstrate that Euroscepticism can be divided into different components and that these variables can be identified using a questionnaire method. Surveys can identify the general tendency of a group of people. It has been established that statistical analysis can support the elements used to explain Euroscepticism in the literature. After gathering the questionnaire's responses, the data were entered into the statistical program SPSS. The survey enabled 238 students in part-time as well as full-time forms of study, in the field of political science, to participate. The literature review found two significant groupings of aspects. These elements include financial and political variables as well as cultural and social variables.

For the interpretation, we used the values of correlations, which are between -1 and +1. Although the absolute value denotes the strength, the sign denotes the direction (positive or negative) of the relationships. The coefficient loadings for stronger correlations are closer to -1 and +1. Weaker correlations are almost zero. The main goal of this study was to assess students' perspectives regarding Euroscepticism in the context of European integration.

Accordingly, the following are the hypotheses:

H₀: The assessments of selected variables by participants do not differ considerably from their opinions about the European Union.

H₁: The assessments of selected variables by participants do differ considerably from their opinions about the European Union.

5 Results and Discussion

Before analysing the questionnaire data, the responses were put through a reliability analysis. The survey was found to have a reliability rate of 0.812, as determined by the SPSS program's Cronbach's Alpha reliability.

A total of 28 questions were presented to the respondents to determine their level of Euroscepticism. As a result, it can be observed that the statistical analysis also supports the existence of the two groups of significant variables. The following tables (Table 1 and Table 2) show the findings of the variable analysis, questions that were considered in the creation of variables, and the factor analysis of selected variables.

Table 1: Factor analysis of financial and political aspects

Financial and Political Aspects	Groups of Statements	Variable
	Employment opportunities will grow.	.712
	The quality of life will rise.	.734
	The quality of life will decline.	-.512
	Employment opportunities will decline.	-.631
	The atmosphere of political trust will grow.	-.315
	The atmosphere of political trust will decline.	.532

Table 2: Factor analysis of social and cultural aspects

Social and Cultural Aspects	Groups of Statements	Variable
	More chances will be available for education.	.213
	The assimilation of national identity will grow.	.612
	Foreign language learning will be simpler.	.582
	Fewer chances will be available for education.	-.218
	The assimilation of national identity will decline.	-.318
Foreign language learning will be more difficult.	-.438	

In terms of financial variables, H_0 is rejected, and it can be said that there is a certain disparity between the groups. Participants who have unfavourable attitudes toward the EU are therefore found to have higher views regarding financial problems. The H_0 hypothesis is accepted in the context of the social and cultural variables, and there is no discernible difference between the groups. The H_0 hypothesis has been disproved in the context of the political and financial variables, and it is determined that there is a certain difference between the groups.

Other significant results based on our research include:

- Students see employment opportunities increase as well as their quality of life.
- Students perceive a slight increase in the atmosphere of political trust.
- Unexpectedly, students do not associate increased educational opportunities with European integration.
- Students also see a correlation between learning a foreign language and European integration.

Conclusion

The European Union is neither a nation-state nor an intergovernmental body. Instead, it represents emerging legal stability or a unique regional political and judicial structure. The purpose of this study was to identify the aspects of Euroscepticism by analysing all the concerns that are covered throughout the literature and finding solutions to the issues encountered in the European integration process. This study used statistical methods to show how Euroscepticism can impact European integration from the students' perspectives. The main objective of this study was to demonstrate the relevance of this problem in practice.

In interpreting the study's findings, we sought to determine if the Institute of Political Science at the University of Presov Political Science students were pro-EU or anti-EU. As a result, the students find themselves being anti-European on questions regarding some political issues. However, they generally see that employment opportunities grow in the context of European integration, as well as the quality of life, which was shown by the highest level of coefficient. To sum up, the regulatory work in all areas needs to be done effectively so the goal of European integration can be fulfilled.

Economic integration, an ongoing reduction of economic gaps, or geographic proximity cannot eliminate the disparity in attitudes present throughout the European continent. Investigating the degree of differences in the sociocultural and historical contexts of individual

member states about several controversial topics, such as migration, the protection of external borders, the rights of LGBTQ+ and other minorities, or the currently controversial foreign defence and security policy, would be an interesting way to broaden the research issue.

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ANALYSIS OF STRATEGIC COMMUNICATION OF RELEVANT MINISTRIES ON THE FACEBOOK DURING THE PANDEMIC¹

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Abstract: The COVID-19 pandemic has caught the international community unprepared, not only medically but also politically. During the pandemic, world governments tried to reduce the prevalence of COVID-19 in society through measures that, in hindsight, can be assessed as more or less effective. However, one of the main tools to achieve the compliance with COVID measures has been strategic institutional communication, which has required continuous and effective communication of information to the population. This article is devoted to the analysis of strategic communication of selected Slovak institutions. The aim is to find out whether the strategic communication of the selected institutions on social networks was effective and in line with the best practices in the field. For this purpose, 600 statuses of the selected institutions were analysed in the timeframe from 1 March 2020 to 31 March 2022.

Keywords: strategic communication, COVID-19, disinformation

JEL: I12, E70,

Introduction

The COVID-19 pandemic can be described as the first pandemic in modern times to catch the international community unprepared, despite long-standing warnings from scientists.² However, as the quality and quantity of health systems have increased, the capacity of governments to manage a pandemic has evolved over time. Initially, these were mainly non-medical measures, such as partial lockdowns, the establishment of social bubbles, total or partial travel bans between districts or countries, working and learning from home, or wearing masks. Following the development of the vaccine in 2020, pandemic management was also supplemented by the task of effectively and rapidly vaccinating at least 70% of the population needed to achieve collective immunity, whereas this WHO threshold is doubted.³

However, Slovak institutions, not only by their fault, have not always been able to convince enough citizens to get vaccinated. Data show that in July 2021, 37.38% of the population was vaccinated and in January 2022 only 45.81%. Paradoxically, the Slovak Republic experienced the fastest rate of vaccination at a time when the availability of vaccines and syringes was limited but the interest in vaccination was high. The positive trend continued after the delivery of additional vaccines and capacity strengthening until July 2021, when vaccination coverage slowed down to 40% and de facto stopped below 50%.⁴ As not enough of the population has been vaccinated, Slovakia still does not have collective immunity and vaccination levels are similar to those in Lesotho, Angola or the Central African Republic. The

¹ The article was prepared and published as a partial output from the VEGA project no. 1/0842/21 – *Development of cooperative security and the position of the Slovak Republic*.

² SALAMA, C. (2022): First evaluation of COVID-10 responses, p. 7.

³ PLANS-RUBIÓ P. (2022): Percentages of Vaccination Coverage Required to Establish Herd Immunity against SARS-CoV-2, p. 6.

⁴ OUR WORLD IN DATA (2023): COVID-19 Data Explorer.

Czech Republic, which had a comparable baseline situation to Slovakia, fared better and reached a vaccination rate of 60% of the population.⁵

Samia Tasnim of the Texas School of Public Health argues that activating communication through information technology between at-risk populations and professionals has proven effective in the past, saving resources, and improving patient outcomes. Effective strategic communication set up by ministries on social platforms in conjunction with civil society, NGOs and academia is the key to providing verified information to potential patients and to combat misinformation associated with COVID-19 on social platforms.⁶

This is why we consider the communication of ministries on social networks to be a key aspect of motivating citizens to vaccinate and counteracting misinformation and disinformation in the information space. This article does not set out to prove that strategic communication is the silver bullet for increasing vaccination rates. Pascaline Van Oost of the Université libre de Bruxelles argues that trust in institutions is an important aspect in increasing vaccination rates. In contrast, various forms of incentives such as rewards for vaccination have only a minimal effect.⁷ Of course, trust in government stems from many factors and historical experiences that are difficult to change in a dynamic and uncomfortable environment such as a pandemic. However, strategic communication is key to effective pandemic management, according to Bernadette Hyland-Wood of the Queensland University of Technology, and if set up effectively can increase public trust in government.⁸

In order to analyse the strategic communication of government institutions, a mixed approach was selected using quantitative and qualitative analysis of posts of selected representative institutions on Facebook the social network during the observed period from March 1, 2020, to March 31, 2022. However, the Ministry of Health was not included in this research, as by its nature it communicated most actively mainly through the daily updates on the status of COVID-19 in Slovakia, current measures, practical hygiene guidelines or opportunities for travel between regions and abroad. The aim of this article is to analyse selected institutions that are not primarily involved in health but rather in strategic communication and debunking of misinformation narratives or have participated in the implementation of anti-pandemic measures. For the purposes of the study, the Ministry of Foreign and European Affairs (MFA), the Ministry of Interior (MoI) and the Ministry of Defence (MoD) were selected, which together have 173,000 followers and thus can communicate to their extensive and diversified network (Figure 1).

1 Importance of strategic communication

During the pandemic, it was shown that effective communication played a key role in maintaining the health and safety of citizens and maintaining trust in institutions. However, strategic communication, or its objectives, can be divided into two categories.

The first objective of strategic communication during the pandemic was, or at least should have been, to increase trust in public institutions and the media⁹. In non-pandemic and non-war times, trust in institutions represents a kind of safe harbour for the citizens of a state: they trust that in an emergency the state will take care of them and also provide them with

⁵ HOLDER, J. (2023): Tracking coronavirus vaccinations around the world.

⁶ TASNIM, S. - HOSSAIN, M. - MAZUMDER, H. (2020): Impact of rumors and misinformation on COVID-19 in Social Media, 172.

⁷ VAN OOST, P. - YZERBYT, V. (2022): The relation between conspiracism, government trust, and COVID-19 vaccination intentions: The key role of motivation, p. 8.

⁸ HYLAND-WOOD, B. - GARDNER, J. - LEASK, J. et al. (2021): Toward effective government communication strategies in the era of COVID-19, p. 3.

⁹ Ibid.

reliable information so that they can make the right decisions in their daily lives.¹⁰ In pandemic times, setting the right strategic communication is even more important, as trust in institutions is reflected into compliance with the measures. Whether it is a pandemic or a war, institutions are better able to deal with crises if citizens trust them.¹¹ However, the theory was not applicable to reality in most countries during the pandemic and most governments, in turn, lost the trust of citizens during the pandemic.¹² Subsequently, research has confirmed that lower trust in institutions was reflected in non-compliance with government measures and hence increased prevalence of the virus in society and increased mortality rates.¹³

The second objective of strategic communication during a pandemic was to communicate government actions in a way that would ensure their acceptance and compliance by citizens.

However, communication needs to be clear and understandable, which is difficult to achieve in an evolving pandemic. It is therefore important to increase the quality and quantity of communication, to use credible communication platforms and to consistently explain changes in measures. Institutions should also increase the credibility of health institutions, scientists, and the media, tailor strategic communications with recognition of the population diversity, and most importantly be hyperactive in efforts to combat misinformation and disinformation.¹⁴

2 Analysis of strategic communication

All of the ministries monitored were active in their communications before the outbreak of the pandemic in Slovakia. Initially, especially the Ministry of Foreign Affairs was active, communicating the course of repatriations, mobility restrictions, but subsequently they limited their activities mainly to the state of the pandemic situation abroad and measures related to travel.¹⁵

Immediately after the start of the pandemic, the Ministry of the Interior began communicating mainly the current measures and activities of the state forces, but also refuting hoaxes and misinformation. This activity of the Ministry of the Interior was reinforced by the Hoaxes and Frauds - Slovak Police website, which has been highly monitored and appreciated for a long time.¹⁶ The Ministry of Defence also focused on communicating current measures and updates on the pandemic in Slovakia, but they also communicated their department's activities in relation to assistance with testing or vaccinations.

¹⁰ MCKNIGHT, D. - HARRISON, LARRY L. (1998): Initial trust formation in new organizational relationships, p. 476.

¹¹ FAN, Y. - ZILI, H. (2021): Health Communication and Trust in Institutions during the COVID-19 Lockdown in China's Urban Communities, p. 2.

¹² HANSON, C. et al. (2021): National health governance, science and the media: drivers of COVID-19 responses in Germany, Sweden and the UK in 2020.

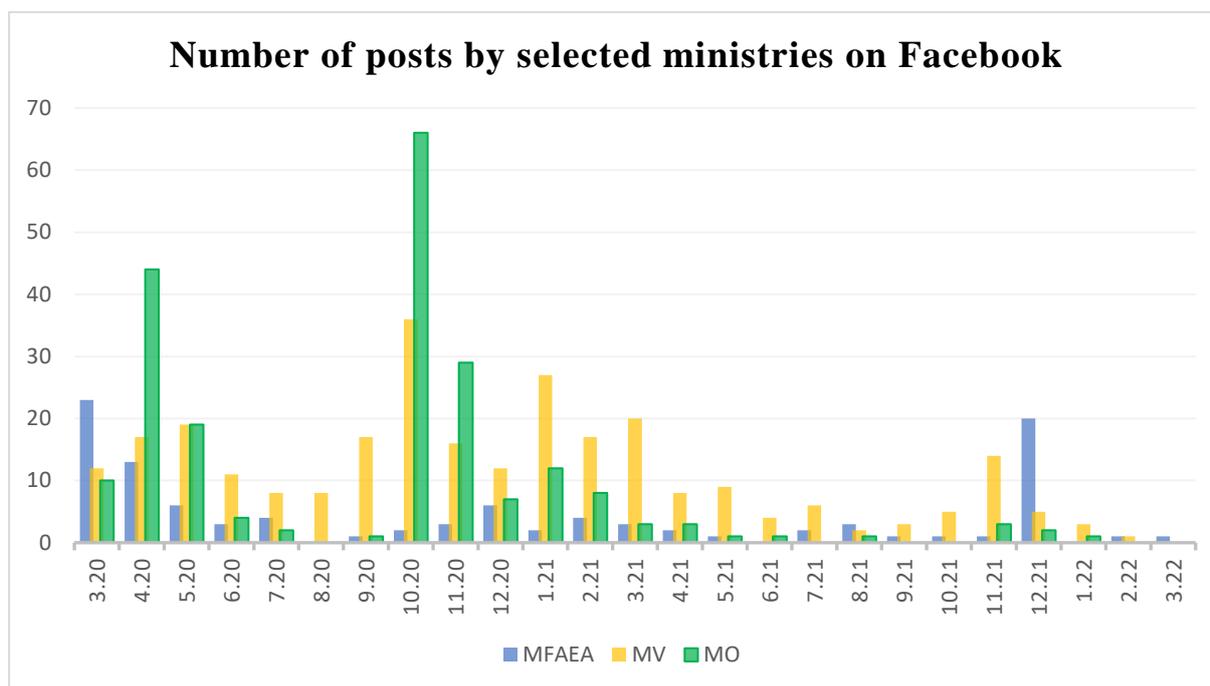
¹³ ERCEG, N. - RUŽOJČIĆ, M. (2020): Misbehaving in the corona crisis: The role of anxiety and unfounded beliefs.

¹⁴ HYLAND-WOOD, B. - GARDNER, J. - LEASK, J. et al. (2021): Toward effective government communication strategies in the era of COVID-19, p. 6-7.

¹⁵ Facebook page of the Ministry of Foreign and European Affairs of Slovak Republic; Facebook page of the Ministry of Defence of Slovak Republic; Facebook page of the Ministry of Interior of Slovak Republic.

¹⁶ SITA (2023): Stránka Hoaxy a podvody Polície SR je dlhodobo najsledovanejšou na Slovensku, dominantným zdrojom nepravd je Meta.

Figure 3: Activity of the selected Ministries on Facebook. Source: Official Facebook pages of the Ministries



Source: FACEBOOK (2023): Official pages of the Ministry of Foreign and European Affairs, the Ministry of Interior and the Ministry of Defence.

The contributions from all ministries communicated clear and understandable messages and, crucially for strategic communication, communicated with empathy and with the message that we are dealing with the crisis together.¹⁷ For example, the Ministry of Defence, which also ran the Soldiers Through the Eyes of Children project during the COVID-19 pandemic, which illustrated the efforts of soldiers to help manage the pandemic, set up communications along these lines.¹⁸ Similar contributions evoking a sense of solidarity were also disseminated by the Ministry of the Interior and the Ministry of Foreign Affairs pointed to cases when other countries provided medical material or personnel to the Slovak Republic and when, on the contrary, Slovaks abroad helped, which again pointed to mutual solidarity. However, showing solidarity can be a double-edged weapon. The institutions failed to deal with the population who refused to comply with the measures or to believe the scientific facts. As communication was not sufficiently focused on the aforementioned group of people, the sense of solidarity presented in adherence to the measures and later vaccination may have resulted in the marginalization of people who did not adhere to the measures and their subsequent formation of communities, especially on social networks.¹⁹

Confidence in vaccination and compliance was also not helped by frequent changes in measures and unclear restrictions on the operation of establishments, where businesses did not understand why their sector was being restricted and others were not.²⁰ The government crisis has brought additional problems, namely different communication of the measures directly by the government. The import of the Russian vaccine Sputnik also brought chaos to

¹⁷ REYNOLDS, B. - QUINN, S. (2008): Effective communication during an influenza pandemic: the value of using a crisis and emergency risk communication framework, p. 15.

¹⁸ MINISTRY OF DEFENCE (2020): Odborná porota vyhodnotila súťaž "VOJACI OČAMI DETÍ".

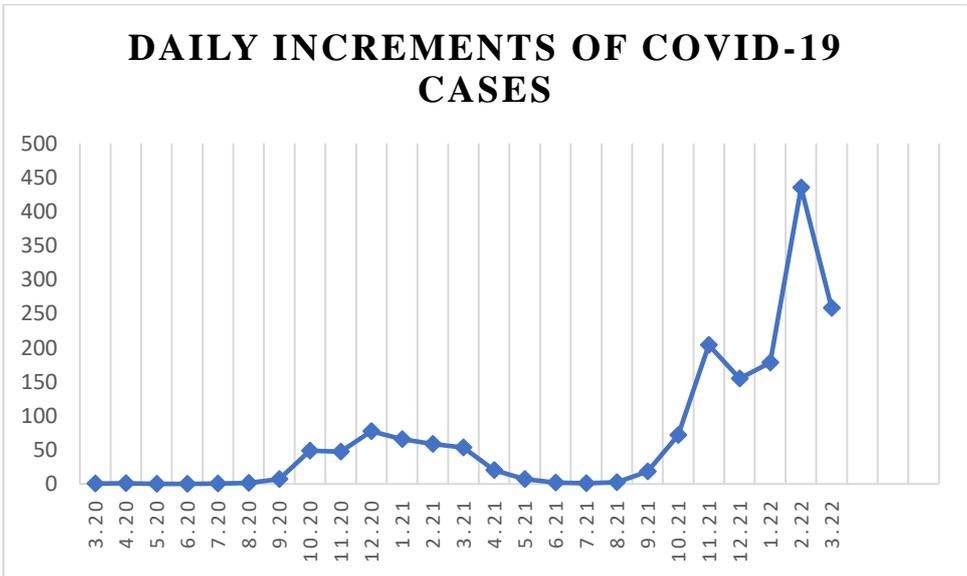
¹⁹ Lupton, D (2015): The pedagogy of disgust: the ethical, moral and political implications of using disgust in public health campaigns, p. 9.

²⁰ TA3 (2021): Pomoc je nedostatočná, opatrenia sú zmätočné. Asociácia hotelov a reštaurácií vyzýva vládu na zmenu.

communication. From the beginning, the then Foreign Minister communicated that Sputnik was not only a vaccine but also an instrument of hybrid warfare on the part of the Russian Federation, which the then Prime Minister refused to accept.²¹ When Sputnik was not even recommended by the State Institute for Drug Control, the Prime Minister began to discredit the claims of the Foreign Minister in addition to discrediting the Director of the Institute. In doing so, it is the unified communication of all institutions, emphasizing their credibility to each other, that is key to effectively managing the pandemic.²²

Thus, the observed ministries communicated qualitatively effectively, but their efforts were hampered by the turmoil caused by the government crisis. Quantitatively, however, with the exception of the MoI, they lacked continuous and uninterrupted communication. Comparing Figures 1 and 2, it can be observed that the ministries communicated information about COVID-19 especially when its prevalence in society started to rise (Figure 2).

Figure 2: Daily Increments of COVID-19 cases



Source: OUR WORLD IN DATA (2023): Daily increments of COVID-19 cases.

The lack of communication at times of low virus prevalence may have caused frustration in society when the COVID cases increased and anti-pandemic measures were reintroduced. Singh from the College of Communication argues that in crises like pandemics, people's ability to process difficult information over the long period of time is reduced. That is why it is necessary to maintain effective continuous communication and build a society which understands the key aspects of the issue.²³

The pandemic has also brought a lot of misinformation and disinformation into the information space. As research has shown, that it is the debunking, prebunking and informing citizens about how to spot misinformation or disinformation on the internet, what significantly reduces the spread of the virus.²⁴ The Department of the Interior and the Department of Defense have been debunking hoaxes and highlighting misinformation on the Internet since the beginning of the pandemic. The Ministry of Foreign Affairs, however, only started to

²¹ Ibid.
²² HYLAND-WOOD, B. - GARDNER, J. - LEASK, J. et al. (2021): Toward effective government communication strategies in the era of COVID-19, p. 4.
²³ SINGH, A. (2021): The Role of Crisis Communication in the COVID-19 pandemic.
²⁴ HYLAND-WOOD, B. - GARDNER, J. - LEASK, J. et al. (2021): Toward effective government communication strategies in the era of COVID-19, p. 5.

communicate the danger of disinformation via Facebook in August 2021. However, it should be stated that the activity of the Ministry of Foreign Affairs has significantly intensified in the context of the current war in Ukraine, in which they inform the population about the latest developments and also use various tools to suppress disinformation spread in the Slovak information space.

Conclusion

The observed ministries published 600 posts on Facebook over a period of 2 years. Despite the fact that strategic communication was slightly deficient during the pandemic, the institutions managed to communicate the current status of the pandemic and the anti-pandemic measures relatively effectively. With the exception of the aforementioned periods of inactivity, the qualitative research of the posts suggests that the quality of the institutions' strategic communication increased during the observed period, reflecting the theoretical knowledge of effective strategic communication and its best practices in the context of a pandemic.

However, the success of strategic communication could be higher if government actions were more consistent, not contradictory and communicated in the same way by all government officials. It is also necessary for effective communication of measures that institutions cooperate with each other, as the MoD, MFA and MoI have been a good example of such approaches. However, incidents such as the Prime Minister's dispute with the State Institute for Drug Control may have undermined public confidence and the efforts of the institutions.

Nevertheless, this study should encourage further comparative research. During the pandemic, all of the European countries had quite different approaches to managing their health situation. For example, Sweden, to some extent, used similar tools of strategic communication. However, Sweden concentrated more on honest communication about the inconvenience of the restrictions or the economic costs of the pandemic. Even more importantly, Sweden took an effort to concentrate on the leadership, cooperation of the institution and trust-based measures, which, as we proved in this article, were crucial for the effective management of the pandemic.²⁵ However, proof that Slovak strategic communication can work well when there is political consensus and public trust on the issue is the current information coverage about the war in Ukraine when the strategic communication of the institutions is united and consistent.

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²⁵ LUND UNIVERSITY (2020): Public Diplomacy in times of crisis: A closer look at Sweden's governmental communication and mass media frames during the coronavirus pandemic.

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THE FUTURE OF CENTRAL BANK DIGITAL CURRENCY¹

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Abstract: This paper reviews the published research on the topic of central bank digital currency and analyses the proposed features of CBDC considering their advantages and disadvantages. We use both published theoretical studies and results of experiments to gauge the expected gains and costs from adopting a CBDC. The aim of this paper is to weight the benefits of CBDC and predict the most likely shape and functions of the future digital Euro. We conclude that the need for CBDC does not appear to be imminent and introduction of CBDC would pose challenges to the current structure of the banking system. However, CBDC can be a powerful tool that could solve a number of issues in today's monetary and fiscal policy.

Keywords: CBDC, monetary policy, central banking, digital currency

JEL: E42, E50

Introduction

Money and its form changed along with time and technological achievements of civilization. Changes in the type of currency and the monetary system had significant consequences for society, whether it was the various reforms of the Roman denarius in ancient times, or the abolition of the conversion of the American dollar to gold in the relatively recent past. Paper money issued by central banks forms the basis of the monetary system in almost every economy today. Although this system seems to work very well, the development of different forms of money and payment systems has not stopped, and in recent years an acceleration in the innovation of electronic types of money and payment systems can be observed. This innovation has so far been concentrated mainly in the field of private electronic money, such as money created by commercial banks when providing loans or also by non-bank entities providing payments via the Internet. In addition to digitized bank money backed by state currency, new forms of unbacked digital currencies have also begun to appear, which can also function without central banks.

The most famous digital currency today is Bitcoin, which is one of the more than 20,000 digital currencies in existence. These currencies often have disadvantages such as high volatility, use for criminal purposes and low acceptance for payments. They also have an impact on the transmission of interest policy, financial stability and the availability of loans and other important banking services. These forms of money also have many advantages, such as faster and cheaper payments and transfers, easier access to banking services, programmability of their functions, interest, etc.

Electronic money and digital currencies already have an impact on the functioning of the economy, as well as the potential to influence the effectiveness of the monetary policy of central banks. The influence of digital money can also provide opportunities if central banks introduce their own digital currencies. For these and other reasons, the topic of digital currency has become one of the main objects of economic research and interest not only in academics,

¹ This paper is an output of the science project VEGA 1/0221/21 Interest rates in the environment with central bank digital currency.

but also in central banks and state financial institutions.

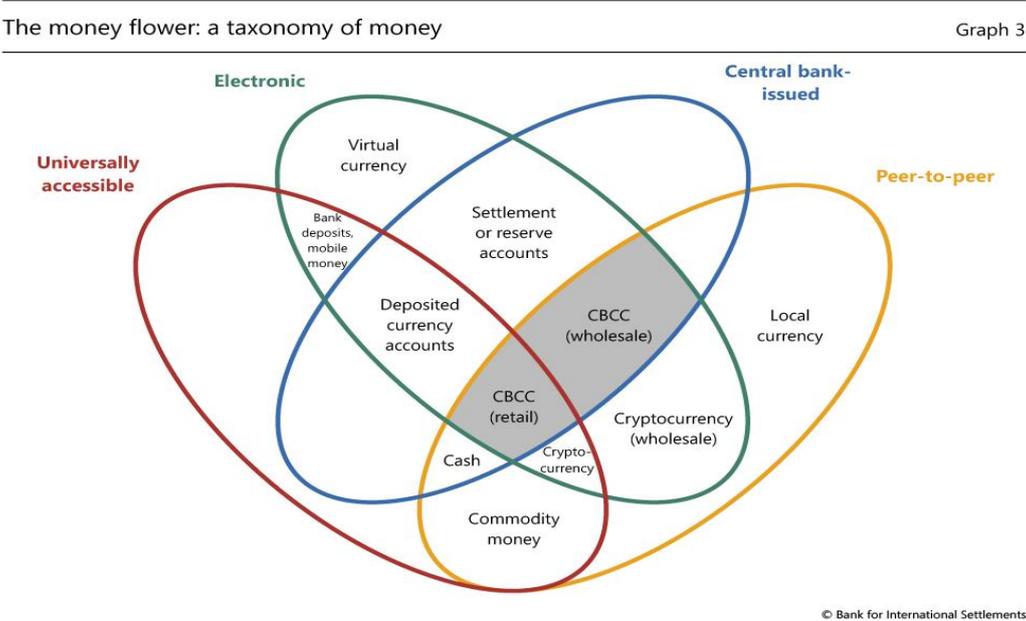
A recent survey organized by the Bank for International Settlements showed that 80% of central banks are currently researching the introduction of a digital currency, and many are in the testing phase of their own digital currency prototypes. These facts motivate our interest in digital currencies and their impact on monetary policy, financial stability and the economic consequences of their introduction into circulation. This paper will summarize the state of science and research in the field of central bank digital currencies. It will list their design specifications, assumptions for use, possible benefits and risks. Furthermore, we also look into the impact of digital currencies on the monetary policy of central banks. The result of this paper is an analysis of possible features of CBDC and consideration of the optimal design for the digital Euro. We use the term digital currencies to include cryptocurrencies and digital currencies of central banks. Money created by the private banking sector is referred to here as "electronic money".

1 Literature review

1.1 Digital currencies and their characteristics, advantages and disadvantages

To characterize the current state of digital money and currencies, it is necessary to start with a description of what digital currency actually represents, what features it has, and who and how will use it. The Bank for International Settlements (BIS) compiled a diagram based on studies Bjerg illustrates the taxonomy of money^{2 3}. According to the BIS, money has the following four main attributes: issuer type (central bank or other), form (electronic or physical), availability (unlimited or limited) and money transfer mechanism (centralized such as a bank or decentralized such as "peer- to - peer " or distributed ledger database (DLT). This taxonomy is used today across scholarly publications to define the characteristics of different digital currencies and also to divide the different types of central bank digital currency designs.

Figure 1: The money flower: a taxonomy of money



Source: Bank for International Settlements (2018): Central bank digital currencies, BIS Committee

² The Bank for International Settlements (BIS) (2017).

³ BJERG, O. (2017): Designing new money-the policy trilemma of central bank digital currency.

When analysing suitable forms of digital currencies of central banks, abbreviated "CBDC", the first scientific works first consider several variants of the above-mentioned characteristics, including the use of peer -to- peer cryptocurrencies. Later, however, a consensus was formed supporting a centralized type of CBDC without the need to use cryptography and blockchain⁴.

Further research on this topic is considering whether CBDC should be introduced as a supplement to cash or replace it entirely. Judson analyses the use and volume of banknotes in the US and concludes that CBDCs are unlikely to fully replace today's central bank money. A similar opinion is shared by the National Bank of Slovakia says that euro banknotes and coins will be in circulation for several more decades. Other contributions on the topic of CBDC characteristics are devoted to restricting CBDCs to use by only certain institutions or narrowing their use to the form of today's bank reserves for interbank transactions. Reasons for introducing CBDCs as bank reserves include security, protection, efficiency, scalability, resilience and transparency⁵. Pfister analyses private W-CBDCs and public R-CBDCs and recommends that " wholesale " W-CBDCs used for interbank transfers should be based on the principle of distributed databases in contrast to " retail " R-CBDCs, which are more suitable for central establishment⁶.

Other publications focus on the issue of keeping cash alongside CBDCs or abolishing physical money altogether. For example, Rogof argues that the abolition of cash would prevent criminal activities such as "money laundering" and tax fraud, and would help expand monetary policy tools and options⁷. However, in order for people to use money, it is necessary for it to be attractive enough for them, which means that the introduction of a fully transparent CBDC would be unpopular and problematic in a democratic society. Niepelt notes that the monetary policy benefits associated with the abolition of cash could be achieved without a CBDC.⁸ Possible solutions to this issue are presented by Goodfriend⁹.

Important aspects of CBDC design include the ability to earn interest. CBDC in this case could either be a substitute for cash and pay no interest, or it could bear interest at the central bank rate. The introduction of interest rates is one of the ways in which the central bank could improve the transmission of its interest rate policy, since the target level of interest rates would be directly distributed to the general public and thus bypass the banking system. One of the advantages of this CBDC design is also the more efficient introduction of negative interest rates and the breaking of the lower interest rate limit, the so-called "zero-lower-bound".

Another of the characteristics of CBDC is the form of its introduction. CBDC can be in the form of tokens such as Bitcoin or in the form of electronic accounts maintained at a central bank. Payments and transfers using tokens would look similar to how it is today with physical cash representing the unit of account and the official currency of the country. Tokens would be anonymous and no intermediary would be needed for token payments as is the case with cash payments today. The introduction of CBDC accounts, on the other hand, would mean that each citizen would be assigned their own account at a central bank, where the central bank would provide "regular" accounts for citizens, with cash existing purely in electronic form. From a technological point of view, the idea of such a CBDC does not represent much progress compared to the systems used by commercial banks today, but in practice the creation of

⁴ SCORER, S. (2017): Central Bank Digital Currency: DLT or not DLT? That is the Question.

⁵ OPARE, E.A. – KIM, K. (2020). Design Practices for Wholesale Central Bank Digital Currencies from the World.

⁶ PFISTER, C. (2019): Central Bank Digital Currency: One, Two or None?

⁷ ROGOFF, K. – ROGOFF, K.S. (2017): The curse of cash.

⁸ NIEPELT, D. (2018): 9. CENTRAL BANK DIGITAL CURRENCY: WHAT DIFFERENCE DOES IT MAKE? Do We Need Central Bank Digital Currency?, p.99.

⁹ GOODFRIEND, M. (2000): Overcoming the zero bound on interest rate policy. Journal of Money, Credit and Banking, p. 1007-1035.

millions of accounts for all residents would be difficult. To simplify the use of CBDC, maintenance and support could be provided by third parties such as commercial banks. In this case, banks would also provide an exchange between CBDC and bank money, similar to how banks today provide cash withdrawals using ATMs¹⁰.

Token CBDCs with payments that involve the transfer of an object (specifically a digital token) could extend some of the attributes of cash into the digital world. A CBDC could provide varying degrees of anonymity and instant settlement. The token form could thus limit the development of other forms of anonymous payment such as cryptocurrencies, but it could also reduce financial integrity. Design and features such as limits on the size of CBDC payments and stakes could reduce concerns about anonymity abuse, but not eliminate them. Conversely, an account-based CBDC, with payments through the transfer of claims recorded on the account, could increase risks for financial intermediation by reducing the demand for cash deposits and current accounts in commercial banks. This would increase the cost of financing loans for banks and increase the risk of sudden withdrawals and transfers from commercial banks to the central bank. If the bank faces problems in the financial markets, such a movement of capital could destabilize the financial system.

Each of the characteristics of a CBDC has broad implications for its use and economic impact. Therefore, it is already obvious today that the types and consumption of CBDCs would differ between countries according to the needs of the given economy. The state of economic development is therefore an important factor determining the type of CBDC for a given country. Gnan and Masciandaro analyse the various forms of CBDCs and their use in developing economies (EMs). The use of CBDC for interbank settlements could have advantages in EM where existing wholesale payment systems are not yet well developed and efficient. Anonymous CBDCs and cash exchanges could be particularly useful for increasing financial inclusion and efficiency in EM, but would also pose the risk of tax evasion. If it wasn't for the CBDC credible, it could easily fail and be replaced by another currency, such as the dollar, which often displaces weaker sovereign currencies in EM. Using CBDCs to bolster monetary policy with negative interest rates is less relevant in EMs given the typically higher inflation rates. Non-anonymous CBDCs, like public deposits in a central bank, would reduce informality, but could hinder the expansion of the banking sector and services in EM¹¹.

Using a model with imperfectly competitive banks, Andolfatto shows that a central bank digital currency not only increases financial inclusion, but also increases deposit rates through increased competition¹². Barrdear and Kumhof develop a dynamic stochastic general equilibrium (DSGE) model that shows how central bank digital currencies lower the real interest rate and thereby stimulate the economy. Their model assumes that the introduction of CBDC could lead to up to three percent growth in real domestic product¹³. Another positive consequence of the introduction of CBDC is increased competition in the electronic payments market. Numerous studies describe improved competition in the banking sector as a benefit of introducing CBDCs. However, Cecchetti and Schoenholtz point to possible risks associated with the introduction of CBDCs, such as financial destabilization¹⁴.

1.2 CBDC and monetary policy

¹⁰ BINDSEIL, U. (2020): Tiered CBDC and the financial system.

¹¹ GNAN, E. – MASCIANDARO, D. (2018): Do we need central bank digital currency? Economics, technology and institutions. Vienna: SUERF-The European Money and Finance Forum.

¹² ANDOLFATTO, D. (2021): Assessing the impact of central bank digital currency on private banks, p. 525-540.

¹³ BARRDEAR, J. – KUMHOF, M. (2021): The macroeconomics of central bank digital currencies, p. 104-148.

¹⁴ CECCHETTI, G. – KERMIT, L. S. (2023): Central bank digital currency: Is it really worth the risk?, p. 115-122.

One of the main topics of digital currency research is the impact of the introduction of CBDC on the monetary policy of central banks. Here, the literature focuses on the consequences of the introduction of CBDC on the activity of the central bank, the effectiveness of interest rate policy and changes in the transmission of interest rate policy. To analyse the impact of CBDC on monetary policy, Niepelt uses the neutrality argument of Modigliani and Miller and Chamley and Polemarchakis, according to which money is irrelevant from a macroeconomic point of view. Features of CBDC as a currency, store of value function and the medium of exchange is comparable to the physical money of central banks. According to the argument of neutrality, the impact on fiscal and monetary policy is minimal and CBDC could in principle be used to implement monetary policy without the need for changes and without impacting its operation (2018)¹⁵. Dyson and Meaning (2018) argue that with a careful design choice, a CBDC may not interfere with the performance of monetary policy¹⁶. At the same time, however, it is questionable whether this equivalent policy would really be chosen in a state of political-economic equilibrium. In addition, the substitution of bank money with "internal" money of central banks could change the decision-making of monetary policy makers, especially if it was accompanied by restrictions on the use of cash. An interest-bearing form of CBDC could increase the transparency of digital cash and serve as a major monetary policy tool. Interest rate policymakers would be able to push market interest rates below zero in response to a severe adverse economic shock, and thus the central bank would be able to provide an appropriate amount of monetary accommodation without resorting to quantitative easing (QE). The balance sheet of the central bank would thus become very transparent. In particular, the central bank could hold short-term government securities in the same amount as its digital cash liabilities. Because QE would no longer be necessary, the size of the central bank's balance sheet would simply reflect the demand for digital cash, and the maturity composition of public debt held by the public would be determined by the fiscal authorities, not the central bank. The operating procedures of the central bank would be reasonably transparent: it would engage in purchases and sales of government securities in order to adjust the supply of digital cash in accordance with the development of demand for digital cash. The spread between the interest rate of digital cash and the interest rates of short-term government securities would be negligible due to the virtually costless arbitrage between these risk-free assets. Due to the abolition of paper currency, the central bank would no longer make a profit from minting money and would simply cover its costs through tiny fees for payment transactions.

Bordo and Levin consider the benefits of an interest-bearing form of CBDC and argue that CBDC could "free" the economy from the lower interest rate floor, allowing monetary policy to focus more on price stability (the price level) and implement the Friedman rule^{17 18}. This floor is the main reason why many central banks are currently targeting a positive inflation rate of two percent or more, while the CBDC has this need to maintain such an "inflation cushion" or deploy alternative monetary policy tools, e.g. as quantitative easing or credit easing will essentially rule it out.

Böser and Gerslach examine how the introduction of a central bank interest-bearing digital currency affects banking activities and monetary policy. In their models, deposit account holders can switch from bank deposits to CBDC as a secure medium of exchange at any time. As banks face the risk of sudden cash withdrawals, either because depositors prefer CBDCs

¹⁵ NIEPELT, D. (2018): 9. CENTRAL BANK DIGITAL CURRENCY: WHAT DIFFERENCE DOES IT MAKE? Do We Need Central Bank Digital Currency?, p.99.

¹⁶ MEANING, J. – DYSON, B. – BARKER, J. – CLAYTON, E. (2018): Broadening narrow money: monetary policy with a central bank digital currency.

¹⁷ BORDO, M. D. – LEVIN, A. T. (2017): Central bank digital currency and the future of monetary policy.

¹⁸ FRIEDMAN, M. (1969): The optimum quantity of money, and other essays.

or because they fear bank insolvency, the regulator or central bank may require an increase in collateral or use sanctions as a tool to force banks to reduce their riskiness. This leads to higher overall productivity. However, the number of households holding CBDCs will increase over time, creating additional liquidity risk for banks. After a certain period, a monetary policy with tight collateral requirements that would create liquidity risk for banks and expose bankers to sanctions would make banking unviable and lead the central bank to abandon these measures. Under these circumstances, the incentives for bankers to monitor will return to low levels. According to Böser and Gerslach, CBDC thus has a structural disadvantage and can at best bring a short-term improvement in bank monitoring due to the risk of sudden withdrawal of money by the bank's clients, the so-called "run on bank."¹⁹

Meaning et al. discusses the impact of the introduction of CBDC on the transmission of monetary policy in three areas: the impact on monetary policy instruments, the impact on the transmission of changes in CBDC interest to interest rates and asset prices, the impact on the transmission of changes in CBDC interest to the real economy and economic growth. Monetary policy tools such as reserve interest rates could be used in the same way as before the introduction of the CBDC. A change in CBDC interest rates would result in larger changes in interest rates offered by commercial banks. The transmission of target interest rates to the economy would strengthen overall after the introduction of the CBDC, and this will be due to the substitution between deposits in commercial banks and the central bank (2018).²⁰

Quantitative easing and central bank programs increasingly focus on purchases of private assets. However, these purchases must be made through commercial banks from which the central bank purchases liabilities created by the private sector. In the case of the introduction of CBDC, the central bank could directly buy these assets from businesses and thereby narrow the impact of QE and thus support only certain sectors in the economy that QE is aimed at. Since it is calculated that newly created deposits in the form of CBDC accounts would be covered by government securities, Frascini and Samoze think that the introduction of a CBDC would cause a necessary increase in central bank assets and thus prevent the sale of assets acquired during support programs such as QE²¹. Armelius et al. examines the effect of the introduction of the e-koruna, which represents a CBDC without the possibility of interest. Such a CBDC would cause the extinction of possible negative interest rates and consequently also reduce the effect of the existing QE program on the economy (2018).²²

1.3 CBDC and macroeconomic and financial stability

The introduction of digital currency is a phenomenon that affects several parts of the economy, and its impact will depend on the characteristics of the CBDC. As such, digital currency has the potential to increase the central bank's control over the economy, but it could also have unwanted consequences for the banking sector and financial stability. Regarding the macroeconomic and financial stability benefits of central bank digital currency, Yao argues that the development of central bank digital currency in China could increase the stability of currency value, increase the security and control of payment data, and reduce dependence on payment monopolies and thereby strengthening the position of the consumer in digital

¹⁹ BÖSER, F. – GERSBACH, H. (2020): Monetary policy with a central bank digital currency: The short and the long term.

²⁰ MEANING, J. – DYSON, B. – BARKER, J. – SLAYTON, E. (2018): Broadening narrow money: monetary policy with a central bank digital currency.

²¹ FRASCHINI, M. – SOMOZA, L. (2021): The likely impact of central bank digital currencies on quantitative easing.

²² ARMELIUS, H. – BOEL, P. – CLAUSSEN, C.A. – NESSÉN, M. (2018): The e-krona and the macroeconomy, p. 43-65.

payments²³. With high central bank control over transactions and money movements, digital currencies could offer effective tools for macroeconomic control. Monetary policy would thus become much more effective and many current problems in its performance would be avoided, such as the time lag between the implementation and effect of monetary policy, counter-cyclical policy could be specified for certain sectors, the interest rate could be specified and would be different for different digital currency users. Pre-determined rules and programmability of the currency would also make the forward guidance of the central bank much stronger.

Kim and Kwon examine the implications of digital currency for financial stability using a monetary general equilibrium (DSGE) model. They show that the introduction of central bank account deposits in digital currency will reduce the supply of commercial bank loans, which will increase the nominal interest rate and reduce the ratio of reserves to deposits²⁴. This can have a negative impact on financial stability by increasing the likelihood of a banking panic, in which commercial banks do not have the cash reserves to repay depositors. Regarding the spread of financial risk, Ferrari examine digital currency in an open economy. They show that the presence of a central bank digital currency can significantly amplify financial panics. But the extent of these effects will depend on the particular design of the digital currency, and the effects can be significantly dampened if the central bank has risk mitigation features²⁵.

Williamson studies the impact of the introduction of CBDC on financial stability and uses his model of the banking sector to model the effect of a panic in the banking market and what impact such a panic would have on the overall economic situation. To examine these issues, it uses a payment model backed by central bank liabilities and private bank deposits where a bank panic can occur. The main conclusion from the constructed model is that the introduction of a digital currency would increase the likelihood of bank runs, however CBDC is potentially more useful in transactions than physical currency and this will not only mitigate the damage caused by bank runs, but could mean that the overall effect on the economy is positive²⁶.

Jun and Yeo examine the impact of CBDC on the height of bank supply positions in an environment where digital currency is close substitute. Their results suggest that central banks looking to implement an economy-wide ledger-type CBDC should first monitor bank loan yields and consider policy measures to force banks to maintain adequate levels of liquidity reserves²⁷.

Andolfatto examines the impact of a central bank digital currency on commercial banks in a model where the banking sector is not perfectly competitive. Two main conclusions emerge from the modelling of this simplified economy. First, the introduction of an interest-bearing CBDC increases financial inclusion and reduces the demand for cash. Secondly, the introduction of an interest-bearing CBDC has the effect of disrupting bank monopolies and increasing the interest rate on current accounts, but the resulting effect may not be negative, as Andolfatto believes that increased interest would help increase the proportion of savings and the capital-generating ability of savers²⁸.

Similar to other authors, Bindseil states that the main risks of introducing CBDC accounts are the reduction of the intermediary function of banks in the economy and the increase of the probability of liquidity outflow from current accounts to CBDC. Bindseil proposes a solution in the form of a two-stage interest rate CBDC, which would be suitable

²³ YAO, Q. (2018): A systematic framework to understand central bank digital currency, pp. 1-8.

²⁴ KIM, Y. S. – KWON, O. (2019): Central bank digital currency and financial stability.

²⁵ FERRARI, M. M. – MEHL, A. – STRACCA, L. (2020). Central bank digital currency in an open economy.

²⁶ WILLIAMSON, STEPHEN D (2021): Central bank digital currency and flight to safety.

²⁷ JUN, J. – YEO, E. (2021): Central bank digital currency, loan supply, and bank failure risk: a microeconomic approach.

²⁸ ANDOLFATTO, D. (2021): Assessing the impact of central bank digital currency on private bank, p. 525-540.

for controlling the supply of money in the economy, whether in a crisis or in a normal situation. Bindseil notes that if the CBDC had the usability of bank deposits, households would no longer have a reason to keep money in banks. Last but not least, Bindseil compares the impact of CBDC with that of private digital currencies such as Libra and “stable coins” and proposes to analyse the impact of these currencies on the economy in a common context.²⁹

Hamza discusses the potential consequences of introducing a CBDC on the dual banking system in the Middle East. In the Islamic world, banking services and thus CBDC are subject to Sharia law. According to him, the impact of the introduction of CBDC on financial stability and the banking sector is unclear and will depend on the design and size of the transition from bank deposits to CBDC.³⁰ Banks can also use more market funding to restore their liquidity and funding profile. An indicative calculation of the demand for the e-krona in normal times shows that it would be below three percent of nominal GDP and that the effect of the e-krona on bank financing costs would be up to 25 basis points, according to plausible assumptions. In times of financial crisis, e-krona can increase the number of banks experiencing liquidity flight. This will happen

2 Methodology

The analysis and synthesis of the existing literature was used in the theoretical investigation and in summarizing the state of research. This analysis further helps determine the characteristics of the examined CBDC and motivate our subsequent policy recommendation.

The theoretical part of this work focuses on analysing the impact of the introduction of CBDC on the performance and effect of monetary policy. For this part, comparative analysis and partial results were utilized based on the recommendation of the literature for the issue of monetary policy research were used.

3 Results

3.1 Need for CBDC in The Euro Zone

In this section we investigate CBDC in the context of eurozone implementation where Euro would be either supplemented or fully replaced by the digital Euro.

First, the need to digitalise our means of payments have been apparent and is evidenced by the decline of volume of payments made in paper money and coins. The cost of printing and reissuing physical money is not insignificant and together with costs associated with the handling of money by businesses and government amounts such cost that replacing it with CBDC could lead to noticeable benefit. Barrdear and Kumhof estimate that along with lower real rates, and taxing efficiencies, digitalisation would yield permanent 3% increase in GDP. Second, the CBDC could be a better policy tool especially breaking the zero-lower bound that has been a major issue in a low inflation and low growth economies of Eurozone. Third, with the emergence of crypto currencies public perception of electronic means of payment has changed such that money is not viewed as a something that needs to have a physical form. In response, ECB has also embraced the idea of digital Euro and started a number of working groups and research projects aimed at CBDC. It is clear that having a single currency for a large number of countries with diverse needs is an Achilles heel of the eurozone. CBDC could be programmed to be tailored to a specific country or persons which could ameliorate Euro’s blanket one-size-fits-all approach to different economies. Despite digitalisation being viewed as positive, the public and the ECB currently does not seem to be worried about the current

²⁹ BINDSEIL, U. (2019): Central bank digital currency: Financial system implications and control, p. 303-335.

³⁰ HAMZA, H. – KHOUTEM, J. (2020): Central Bank Digital Currency and Financial Stability in a Dual Banking System, p. 233-252.

form of central bank money. ECB does not consider development of CBDC as a priority and only plans to implement it in the distant future. Currently there is not overwhelming evidence of the benefits the digital Euro would bring besides lowering transaction costs. For these reasons, CBDC is not immediately needed or called for from the central bank or the wider public.

3.2 Advantages and Disadvantages of Digital Euro

Advantages of CBDC implementation are described in a number of central-bank working papers and published in academic literature. These range from transaction cost benefits and transaction speed, overall safety and lower cost of payment processing, better transparency, better tax collection, more efficient monetary policy, faster policy transmission, possible programmability and improved fiscal policy.

Potential problems, on the other hand, are not to be taken lightly as they are equally numerous and include a range of destabilising effects on banking, competition, payment processing in the private sector, financial stability issues, bank runs, privacy concerns and overall integration issues.

Among the first and most obvious benefits mentioned across the literature on CBDC is payment efficiency and cost. This is a well-known problem for international payments, particularly in case of remittances being sent from developed to developing countries. Since the EU is a somewhat integrated system and eurozone has already implemented fast and cheap payment processing (such as SEPA Instant Credit Transfer), it is unclear if the benefit of digital Euro payments would outweigh the costs of implementation. Another one of the main advantages of CBDC is the provision of banking to persons without access to bank services. Given that EU is home of more than 10 000 bank and is considered overbanked, this benefit, although significant in some developing countries, is redundant. The impact of more efficient taxation and fraud detection is difficult to predict but this seems to be more beneficial feature of the CBDC in the eurozone. The problem may arise in setting the boundaries for anonymity in payments as having all payments recorded on a government or central bank computer would make a lot of citizens uncomfortable.

Lastly the benefit of monetary policy advances afforded by CBDC are perhaps the most impactful most needed but also most dangerous to the financial ecosystem. Radical policies such as negative interest rates imposed to everyone via CBDC and without any recourse to physical cash would create as many problems as it would solve and would have potential to trigger a cascade of banking problems. Interest on the CBDC deposits would need to be set such that it would not undermine the deposits in commercial banks at all times, otherwise a bank run could happen.

3.3 The Future of Digital Euro

We ought to ask ourselves if we are not just dreaming and if there is a realistic future for CBDC concept in the EU. The answer is not definite. ECB and its current president Christine Lagarde does not expect CBDC to be adopted in the next 20 years, and currently the whole concept is a bit of a sci-fi and somewhat too ambitious and radical to implement. Given the amount of work needed and political obstructions expected along the way, it may take a crisis to actually move this project ahead. And we therefore think that CBDC would only see success if it is used as a radical policy tool and not just a transaction lubricant.

The actual form of the digital euro will be important. It is likely that it will be similar to current bank deposits with only slightly lower level of interest to compensate users appropriately considering its safety profile. The CBDC will be accessible to the same parties as the current central bank money. It will be cleared by the central bank and may hold special privacy policies to prevent fraud and money laundering and programmable properties for cases

such as a pandemic, war or other national emergency for expediting fiscal transfers.

To be able to send money and make payments electronically, one needs to open a bank account or use a commercial bank or a similar financial institution. With the use of CBDC, people or even companies could transact without banks and may prefer to use CBDC majority of the time and thus create a liquidity outflow from the banking sector. Banks will have more competition, may be forced to raise interest rates or become less profitable and shrink. This may lower the amount of credit and money in the economy and possibly have negative side effects that ECB will have to deal with. We therefore think that CBDC has a potential to open Pandora's box of issues linked with its integration to the current financial system which will hamper its development and implementation or perhaps even make it completely inappropriate.

Conclusion

The ideal form of CBDC is currently unknown. Existing research on this issue points to economically significant impacts that the introduction of CBDC could bring. Considering the number of forms and characteristics that CBDC can take, we consider the issue of the impact of CBDC on the banking sector and financial stability to be a very important part of the research on digital currencies of central banks. CBDC represents an important step in the development of money and central bank money, which today faces several problems. Central banks have been aware for a long time that central bank money is losing its position and is increasingly being replaced by money in the rapidly developing private sector. Monetary policy becomes less effective and its implementation requires more and more unconventional tools. CBDC represents a revolution not only in payments and bank money, but also in the conduct of monetary policy. On the other hand, changes in the form of money and its functioning have the potential to create unexpected competition for the private banking sector and thereby threaten financial stability. For these reasons, it is necessary to carefully consider the suitability of introducing a CBDC in a given economy and pay extra attention to the way the digital currency is used and designed.

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ANALYSIS OF HETEROGENEITY IN INDEBTEDNESS LEVELS WITHIN EURO AREA. A CLUSTER ANALYSIS OF PRIVATE SECTOR DEBT STRUCTURE¹

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Abstract: The importance of assessing the issue of heterogeneity of the Euro Area (EA) nations has re-emerged in light of the considerable monetary policy actions taken by the ECB in response to the health crisis of 2020. This study uses a hierarchical cluster analysis to compare how the various Euro Area members fare in terms of private sector indebtedness, and dendrograms are used to illustrate the findings. As a transmission of monetary policy into real economy can be largely impacted by dissimilarities in the level of indebtedness, the main objective of the paper is to assess heterogeneity of EA and to analyse whether there are any signs of convergence or divergence over time. We conclude that EA economies form clusters which differ in levels of indebtedness, yet neither converge nor divergence was detected between 2010-2017 in this regard.

Keywords: European Union, indebtedness, real economy, cluster analysis

JEL: E52, G51, C38

Introduction

The European Union (EU) was created in 1993 with the entry into force of the Maastricht Treaty. The Maastricht Treaty has significant effects on the regional political and economic landscape. With its implementation, the Economic and Monetary Union (EMU) was established, marking a significant advancement in the union of the EU's economies. EMU entails the coordination of monetary, and to some extent also fiscal policy, as well as the use of the euro (€) as a single currency and unit of account. Beginning in 1999, the euro became a legal tender, and the European Central Bank (ECB) took control of the implementation of a unified monetary policy. The early, official view of the ECB was that policy choices should take into account the evolving economic circumstances of the monetary union as a whole, rather than just its individual member states.² The major goal of the central financial institution was to work towards price stability, with an annual growth rate of the harmonised index of consumer prices in the Euro Area of close to but not exceeding 2%. This stance has recently changed in the Euro Area to an action of targeting symmetrically 2% inflation rate in the medium term.³

Indebtedness and monetary policy are closely related concepts. Monetary policy refers to the actions taken by a central bank to control the supply of money in an economy and influence interest rates to achieve macroeconomic goals such as price stability, full employment, and economic growth.⁴ Indebtedness, on the other hand, refers to the level of debt that individuals, businesses, and governments have incurred. In scope of the paper, focus is paid to indebtedness levels of private sector, i. e. households and non-financial corporations.

¹ This paper is an output of the science project VEGA 1/0221/21 Interest rates in the environment with central bank digital currency.

² DUISENBERG, W. (2001): Some Remarks on the euro in a US Context.

³ CECIONI, M. et al. (2021): A clear and symmetric 2% inflation target for the ECB.

⁴ MISHKIN, F. S. (2016): The economics of money, banking, and financial markets 11th edition, p. 386.

Policymakers should monitor closely level of indebtedness of real economy entities for several reasons. Firstly, high levels of indebtedness can limit the effectiveness of monetary policy in stimulating economic growth. Secondly, highly indebted entities can create risks to financial stability. Moreover, the level of private individuals and legal entities indebtedness can provide valuable information to central banks when making decisions about monetary policy. For instance, if the level of indebtedness is high, central banks may need to adopt monetary tightening combating stipulated risk of economic overheating.

The paper examines the degree of heterogeneity among the Euro Area members in order to answer whether assumptions for single monetary policy hold. The efforts to evaluate and measure contribution of various sources of heterogeneity are not new in empirical studies. Vast majority of research papers perform time-series analysis.⁵ However, statistical techniques which were previously primarily linked to machine learning are presently increasingly expanding to the field of macroeconometrics as well. The clustering analysis and dimensionality reduction techniques which are put to use in our study have been also recently connected with analysis of heterogeneity of European Union countries.⁶

1 Theoretical Background

The effectiveness of monetary policy may be significantly impacted by the degree of debt in an economy. When debt levels are high, monetary policy's ability to spur economic development may be hampered. This is because highly indebted individuals and businesses may be less likely to take on additional debt, even if interest rates are low. Furthermore, heavily indebted people and companies can be less likely to spend and invest, which can also reduce how successful monetary policy is in promoting economic development. The relationship between indebtedness and monetary policy transmission has been debated in the literature immensely in the past. For instance, the higher the debt service of non-financial corporation, the less money is left for future investments.⁷ A recent contributions to the strand of literature in this regard confirms the assumption empirically in Euro Area environment as well.⁸

In the analogous manner, high levels of indebtedness can also create risks to financial stability. If interest rates rise, highly indebted individuals and businesses may struggle to meet their debt obligations, which can lead to defaults and financial instability. For example, if the level of indebtedness is high, the central bank may need to adopt a more cautious approach to raising interest rates, to avoid triggering defaults and financial instability.

Contrarily, there are studies which show that high-debt households can be source of additional spendings at times of declining policy rates. In accordance with the cash-flow channel of monetary action transmission, monetary policy is more effective when people who carry higher debts are exposed to variable interest rates.⁹ The lower the interest rate, the lower the monthly repayment, hence spare money to future spendings.

2 Methods of the Research

In the study, we apply hierarchical clustering algorithms. The study includes 11 countries of Euro Area for which debt ratios in 2010, 2014 and 2017 were collected in relation to households and non-financial corporations (NFC). By identifying clusters of similar countries based on their indebtedness patterns, the study aims to provide insights into challenges

⁵ JONDEAU, E. – SAHUC, J. G. (2008): Testing heterogeneity within the euro area, p. 192.

⁶ COUDERT, V. et al. (2020): Heterogeneity within the euro area: New insights into an old story, p. 431.

⁷ BERNANKE, B. S. – GERTLER, M. – GILCHRIST, S. (1999): The financial accelerator in a quantitative business cycle framework, p. 1353.

⁸ BARRELA, R. – GARCIA, P. L. – SETZER, R. (2023): How high corporate debt stifles investment.

⁹ KIM, Y. – LIM, H. (2020): Transmission of monetary policy in times of high household debt, p. 11.

that arise from heterogeneous levels of debt across member states when conducting the same monetary policy.

2.1 Statistical Methods

Hierarchical clustering algorithms are one of the most commonly used clustering techniques. They group data points into a tree-like structure, called a dendrogram, where each cluster is represented by a branch. There are two types of hierarchical clustering algorithms: agglomerative and divisive.¹⁰ Agglomerative clustering algorithms start with each data point as a separate cluster and gradually merge them into larger clusters based on their similarities, while divisive clustering algorithms start with all the data points in a single cluster and recursively divide them into smaller clusters based on their differences.

Hierarchical Agglomerative Clustering (HAC) algorithms have several advantages, such as their ability to handle different shapes and sizes of clusters and their interpretability, as they provide a clear visualization of the relationship between clusters. However, they also have some limitations, such as their high computational complexity and sensitivity to noise and outliers in the data.

The decision on the distance computation method is a crucial stage in hierarchical clustering. In this study, we compute distances between observations in n-dimensional space using the widely used metric known as Euclidean distance. If the data is continuous and properly scaled in all dimensions, as it is in our situation, the Euclidean distance is perceived as the most appropriate approach. Euclidean distance is defined as following:¹¹

$$D_e(x_i, x_j) = \left(\sum_{l=1}^n |x_{il} - x_{jl}|^2 \right)^{\frac{1}{2}} \quad (1)$$

The choice of the linkage method is the next critical step. A broad range of linkage methods is available to the researchers. In the study, we employ Ward's method, which is a general optimization model that can follow different criterion and was originally designed to minimize the increase of sum-of-squares when clustering observations. Based on the presumption that there are no obvious outliers in the sample¹², it has been shown that Ward's technique outperforms the others.¹³

As each country is characterized by 10 variables (5 indicators of households' indebtedness and 5 attributes of indebtedness of non-financial corporations), we aim to identify which of two sets of variable drives the heterogeneity the most. For that reason, we use statistical learning to reduce dimensionality to one feature for households and one feature for NFC trying to preserve as much of the variation of original attributes as possible. Reduction of 10 variables to 2 will simplify visualization of the relationship in the two-dimensional space.

Principal Component Analysis (PCA) is a widely used statistical method for reducing the dimensionality of a dataset while retaining as much of the original variation as possible. PCA works by transforming the original variables into a new set of uncorrelated variables, called principal components.¹⁴

¹⁰ MADHULATHA, T. S. (2012): An overview on clustering methods, p. 719.

¹¹ KUMAR, V. – CHHABRA, J. K. – KUMAR, D. (2014): Performance evaluation of distance metrics in the clustering algorithms, p. 40.

¹² MILLIGAN, G. W. (1980): An examination of the effect of six types of error perturbation on fifteen clustering algorithms, p. 331.

¹³ HANDS, S. – EVERITT, B. (1987): A Monte Carlo study of the recovery of cluster structure in binary data by hierarchical clustering techniques, p. 240.

¹⁴ ABDI, H. – WILLIAMS, L. J. (2010): Principal component analysis, p. 433.

2.2 Data

We analysed eleven member states of Euro Area over the time span of 2010-2017. Namely, Belgium, Germany, Greece, Spain, France, Italy, Luxemburg, Malta, Netherland, Austria, Portugal, Slovenia, Slovakia, and Finland are in the sample.

Analysis is concerned with the time period of 2010-2017 because it is when the ECB conducted its household survey. The first wave of the survey was introduced in 2010, followed by the second wave in 2014 and in 2017 there was a third wave. The Household Finance and Consumption Survey (HFCS) is a comprehensive survey conducted by the European Central Bank (ECB) that collects detailed data on the assets, liabilities, income, and consumption of households in the Euro Area. For non-financial corporations, we used Eurostat's datasets to gather pertinent information regarding debt levels for the same time periods of 2010, 2014, and 2017, in order to have data that matches the HFCS collection. The descriptive statistics of chosen variables for the analysis are presented in the Table 1.

Table 1: Average values of indicators in analysed period 2010-2017

Country code	Households: average 2010-2017					Non-financial corporations: average 2010-2017				
	Debt-to-assets	Debt-to-income	Debt service-to-income	Debt-to-GDP	Percentage of mortgage debt	Debt-to-assets	Debt-to-equity	Debt-to-income (after tax)	Debt-to-GDP	Proportion of bank loans on total debt
BE	21%	84%	14%	57%	92%	37%	62%	92%	115%	92%
DE	28%	40%	10%	55%	88%	33%	65%	343%	56%	90%
GR	19%	58%	15%	61%	80%	56%	161%	596%	66%	98%
ES	25%	139%	18%	72%	89%	43%	86%	479%	97%	92%
FR	20%	61%	17%	55%	81%	36%	66%	405%	84%	72%
IT	15%	51%	13%	42%	78%	41%	82%	642%	75%	89%
LU	20%	99%	16%	58%	91%	37%	66%	220%	229%	82%
MT	10%	75%	13%	53%	83%	45%	142%	231%	90%	94%
NL	49%	207%	14%	112%	88%	37%	64%	221%	139%	91%
AT	18%	34%	6%	51%	86%	44%	94%	298%	75%	85%
PT	35%	185%	17%	79%	94%	43%	98%	578%	104%	85%
SI	7%	26%	14%	28%	60%	42%	98%	1744%	68%	96%
SK	13%	42%	12%	32%	84%	38%	76%	117%	45%	90%
FI	36%	73%	11%	61%	75%	38%	66%	388%	86%	82%

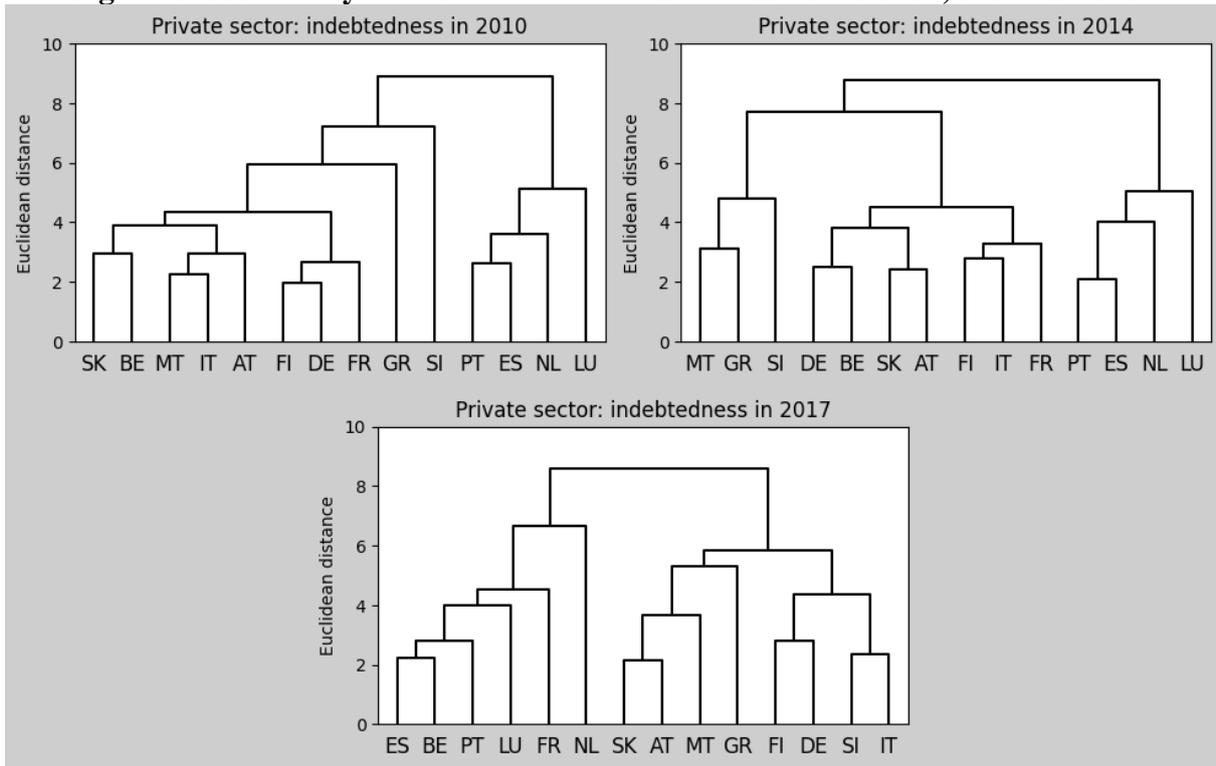
Source: Data from Eurostat and ECB Household Finance and Consumption Survey (HFCS)

3 Results of the Research

In this chapter, we present the results of a cluster analysis of European Union (EU) member countries, with a primary focus on EA nations. Hierarchical agglomerative clustering is employed, and the dendrograms serve visualization purposes. The analysis tries to answer following research questions:

- whether the members of Euro Area can be (based on their indebtedness levels) divided into groups within which countries are more similar than in comparison to the members of other clusters.
- and whether there are any signs of convergence or divergence over time, i. e. during the observed period 2010-2017.

Figure 1: HAC analysis of indebtedness of EA members in 2010, 2014 and 2017



Source: Own calculations of data from Eurostat and ECB Household Finance and Consumption Survey (HFCS)

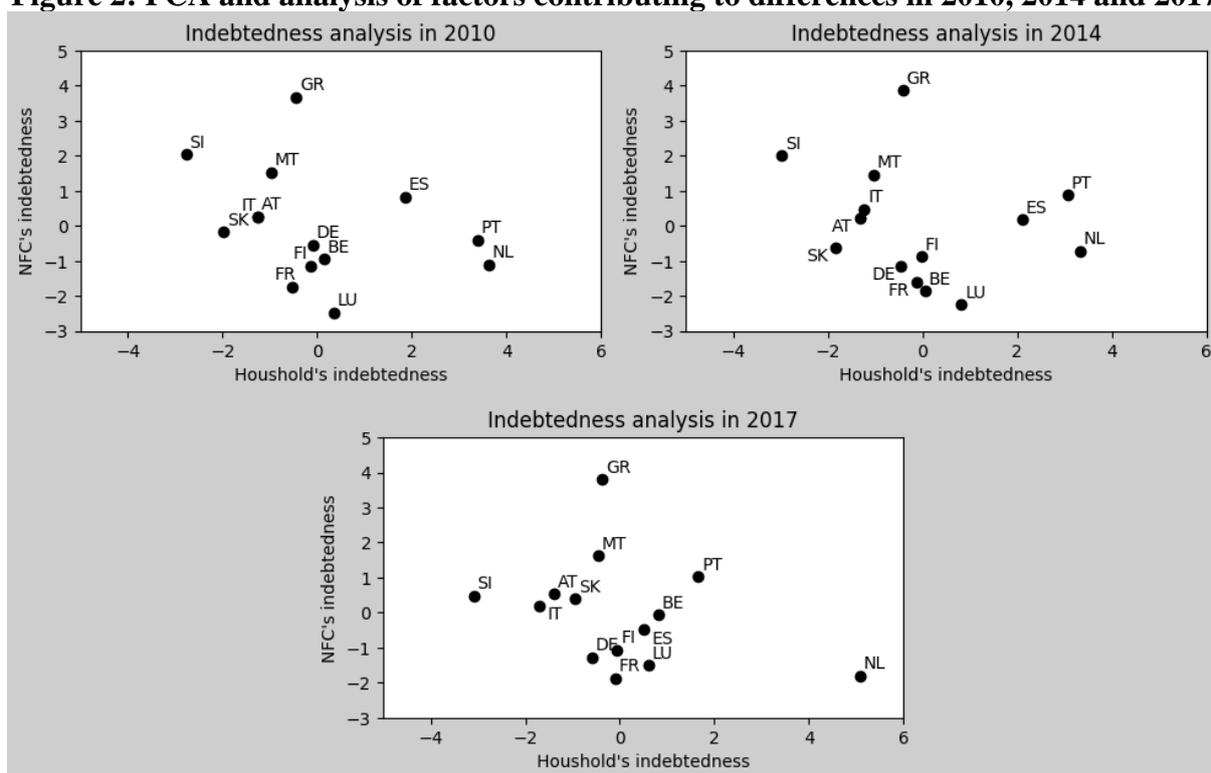
The dendrogram's link heights serve as a visual representation of the dissimilarity measurement. Higher levels of dissimilarity are indicated by larger numbers on Y-axis. There are neither converging nor diverging trends, as shown in Figure 1. Figure 1 provides an evidence of steady highs throughout the times. Even though clustering analysis provides compelling evidence about constant levels of dissimilarity among analysed eleven countries, we can see pattern of splitting the EA member states into two similarly sized groups. Since the start of the analysed period, it was clearly visible that Netherlands, Luxembourg, Portugal, and Spain share the same traits in terms of debt levels in private sector. The indebtedness analysis of 2017 depicts enlargement of this group by Belgium and France.

The clustering analysis provides insights into identifying similar objects by separating them from dissimilar ones. The information about which variables contributed to the formation of clusters is often hidden. In terms of this paper, it would be vital to identify whether heterogeneity of member states streams primarily from variations in households' indebtedness or from differences in debt ratios of non-financial corporations.

In this stage, principal component analysis (PCA) is performed. It aims to transform 5 unique variables of household debt into one, as well as, to reduce 5 variables of NFC's indebtedness into a single one. This transformation is applied for three distinctive time periods of 2010, 2014 and 2017. PCA preserves 80 to 90% or underlying variation of the original collection of 5 variables for households, or NFC respectively.

Figure 2 provides similar perspective as Figure 1, yet the countries are displayed in two-dimensional space. The X-axis shows the variance in household debt levels among nations, while the Y-axis shows the magnitude of a difference in NFC debt ratios. An interesting conclusion is that the countries become less scattered across the chart over time. The cluster of countries Spain, Netherlands, and Portugal is clearly identifiable as it was a case in Figure 1.

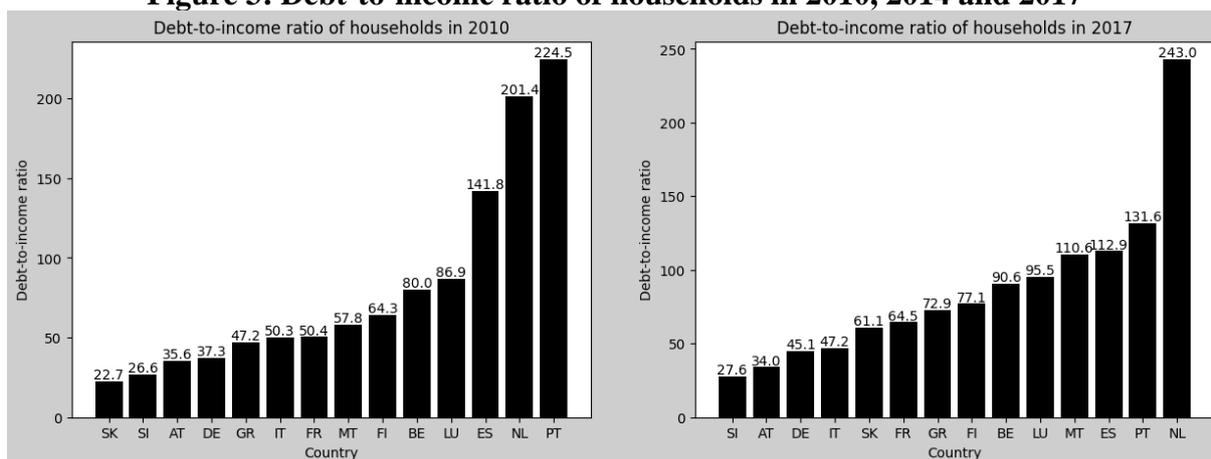
Figure 2: PCA and analysis of factors contributing to differences in 2010, 2014 and 2017



Source: Own calculations of data from Eurostat and ECB Household Finance and Consumption Survey (HFCS)

Figure 2 suggests that households' indebtedness drives the dispersity of observation more than the debt ratios of non-financial corporations. In order to identify the most distinctive variable, we investigate input data and assume that the variation in debt-to-income ratio of households may be the one steering the direction of the clustering algorithm.

Figure 3: Debt-to-income ratio of households in 2010, 2014 and 2017



Source: Own calculations of data ECB Household Finance and Consumption Survey (HFCS)

The debt-to-income ratio of households is a financial metric that compares the amount of debt a household has to its income. It is calculated by dividing the total debt of a household

by its total income over a specific period, usually expressed as a percentage.¹⁵ Figure 3 clearly demonstrates that countries such as Belgium, Luxemburg, Spain, Netherland, and Portugal are in the forefront of the sample. We assume that this indicator is the distinguishing characteristic of the group of abovementioned nations to form the cluster on their own.

Conclusion

The paper had an ambition to shed some light into discussion about homogeneity of European Union members, with a particular emphasis on the nations that constitute the core of the monetary union. Since intrinsic heterogeneity in indebtedness level of real economy entities of Euro Area member states could have significant implication for the conduct of single monetary policy. The focal point of the analysis was to answer whether member states form clusters which share effective differences among themselves and whether converging or diverging tendencies prevail in their development during the analysed period.

The study identifies leanings towards formation of two distinct clusters. The differential factor is identified as differences in households' indebtedness level mostly. In particular, the analysis of input data indicates that the distinctive feature rests in debt-to-income ratio of households. On the other hand, no evidence about growing dissimilarities can be found in the sample. Outcome of PCA even suggest that countries are converging towards the mean in both households' and NFC's indebtedness. Yet, reduction of dimensionality let to the loss of 15-20% of variation comparing to the original data, therefore features derived from PCA only approximate the development in the real economy. In spite of the result that level of heterogeneity among analysed Euro Area nations stays intact, the differences in debt levels are substantial and further analysis of their implications towards the conduct of monetary policy is needed.

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¹⁵ AHN, M. – BATTY, M. – MEISENZAHN, R. (2018): Household debt-to-income ratios in the enhanced financial accounts.

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IRISH ECONOMY DURING COVID-19 AND BEYOND

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Abstract: The aim of this paper is to explain key factors influencing the Irish position in comparison with other European economies and identify the specifics of the Irish economy within the European Union. We based our research on Eurostat data and other sector-specific data to analyse basic macroeconomic indicators of Ireland and perform sectoral analysis of selected sectors relevant to Ireland and specifically influenced by the Covid-19 pandemic. The Irish economy is dependent on multinational companies that contribute to its high GDP. We assume that these specifics will continue to affect Irish economic indicators and Ireland will perform strongly compared to the rest of the European Union.

Keywords: Ireland, IT, pharmaceutical sector, Covid-19

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Introduction

The global Covid-19 pandemic had a strong impact on the global economy; however, the differences among individual economies in the world and in the European Union have led to differing outcomes of the economic changes connected to the pandemic. In 2020, the gross domestic product of the European Union declined by 5.6% and almost all member states also recorded declines. The only exception was the economy of Ireland which grew its GDP by 6.2%.¹

In this paper, we discuss the specifics of the Irish economy in recent years with the aim to explain key factors influencing the Irish position in comparison with other European economies.

We will base our research on scientific papers and expert opinions and confront them with detailed data from Eurostat comparing several key indicators of the overall economic situation, with a specific focus on sectoral analysis. We will identify the specifics of the Irish economy in 2020, the year when the economic impact of the pandemic was the strongest and describe whether these factors were specifically beneficial during the pandemic or benefit Ireland in general and will contribute to future economic growth.

1 Irish economy within the European Union

Ireland became a member of the European Communities in 1973 when it followed the example of its biggest trade partner, the United Kingdom and switched from European Free Trade Area membership to membership of the European Economic Community. Irish economy underwent a great change in its economic levels and structure. Trade openness grew from 75% in 1973 to 229% in 2021. Employment share in agriculture changed from 24% in 1973² to 4%³ in 2022, the share of industry went from 31% to 19.2% and the share of services grew significantly from 45% to 76.8%.

¹ Eurostat (2023): GDP and main aggregates- international data cooperation annual data.

² Central Statistics Office (2004): Ireland and the EU 1973-2003.

³ Eurostat (2023): Employment by A*10 industry breakdowns.

The Irish economy is now the ninth biggest economy in the EU with GDP in current prices of 502.584 billion EUR⁴ with a population of only 5 million people.⁵ Therefore, Ireland has the second highest GDP per capita after Luxembourg and in 2022; its GDP p.c. in PPS was 233.9% of the EU average. Irish GDP per capita is the fifth highest in the world after Monaco, Liechtenstein, Luxembourg and Bermuda.⁶

However, the Irish GDP is significantly influenced by its attractiveness for foreign direct investment and the profits of international companies in Ireland. Former Governor of the Central Bank of Ireland Patrick Honohan argues, that after removing the effects of multinational companies and adjusting for prices in Ireland, the country would be somewhere between the eighth and twelfth most prosperous economies in the European Union.⁷

Another indicator reflecting the specifics of Irish GDP is GDP growth. As we already stated, the Irish economy grew in 2020, unlike any other country in the EU. Additionally, Ireland was the fastest-growing economy in the EU also in 2021 and 2022 and was among the fastest-growing economies several times in the previous decade. In 2015, the Irish economy grew by 24.4% due to the revision made by Central Statistics Office Ireland resulting from several multinational companies relocating to Ireland.⁸

The limits of evaluating the Irish economy based on its GDP can be seen if we compare them to the unemployment indicator. While the Irish economy was growing significantly between 2019 and 2021, the level of unemployment was also growing, from 5% to 6.2%. E.g., Denmark had the same level of unemployment in 2019, while in 2021; their unemployment grew only to 5.1%.⁹ The employment level in Ireland decreased from 75% in 2019 to 72.1% in 2020. This decrease by almost 3 percentage points was the highest in the European Union.¹⁰

GDP is not only used as a measure of the economic strength of a country but is used in other widely used indicators, that can also be distorted in the Irish case. Most importantly, it may influence the view of the Irish government debt and budget deficit, two important indicators in the EU measuring compliance with Sustainability and Growth Pact.

2 The specifics of the Irish economy

The Irish economy has experienced several decades of investment from multinational companies for different reasons, including low labour costs, educated workforce, stable business environment and mostly low corporate taxes.¹¹ The divergent development of the GDP and gross national income of Ireland has been apparent since the 1990s.¹² The strong presence of multinational companies in the Irish economy distorts some statistics, which has been apparent for some time. These specifics became more apparent during the pandemic in 2020, when Ireland was the only growing economy in the European Union, as previously stated.

Other indicators influenced by the presence of selected multinational firms are export indicators. Ireland is a popular destination for software companies and pharmaceutical companies, two businesses where intellectual property is the key component of their production value. Part of what Ireland (and other countries with a strong presence of multinational companies) reports as exports is production in developing countries using the intellectual property owned by companies registered in Ireland. As these goods are then exported

⁴ Eurostat (2023): GDP and main aggregates- international data cooperation annual data.

⁵ Eurostat (2023): Population change - Demographic balance and crude rates at national level.

⁶ World Bank (2023): GDP per capita (current US\$).

⁷ HONOHAN, P. et al. (2021): Is Ireland really the most prosperous country in Europe?

⁸ European Commission (2016): Irish GDP revision.

⁹ Eurostat (2023): Unemployment by sex and age – annual data.

¹⁰ Eurostat (2023): Employment and activity by sex and age - annual data.

¹¹ FITZGERALD, J. (2018): National Accounts for a Global Economy: the Case of Ireland.

¹² MINK, R. (2022): Ireland's Miraculous Economic Growth, p. 249.

elsewhere, the goods newer physically cross Irish borders.¹³ If several countries in the European Union or Eurozone show the same specifics in the data (similar problems may occur in data from the Netherlands), this may even lead to incorrect decisions on Eurozone or European Union levels.

The pandemic and subsequent economic crisis had a negative impact also in Ireland, although it might be covered by the growth of its GDP. In addition to indicators mentioned in the first chapter of this paper (e. g. unemployment), the research by the Economic and Social Research Institute suggests the use of consumption as the best indicator for comparing the Irish economy to other member states of the European Union.¹⁴ The impact of the crisis on Ireland was also described by Andreosso-O'Callaghan,¹⁵ as she concludes that despite the strong export-oriented pharmaceutical sector in Ireland, its health service industry is very ineffective.

These specifics of the Irish economy have been studied for at least several years before the pandemic and these distortions in data are therefore expected to continue after the global economy fully recovers from the effects of the crisis connected to the Covid-19 pandemic. Cautious evaluation of Irish data is therefore advisable.

3 Irish economy during the pandemic

In 2020, after several years of economic growth in the European Union, the pandemic caused the EU economy to decline by 5.6%. Meanwhile, the Irish economy grew by 6.2% and was the only growing economy in the EU in 2020. The pandemic had mostly negative impact on EU economies, however, some sectors may have benefited from it. Among the sectors that benefited from the pandemic are the pharmaceutical sector¹⁶ and computer manufacturing,¹⁷ both of which are important for the Irish economy.

The first case of Covid-19 in the European Union was reported in France on 24 January 2020 while the first death was reported on 15 February.¹⁸ By the beginning of March 2020, many countries' economies were not yet affected by the pandemic. Therefore, we compared the data on economic activities (NACE Rev. 2 classification) between the first and second quarter of 2020 in the EU to identify the sectors most negatively influenced by the onset of the covid pandemic and the sectors that grew despite these global changes. If we look at the sectoral level data in the industry, there are only four sectors that grew between Q1 and Q2 of 2020, with the highest growth recorded in the Manufacture of computers and peripheral equipment. The other growing sectors were the Manufacture of pesticides and other agrochemical products, the Processing and serving of fish, crustaceans and molluscs and the Manufacture of irradiation, electromedical and electrotherapeutic equipment. On the other hand, the most affected industrial sectors were the Manufacture of jewellery, bijouterie and related articles, the Manufacture of motor vehicles, Tanning and dressing of leather; the manufacture of luggage, handbags, saddlery and harness; dressing and dyeing of fur, Manufacture of parts and accessories for motor vehicles, and Manufacture of other porcelain and ceramic products.¹⁹ The growth of the pharmaceutical industry was most visible in later periods during the pandemic, but the growth continues still. Based on quarterly production index²⁰ data in the EU, while

¹³ O'TOOLE, C. (2020): The lockdown tale of two economies in Ireland: How big tech and pharma bucked the trend.

¹⁴ MCQUINN, K. et al. (2020): Quarterly Economic Commentary.

¹⁵ ANDREOSSO-O'CALLAGHAN, B. (2020): Industrial Policy Response to the Covid-19 Crisis in Ireland – A Filière Approach.

¹⁶ BRIGHT, S. – MURPHY, O. (2020): Top 5 Businesses Sectors Thriving During Coronavirus.

¹⁷ WANG, B. (2022): COVID-19's Impact on the Computer Industry during the Pandemic.

¹⁸ SPITERI, G. et al. (2020): First cases of coronavirus disease 2019 (COVID-19) in the WHO European Region, 24 January to 21 February 2020.

¹⁹ Eurostat (2023): Production in industry - quarterly data.

²⁰ Index, 2015=100.

Manufacturing grew from 106.1 (2019-Q4) to 113.3 (2023-Q1), Manufacture of basic pharmaceutical products grew from 115.1 (2019-Q4) to 188.9 (2023-Q1) and Manufacture of pharmaceutical preparations grew from 114.8 (2019-Q4) to 166.9 (2023-Q1).²¹

The data from sectoral production for the Irish economy are not available as they are confidential for most sectors, including the manufacture of computers or pharmaceutical products. However, we can evaluate the importance of this and other relevant sectors by the number of persons employed in different sectors by NACE classification compared to previous years. From these data, we can see that the Manufacture of computers is in decline based on the employment levels. The oldest available data are from the year 2000 when employment in the sector Manufacture of computers was at its peak. Since then, employment in this sector declined significantly, as it halved within 15 years. Nevertheless, three of the 10 biggest computer companies²² globally invested in Ireland (Apple, Microsoft, and Dell) as well as important internet companies like Google, Meta or software companies Oracle and Adobe.²³

On the other hand, employment in the sector Manufacture of basic pharmaceutical products and pharmaceutical preparation grew significantly even before the pandemic and almost doubled between 2000 and 2022. The confidentiality and inaccessibility of detailed sectoral statistics for Ireland in Eurostat data forced us to use other sources of data to illustrate the importance of different sectors in the Irish economy. First, we evaluate the importance of the pharmaceutical sector based on data from the European Federation of Pharmaceutical Industries and Associations.²⁴ Their data for Ireland are also limited (the latest available data are from 2014) but we can compare the importance of the pharmaceutical sector in Ireland to that of 22²⁵ other European Union member states. Based on the share of the pharmaceutical industry in total GDP (latest available data), this sector plays a significantly bigger role in Ireland than in other EU economies. In Ireland, pharmaceutical production contributed almost 9.9% of the total GDP. This contribution was much higher than in other countries with the highest shares like Slovenia (5.4%), Denmark (5%) or Belgium (4.4%). The share of pharmaceutical production in GDP even surpassed that of Switzerland (8.2%)

Conclusion

This paper aims to explain key factors influencing the Irish position in comparison with other European economies and identify the specifics of the Irish economy within the European Union. We based our research on Eurostat data and other sector-specific data to analyse basic macroeconomic indicators in Ireland and perform sectoral analysis of selected sectors relevant to Ireland and specifically influenced by the Covid-19 pandemic.

The Irish economy is heavily dependent on multinational companies that moved their seats to Ireland and tax their profits there as well. Disproportionally represented are companies in the IT sector and pharmaceutical sector, where intellectual property rights represent a significant proportion of their export earnings. These factors contribute to the very high GDP in Ireland and GDP p. c. of Ireland being second only to Luxembourg within the European Union.

As this trend was apparent several years before the Covid-19 pandemic, we can assume that these specifics will continue to affect Irish economic indicators. However, the Covid-19

²¹ Eurostat (2023): Production in industry - quarterly data.

²² BizVibe (2023): Global Personal Computer Industry Factsheet 2020: Top 10 Largest Computer Companies in the World.

²³ The Irish Times (2023): TOP 1000.

²⁴ EFPIA (2022): The Pharmaceutical Industry in Figures.

²⁵ Other EU countries included in this database are Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden.

pandemic put these specifics under the spotlight, as the Irish economy was the only one to grow in 2020 among EU member states. Although the IT sector and pharmaceutical sector were thriving during the crisis caused by the pandemic, the Irish economy will probably continue to perform strongly compared to the rest of the European Union even without these extraordinary circumstances.

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